TORT LAW, RISK, AND TECHNOLOGICAL INNOVATION IN ENGLAND

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This paper considers the impact of technological innovation—and the risks arising from it—on the development of English tort law in the modern era, dating from around 1750. At a time when the old forms of action were losing their grip, unprecedented social changes resulted from the Industrial Revolution and the risks that it created. New mechanisms (insurance, regulation and social welfare) were introduced to control these risks and mitigate their effects. Tort law too was obliged to adapt, and its modern contours bear the mark of this history. However, fundamental questions about the proper function of tort law relative to alternative compensatory and regulatory mechanisms remain to be satisfactorily resolved.

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Introduction

This paper considers the impact of technological innovation—and the risks arising from it—on the development of English tort law. It concentrates on the latter’s formative period in the decades leading up to the abolition of the old forms of action in 1875 and the transition to the modern law. As the hold of the former procedural categories loosened, courts and scholars engaged in the task of rethinking fundamental questions—in particular, the proper balance between strict liability and liability for fault. During broadly the same period, the Industrial Revolution—beginning around 1750—also wrought fundamental changes to English society, and brought unprecedented risks alongside the undoubted benefits. The question that arises is whether and to what extent the massive technological and social changes that resulted impacted the development of the law of tort as it acquired its modern form. That is the focus of Part I of the paper.

But the inquiry has a further dimension. Tort law’s development was shaped not only by the risks created by technological innovation but also by the alternative compensatory and regulatory “technologies” that were introduced to control those risks or mitigate their effects. Tort law’s interaction with these other systems—insurance, regulation, and social welfare—gave rise to immediate practical issues, and raised fundamental and still not fully resolved questions about tort law’s function in modern society. Part II addresses these issues.

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1 As to the forms of action, and the transition to the modern law, see Mark Lunney & Ken Oliphant, Tort Law: Text & Materials, 5th ed (Oxford: Oxford University Press, 2013) at 1–17.


3 Naturally, it is not suggested that tort law’s development was historically determined, only that it co-evolved with other social systems and that circumstances external to tort law may on occasion have triggered changes in it. See further John Bell and David Ibbitson, European Legal Development: The Case of Tort (Cambridge: Cambridge University Press, 2012) at 23.
I. Technological Innovation and its Impact on Tort Law

A. Road Building and Carriage Construction: Highway Accidents in the Eighteenth and Nineteenth Centuries

Even in the days of horse-drawn carriages, the highway could be a dangerous place, the more so as technological advances led to considerable increases in speed: from 4–5 m.p.h. in 1750 to 10–14 m.p.h. by 1830.4 Stagecoaches originated around 1630, but were partially eclipsed by the faster mail coaches introduced in the late eighteenth century, which benefited from diverse innovations in construction technology and reached their maximum mileage in 1834.5 By this time, there were fifteen times as many road passengers as forty years before, and they were conveyed by frequently large, highly capitalized coach firms.6 Over the same period, there were also significant improvements in road construction and maintenance, resulting from the application of new engineering techniques. These too permitted higher speeds than before.7

With higher speeds came an increase in the number of accidents. The “running-down cases” that resulted put under considerable stress English law’s old distinction between the alternative actions in Trespass and Case, and paved the way for the recognition of a general liability for negligence in modern English law.8 In the period of the forms of action, which Parliament ultimately abolished in 1875,9 Trespass covered only “direct” injuries, and the Action on the Case was developed to provide a remedy in situations where the injury was “indirect”—at least where there was negligence, which was recognized as a requirement from the seventeenth century on.10 In time, the category of indirect injuries came to be regarded as embracing any injury resulting from negligence. The final step was to ac-

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7 Bagwell & Lyth, supra note 5 at 47–49.
8 See generally Lobban, supra note 6 at 904–11.
10 Mitchil v Alestree (1676), 1 Vent 295, 86 ER 190 (KB) (concerning injury to a bystander); Aston v Heaven (1797), 2 Esp 533, 170 ER 445 (CP) [Aston] (concerning injury to a coach passenger). As to the notoriously problematic distinction between direct and indirect injury, see Lunney & Oliphant, supra note 1 at 8–9.
cept that plaintiffs might sue in Case instead of Trespass even though
their injury was the immediate result of the defendant’s act, provided the
collision was unintentional.\footnote{Williams v. Holland (1833), 10 Bing 112, 131 ER 848 (CP). It was not, however, until 1875 that the Court of Exchequer unequivocally ruled that wilful or negligent conduct was an element of liability for highway accident claims brought in Trespass: Holmes v Mather (1875), LR 10 Ex 261.} A particular factor pointing toward the ex-
pansion of the Action on the Case was that the coachman was rarely
worth suing personally, so the plaintiff was obliged to rely on the principle
of \textit{respondeat superior} (vicarious liability), which was recognized only in
Case. The liability nevertheless rested on the coachman’s negligence, and
insofar as it arose independently of Trespass or any prior relationship be-
tween the parties may be regarded as a first step toward the recognition

\section*{B. Construction and Engineering Technology: Bursting Reservoirs, Leaking
Dams, and the Acceptance of Strict Liability}

In apparent contrast with the fault-based approach adopted in the
running-down cases is the development of strict liability in respect of at
least some forms of construction and engineering works. The leading case
is \textit{Rylands v. Fletcher},\footnote{Rylands v Fletcher (1868), LR 3 HL 330. See also Oliphant, supra note 2, from which
the analysis in the text draws intermittently.} decided by the House of Lords in 1868. The plain-
tiff complained of the flooding of his mine by water leaking from the de-
fendant’s reservoir. Though not personally negligent in the reservoir’s de-
fective construction, the defendant was found liable to compensate for the
harm. In the famous words of Justice Blackburn in the appealed judg-
ment:

\begin{quote}
[T]he person who for his own purposes brings on his lands and col-
lects and keeps there anything likely to do mischief if it escapes,
must keep it in at his peril, and, if he does not do so, is primâ facie
answerable for all the damage which is the natural consequence of
its escape.\footnote{Rylands v Fletcher (1866), LR 1 Ex 265 at 279 [Rylands].}
\end{quote}

The reasons why this principle of strict liability came to be explicitly
endorsed by the common law are hard to discern through the mists of
time, but one plausible hypothesis is that the decision was influenced by
specific political debates of the period. As Brian Simpson pointed out in a
classic historical analysis,\textsuperscript{15} at the time \textit{Rylands v. Fletcher} came to the courts, there was widespread public concern about the risks inherent in industrial activities in general and reservoir construction in particular. Shortly before, there had been two major reservoir disasters in England.\textsuperscript{16} In 1852, a badly designed and ill-maintained dam at Holmfirth in Yorkshire collapsed catastrophically, releasing an enormous volume of water that swept down the valley, killing seventy-eight people and rendering homeless or destitute thousands more. In 1864, another catastrophic dam breach led to the inundation of the city of Sheffield to a depth of almost three meters with water flowing from a reservoir belonging to the Sheffield Waterworks Company. At least 238 people died.\textsuperscript{17}

Considerable sympathy for the victims of such disasters, generally resulting in the organization of public charitable appeals for their benefit, was coupled with a feeling that entrepreneurs should pay their way—even if they were providing a public service.\textsuperscript{18} In response to the Holmfirth catastrophe, Parliament had been persuaded to give statutory authority for new reservoir construction only on condition that the undertaker accept a statutory responsibility to compensate the victims in the event of a breach. Such terms came to be known as “Holmfirth clauses”, after the village where the disaster had occurred.\textsuperscript{19} Subsequently there were legislative proposals to consolidate the law governing reservoirs built under private Acts so as to ensure the inclusion of a compensation provision. The proposal was dropped in 1867—after the Exchequer Chamber’s decision in \textit{Rylands v. Fletcher}.\textsuperscript{20} The Rylands reservoir did not require statutory authorization as it was constructed on private land, but the decision in the case can be seen as affirming that the common law should offer the same protection for private rights as would have been available under the statutory Holmfirth clauses.

\begin{footnotes}
\item[16] Simpson, supra note 15 at 199–208.
\item[17] \textit{Ibid} at 204–205.
\item[18] \textit{Ibid} at 202–08.
\item[19] \textit{Ibid} at 206.
\item[20] \textit{Ibid} at 205–06.
\end{footnotes}
The English courts showed no initial reluctance to apply *Rylands v. Fletcher*. However, the leading legal scholar at the turn of the nineteenth and twentieth centuries, Sir Frederick Pollock, was strongly committed to the idea that negligence provided the unifying principle in English tort law, and so was predisposed against strict liability. Nevertheless, he refrained from open criticism of the case for some considerable time, before eventually admitting to “not much liking” it. Later still, he went so far as to say that he regretted the decision.

In the United States, there was no similar reticence. The case was immediately subjected to strong criticism by courts and scholars, though it gained a measure of acceptance from Oliver Wendell Holmes—even if his opinions on the case are not always possible to discern with precision.

Perhaps the most convincing contemporary advocate of the application of strict liability to hazardous activities was Baron Bramwell, who advanced a prototype theory of enterprise liability. In a well-known dictum, he began by rejecting as a misapprehension the idea that the public benefit flowing from an activity should act as a defence to liability:

> [I]n the first place, that law to my mind is a bad one which, for the public benefit, inflicts loss on an individual without compensation. But further, with great respect, I think this consideration misapplied... The public consists of all the individuals of it, and a thing is only for the public benefit when it is productive of good to those individuals on the balance of loss and gain to all. So that if all the loss and all the gain were borne and received by one individual, he on the whole would be a gainer. But whenever this is the case,—whenever a thing is for the public benefit, properly understood,—the loss to the individuals of the public who lose will bear compensation out of the gains of those who gain.

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21 See the authorities listed in Oliphant, *supra* note 2 at 99, nn 126–32.


24 Frederick Pollock, “A Plea for Historical Interpretation” (1923) 39 Law Q Rev 163 (“those of us here who regret that decision” at 167).


26 Ibid at 100–01.

27 *Bamford v Turnley* (1862), 3 B & S 66 at 84–85, 122 ER 27 (KB) [*Bamford*]. See also *Powell v Fall* (1880), 5 QBD 597 at 601 (CA) [*Powell*].
There are foreshadowings here of the cost internalization that underpins much modern economic analysis of law. But that is perhaps not surprising: this was, after all, the golden age of classical economics, and Bramwell was an enthusiastic supporter of the economic theories of Adam Smith.

C. Modern Transport: The Railways and the Motor Car

1. Setting the Scene

With the development of mechanically propelled forms of transport—especially steam locomotives and the motor car—the question arose of whether the principle of strict liability recognized in *Rylands v. Fletcher* should be applied to accidents involving these novel forms of conveyance. If so, it would have constituted a departure from the approach to road accidents established in the running-down cases. In fact, even the author of the famous rule in *Rylands v. Fletcher* thought strict liability could not be applied to ordinary traffic accidents because road users voluntarily assumed the risk of non-negligent injury:

> Traffic on the highways, whether by land or sea, cannot be conducted without exposing those whose persons or property are near it to some inevitable risk; and that being so, those who go on the highway, or have their property adjacent to it, may well be held to do so subject to their taking upon themselves the risk of injury from that inevitable danger ... In neither case, therefore, can they recover without proof of want of care or skill occasioning the accident.

It remained to be seen, however, whether the involvement of a steam locomotive or motor car warranted a departure from the established fault-based approach on grounds of the greater risks attached to these new forms of transportation.

28 See e.g. Richard A Epstein, “For a Bramwell Revival” (1994) 38:3 Am J Legal Hist 246 (“here is the standard test of economic efficiency accurately stated ... a half century before it made its way into standard economic theory” at 277).


2. The Railways

The advent of railways\(^{31}\) produced what has been described as England’s first wave of personal injury litigation: “Mass transportation [gave] rise to mass litigation.”\(^{32}\) Another commentator remarked that “the railroad locomotive ... generated, on its own steam (so to speak), more tort law than any other [machine] in the nineteenth century.”\(^{33}\) Between 1872 and 1875, some 1,300 people were killed on the railways every year, and more than 4,000 people were injured. Over half the casualties were railway employees.\(^{34}\) However, both the formal principles of accident law and the prevailing legal and social culture were opposed to claims by injured workers against their employers.\(^{35}\) In the law reports, the main evidence of the terrible toll of death and injury is therefore to be found in claims brought in respect of injuries to passengers. And these were numerous: “No actions have been more frequent of late years,” said one judge at the time, “than those against railway companies in respect of injuries sustained by passengers.”\(^{36}\)

In such cases, liability turned on the correct construction of the contract of carriage. In Readhead v. Midland Railway Co., it was decided—just the year after the House of Lords passed judgment in the Rylands litigation—that this entailed an obligation of reasonable care rather than a strict warranty.\(^{37}\) A central strand of the analysis was the injustice of implying into the contract of carriage an obligation that would be impossible to perform—namely the obligation to ensure absolutely that there was nothing likely to imperil the passenger’s safety.\(^{38}\) The negligence-based approach fell in line with the approach already established in respect of coach passengers,\(^{39}\) though a requirement of negligence went against the longstanding strict liability customarily imposed on common carriers of

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\(^{31}\) See generally Lobban, supra note 6 at 958–69.


\(^{33}\) Lawrence M Friedmann, A History of American Law, 3d ed (New York: Simon & Schuster, 2005) at 223. He was speaking of American law, but the observation might equally be applied to English law.


\(^{35}\) See Part ID, below.

\(^{36}\) Readhead v Midland Railway Co (1869), LR 4 QB 379 at 384, Montague Smith J.

\(^{37}\) Ibid.

\(^{38}\) Ibid at 384–85.

\(^{39}\) Aston, supra note 10.
goods,\textsuperscript{40} It has been suggested that plaintiff’s counsel in \textit{Readhead} may have hoped that the court would be emboldened to reconsider the applicable liability standard by the then recent decision in the \textit{Rylands} case.\textsuperscript{41} They did not, however, expressly rely upon that ruling in their own claim—presumably because it was an action on the contract, not in tort—and there is no hint in the judgments that the rule in \textit{Rylands v. Fletcher} weighed in the plaintiff’s favour.

Another set of cases involved actions by owners of land next to railway tracks whose crops or land were set alight and destroyed by sparks from a train. Here the liability, if it arose, had to be tortious rather than contractual, and this created some scope for application of the rule in \textit{Rylands v. Fletcher}. Even before the Law Lords had affirmed his judgment, Justice Blackburn had expressly applied the principle in an action over a burned-down haystack.\textsuperscript{42} However, this was a rare case in which the defendant’s operation of a steam locomotive was not—and did not have to be—authorized by Parliament.\textsuperscript{43} An “exception” to this “general rule of common law”\textsuperscript{44} was made where the operation of steam locomotives \textit{was} under statutory authorization; here, a negligence standard was applied.\textsuperscript{45} As statutory authorization was in fact usually required, the “exception” soon became the general rule. Consequently, Parliament intervened to impose an obligation on the railway companies to compensate for damage to agricultural land or crops caused by sparks or cinders emitted by their engines, albeit subject to a financial ceiling (initially £100),\textsuperscript{46} but this argua-

\textsuperscript{40} \textit{Forward v Pittard} (1785), 1 TR 27, 99 ER 953, where Lord Mansfield explained that “a carrier is in the nature of an insurer” (at 33). The distinction between goods and passengers was justified by Justice Blackburn in the following terms: “The carrier has not the control of the human beings whom he carries to the same extent as he has the control of goods, and therefore it would be unjust to impose on him the same responsibility for their safe conveyance” (\textit{Readhead v Midland Railway Co} (1867), LR 2 QB 412 at 433 [\textit{Readhead} (1867)]).

\textsuperscript{41} Kostal, supra note 32 at 302–303, n 313. Before its ultimate resolution in the Exchequer Chamber, the claim in \textit{Readhead} had gone before a Court of Queens’ Bench that included Justice Blackburn just a year after his great judgment in \textit{Rylands v Fletcher} (\textit{Readhead} (1867), supra note 40). Justice Blackburn, dissenting, would have opted for strict liability in the newer case too.

\textsuperscript{42} \textit{Jones v Festiniog Railway Co} (1868), LR 3 QB 733 [\textit{Jones}].


\textsuperscript{44} \textit{Jones}, supra note 42 at 736, Blackburn J.

\textsuperscript{45} \textit{Ibid}, citing \textit{Vaughan v Taff Vale Railway Co} (1860), 5 H & N 679, 157 ER 1351. See also \textit{Hammersmith and City Railway Co v Brand} (1869), LR 4 HL 171.

\textsuperscript{46} \textit{Railway Fires Act}, 1905 (UK), 5 Edw VII, c 11, s 1. See Morgan, supra note 43 at 48–51.
bly served only to cement the growing conviction of judges and scholars that strict liability was exceptional, and generally to be left to Parliament rather than developed at common law.

3. The Motor Car

The development of the internal combustion engine paved the way for the introduction of the motor car in the late nineteenth century.\(^\text{47}\) Statutory speed limits kept in check the increasing velocities of which these and other mechanically powered vehicles (e.g., steam traction engines) were capable. In 1861, a 4 m.p.h. limit was imposed, and vehicles had to be preceded by a pedestrian carrying a red flag by way of warning. However, the speed limit was increased to 14 m.p.h. in 1896 and to 20 m.p.h. in 1903, while the red-flag requirement was abandoned.\(^\text{48}\)

Road accident and casualty statistics were first collected on a national level in 1926, in which year there were 4,886 recorded deaths in some 124,000 accidents.\(^\text{49}\) The casualty toll continued to rise through the twentieth century, reaching an annual peak of close to 8,000 fatalities in the mid-1960s as the number of vehicles increased.\(^\text{50}\) It hardly needs to be stated, however, that the perils of motorized road transport were well-known long before the statistical data were available.

The first judicial decision on the new menace seems to date from 1861, in a case of injury to a coachman thrown off his carriage when his horses were frightened by the noise and appearance of the defendant’s industrial traction engine.\(^\text{51}\) There was no evidence that the engine could have been constructed or operated differently so as to avoid the danger, but Chief Justice Erle told the jury that it was enough that the defendant knew of the risk, for he had “clearly no right to make a profit at the expense of the

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\(^{47}\) See generally Bagshaw, \textit{supra} note 34 at 35ff; Bell & Ibbetson, \textit{supra} note 3 at 111 ff; Lobban, \textit{supra} note 6 at 973–76; The Honourable JC McRuer, “The Motor Car and the Law” (1966) 4:1 Osgoode Hall LJ 54. See also Bagwell & Lyth, \textit{supra} note 5 at 87 (recording that a four-wheeled gasoline-powered carriage was driven through the streets of Stuttgart, Germany, in 1886).

\(^{48}\) Lobban, \textit{supra} note 6 at 973–75.


\(^{50}\) \textit{Ibid.}

security of the public.”52 That strict liability might apply where injury was caused by a traction engine was confirmed in Powell v. Fall in 1880,53 where Lord Bramwell succinctly expressed the economic justification for strict liability:

It is just and reasonable that if a person uses a dangerous machine, he should pay for the damage which it occasions; if the reward which he gains for the use of the machine will not pay for the damage, it is mischievous to the public and ought to be suppressed, for the loss ought not to be borne by the community or the injured person. If the use of the machine is profitable, the owner ought to pay compensation for the damage.54

The liability was considered to be an application of Rylands v. Fletcher, and it was initially thought that the same rule would apply to motor cars,55 but a Court of Appeal decision of 1908 rejected that analysis and affirmed a negligence-based approach, thus displaying what one commentator, not without an element of sarcasm, has termed “that manly disregard for vulgar logic which makes the common law so much superior to other systems.”56 The decision in question was in the case of Wing v. London General Omnibus Company,57 described as in some ways “the most significant event” in English tort law in the twentieth century,58 though today it is little remembered.

The plaintiff, an artificial flower maker, was injured while travelling as a passenger in the defendant’s motor omnibus. The road at the relevant time was greasy because of recent rainfall, and the omnibus—proceeding at about 5 m.p.h.—skidded on the greasy surface as its driver sought to avoid other traffic and collided with an electric light standard. The claimant injured her foot as she tried to get out. She pleaded her case on two alternative bases: first, that the servants to whom the defendant had given charge of the omnibus had driven it negligently; second, that the omnibus itself was a dangerous machine and that, by placing it on the highway, the defendants had created a nuisance. The trial disclosed no evidence of negligent driving, but the judge put to the jury the question

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52 Watkins, supra note 51 at 1218.
53 Powell, supra note 27 at 597 (sparks from engine set haystack on fire). In Powell, Mellor J expressly applied the rule in Rylands (ibid at 599). The defendant conceded prima facie liability at common law on appeal (ibid at 600–601).
54 Ibid at 601. See also, along similar lines, Lord Bramwell’s dictum from Bamford, supra note 27.
55 Spencer, supra note 51 at 71.
56 Ibid at 70.
57 (1909), 2 KB 652 (CA) [Wing].
58 Spencer, supra note 51 at 79.
whether the defendants were to be held liable for creating a nuisance by allowing the omnibus to run in slippery conditions, in the knowledge of their tendency to skid. The jury found for the claimant, but the judge ruled that this was unsupported by the evidence and entered judgment for the defendants.

The Court of Appeal was unanimously of the view that the strict liability recognized in *Rylands v. Fletcher* did not apply, and that negligence had to be proved if the plaintiff was to succeed. As a majority of the court considered the evidence of negligence to be insufficient, it dismissed the plaintiff's appeal. The court accepted that liability under *Rylands v. Fletcher* was not limited to situations where the defendant created a danger on his own land but might also arise where he made "undue and improper use" of the highway. Yet there was no evidence that the defendants' omnibus or motor omnibuses in general were so unmanageable or dangerous as to merit that description. Admittedly, motor omnibuses had a tendency to skid in slippery conditions, but "all vehicles have their defects" and those of self-propelled vehicles were offset by there being no horses that could be frightened or fall, and their more effective braking capacity. Ultimately, however, the relative advantages and disadvantages of self-propelled and horse-drawn vehicles were neither here nor there, as it was not for the court to weigh them in the balance or to determine which type of vehicle was the safest.

A later attempt to introduce strict liability came via the distinct tort of breach of statutory duty. In a case that came before the Court of Appeal in 1923, a truck was involved in an accident on the highway when one of its axles broke and a wheel came off, damaging the plaintiff's vehicle. It was subsequently discovered that the axle had been in a dangerously defective condition, though the owners were not at fault, having recently sent the truck to a competent firm of mechanics to be overhauled and repaired. The plaintiff argued that the truck's failure to comply with the road safety regulations was a sufficient basis for liability, but the court disagreed. The duty imposed by the regulations was not a duty enforceable by individuals who were injured, but a public duty enforced exclusively by way of the statutory penalty. Parliament could not be taken to have intended to impose on vehicle owners an absolute obligation to ensure their vehicles' roadworthiness in all circumstances on pain of liability in damages, even in the absence of negligence.

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59 *Wing, supra* note 57 at 665, Fletcher Moulton LJ.
61 *Ibid* at 667.
62 See *Phillips v Britannia Hygienic Laundry Co Ltd* (1923), 2 KB 832 (CA) [*Phillips*].
From this time on, negligence has been the standard to be applied generally in road traffic cases, subject to only rare exceptions. The effect has been to deprive large numbers of blameless non-motorists of compensation in running-down cases simply because the driver could not be shown to be at fault. This regime has also added enormously to the cost of litigation and settlement even where the claim was successful, and sets English law at odds with the prevailing approach in most other European jurisdictions. English law has stubbornly retained the negligence standard even in the face of official proposals for the introduction of strict liability or no-fault compensation to address the capriciousness with which the fault principle operates in this area.

D. The Industrial Workplace

Friedrich Engels’ famous account of the English industrial poor in 1844 highlighted the “multitudes of accidents” suffered in the workplace that left their numerous victims maimed: “[T]his one has lost an arm or a part of one, that one a foot, the third half a leg; it is like living in the midst of an army just returned from a campaign.” The most common injury, he found, was the squeezing off of a joint of the finger; the most dangerous part of the machinery was the strapping conveying power from the shaft to the individual machines, which could easily catch up a worker and throw him against the ceiling and the floor with enough force to break every bone in his body. Another particular risk was the explosion of steam-powered boilers, which caused over 1,000 deaths between 1865 and 1882.

Notwithstanding this awful injury toll, it was only surprisingly late—in fact, in the 1830s—that injured workers first brought actions for damages against their employers. The first recorded English case was Priest-
ley v. Fowler in 1837, and there the claim was rejected. An early example of a successful claim is provided by an unreported case in 1840, where a young mill worker’s arm was caught in unguarded machinery, crippling her for life. With the financial support of a wealthy philanthropist, she recovered £100 in compensation from her employer, plus £500 in costs, the defendants having conceded that they were liable for the accident.

Various reasons for the comparatively late development of the law of employers’ liability may be advanced. Simpson has noted that “before suits against employers ... came into vogue, there were other mechanisms for dealing with such accidents. In particular there was the law of master and servant, and the poor law.” He persuasively links the rise of the tort action against the employer to the decline in these alternative mechanisms for the support of the injured employee. First, the Industrial Revolution resulted not only in an unprecedented toll of accidental workplace injury, but also in a change in the typical employment relationship. Previously, menial servants constituted a major part of the workforce, and the law of master and servant represented a significant mechanism for dealing with accidents at work because the master had an obligation to provide board, lodging, and remuneration until the end of the term of employment even in the event of the servant’s disability. In the new industrial world, however, menial servants were replaced by “labourers” hired for the task, the day or the month, with the result that “the protection afforded to the sick and injured amongst the working population was being reduced by changing employment practices.” The first tort actions may therefore be seen as, “in a sense, a move to fill a gap in a protection which had formerly existed.”

Second, there was the role played by the poor law, the forerunner of today’s social security system. Simpson notes:

> In the early nineteenth century and before, it was the poor law which was the principal legal provision for the victims of serious accidents at work, not the law of tort. Given the cost of litigation, and the poverty of the working population, tort law was largely irrelevant.

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69 3 M & W 1, 150 ER 1030 [Priestley].
70 Simpson, supra note 15 at 128 (in chapter 5, “A Case of First Impression: Priestly v Fowler (1837)”).
71 Ibid at 113.
72 Ibid.
73 Ibid at 114.
74 Ibid at 117.
75 Ibid.
Under the poor law, every parish had the obligation of providing relief to the poor (including the “poor by casualty”) settled within its boundaries. The relief could take a number of different forms: payment of medical expenses, provision of board and lodgings in a workhouse, or “outdoor” relief to disabled people in their homes (e.g. payment of a weekly pension). In 1834, major reforms of the poor law were effected by a Poor Law Amendment Act 1834 which abolished outdoor relief, stipulating that relief was to be provided only in the workhouse. Simpson suggests that this reform, which made the receipt of poor law assistance dependent upon acceptance of the disagreeable conditions of the workhouse, may also have had something to do with the growing recourse to tort thereafter.

However, claims by injured workers ran into an obdurate judiciary that contrived to insulate employers from the costs of workplace accidents through the application of an “unholy trinity” of defences: contributory negligence (which was then a complete defence), volenti non fit injuria (voluntary acceptance of risk), and common employment. There was widespread resentment of the last of these in particular. Essentially, the common employment rule provided that an employer could not be held vicariously liable for tortious injury caused by one employee to another, as every employee is deemed to accept the risk of negligence by a fellow servant. Though the rationale was couched in terms of the worker’s implied consent, it seems that the decisive factor was judicial concern at the potential reach of such a liability if it was admitted: “If the master be lia-
ble to the servant in this action, the principle of that liability will be found to carry us to an alarming extent.”

In addition to these barriers to litigation erected as a matter of formal law, numerous practical and cultural obstacles also limited the number of claims brought by injured employees. These included the worker’s economic dependence on the employer and the fear of dismissal or other retribution if a legal claim was initiated. It has also been noted that “judges ... shared the common perception that most industrial accidents were caused by the negligence of workmen. In judicial eyes, it was the workers, rather than the employers, who needed a deterrent to give them an incentive to create a safe workplace.”

In the mid-nineteenth century, the miners’ unions, lacking the representation in Parliament necessary for the pursuit of statutory reform, challenged the common employment rule in the courts, but without success. Subsequently, a significant extension of the right to vote in 1867, and the election of the first trade unionists to Parliament in 1874, increased the prospects of reform through the legislative process, and during the 1870s a number of parliamentary bills were introduced to limit or abolish the common law defences. None was implemented but, following a general election in which employers’ liability had become a significant issue, an *Employers’ Liability Act* was passed in 1880. This “represented a minor adjustment to, rather than a revolution in, liability law.” It provided for the limitation of the common employment rule in specified circumstances, but not its complete abolition—for which the union movement continued to campaign.

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84 Lobban, supra note 6 at 1009.

85 Bartonshill, supra note 81 (confirming the defense’s application in English and Scots law); Wilson v Merry & Cunningham (1868), LR 1 Sc & Div 326 (Scot) (declining to recognize a “vice-principal” exception to the common employment rule).


87 Ibid.

88 Ibid.
The ultimate solution was to take the law—and British social policy—in a new direction. In the general election in 1895, workers’ compensation was again a significant issue. The Conservative Party emerged victorious, and shortly afterward put forward a Workmen’s Compensation Bill with the objectives of saving injured workers from destitution, improving industrial safety by making employers pay for accidents, soothing turbulent industrial relations by the reduction of employers’ liability litigation, and relieving ratepayers of their financial responsibility (via the poor law) for workplace injuries. The Workmen’s Compensation Act was passed in 1897 and came into effect the following year. It provided for the payment of compensation at 50 per cent of pre-accident earnings (up to a ceiling of £1 per week) for “personal injury by accident arising out of and in the course of employment.” The worker’s serious and wilful misconduct could act as a bar to the claim. Liability was to fall on the employer regardless of fault, but there was no compulsion to insure against it. The right to sue in tort was not affected. Though the original Act was limited to particular places of employment—railways, factories, mines, quarries, engineering works and building sites—its scope was extended to other occupations in 1906, and to certain prescribed diseases as well as accidents.

The reform constituted a compromise acceptable to the various interest groups involved. It addressed the compensatory defects of the existing private law regime while maintaining certain accident prevention objectives. At the same time, it protected employers from the unlimited and unpredictable financial burden that would result if reform were pursued through the common law. In the longer term, it paved the way for the introduction of social security, and in 1946 it was incorporated within the overall system of national insurance established in that year, becoming the Industrial Injuries Scheme. Concurrently, the link with pre-accident earnings was loosened, and compensation was paid instead according to the degree of the applicant’s disablement. The right to sue for damages in

89 Ibid at 10.
90 See Oliphant, “Landmarks”, supra note 66 at 49.
91 Workmen’s Compensation Act, 1897 (UK), 60 & 61 Vict, c 37, s 1(1).
92 Bartrip, Workmen’s Compensation, supra note 86 at 10–12.
93 Ibid at 47–54.
94 Ibid at 12.
95 Sir William Beveridge, the architect of the British welfare state, observed that workers’ compensation was the “pioneer system of social security” (Sir William Beveridge, Social Insurance and Allied Services (London: Macmillan, 1942) at 41).
96 National Insurance (Industrial Injuries) Act, 1946 (UK), 9 & 10 Geo VI, c 62.
tort law was retained—and indeed strengthened—in 1948 by the overdue abolition of the common employment defence.

E. Assessing the Impact of Technological Innovation on Tort Law

According to the influential but highly controversial thesis advanced by Morton J. Horwitz, tort law in England and the United States was transformed in the nineteenth century in order to provide a subsidy to the industrial concerns that had sprung up in the aftermath of the Industrial Revolution. Horwitz claimed that the courts of the time abandoned the erstwhile general principle of strict liability as expressed by the Latin maxim *sic utere tuo ut alienum non laedas*, and adopted instead the fault-based standard of negligence so as to reduce entrepreneurial liability.

That thesis is not without its difficulties. Horwitz’s apparent ascription of conscious agency to the judiciary fails to deal with the very wide range of different attitudes evident in the decisions of different judges and ignores the likely hostility to industrial expansion of the many judges who were members of the landed gentry. Further, in many areas of tort law, the principles applied had been recognized by the judges even prior to the Industrial Revolution and were not new adoptions intended to protect business interests and promote economic development. Lastly, Horwitz’s depiction of a straightforward change from strict liability to negligence liability is a serious distortion of what actually occurred. Far from replacing a generalized strict liability, “fault liability emerged out of a world-view dominated largely by no-liability thinking.”

A less ambitious claim may, however, plausibly be made about tort law’s development in response to the risks created by technological innovation during the Industrial Revolution. It was not just the case that accidents became more frequent, but that they more often involved parties with no prior relationship to each other—strangers, whose only interaction was in the accident in which one or other was injured. This forced the courts to move beyond a conception of negligence liability as peculiar to

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98 For more detail, see Lunney & Oliphant, *supra* note 1 at 13–15.

99 See also Charles O Gregory, “Trespass to Negligence to Absolute Liability” (1951) 37:3 Va L Rev 359 (“a desire to make risk-creating enterprise less hazardous to investors and entrepreneurs;” “[j]udicial subsidies ... to youthful enterprise” at 368).


certain pre-existing relationships and to adopt a generalized theory of liability: “[T]he modern negligence principle in tort law seems to have been an intellectual response to the increased number of accidents involving persons who had no preexisting relationship with one another.”\textsuperscript{102} The scope of liability for negligence expanded as the courts recognized duties of care in new types of cases, until the culminating moment of Lord Atkin’s enunciation of his “neighbour principle” in the “snail in the bottle” case, \textit{Donoghue v. Stevenson}.\textsuperscript{103}

However, the seemingly unstoppable development of negligence into a generalized liability was a cause of alarm to at least some members of the judiciary, who urged caution and sought ways to limit the new liabilities to which entrepreneurs were exposed. In the nineteenth century, this backlash was most apparent in relation to accidents in the workplace, in which context the courts developed a set of very effective defences to safeguard the interests of employers (the “unholy trinity” mentioned above). We see in the relevant cases an explicit reliance on consequentialist reasoning to justify restrictions on the scope of liability that might otherwise become an undue burden on entrepreneurs—and consequently on society. This has been a repeated refrain in English tort law ever since.

II. Technologies for Controlling Risk

Tort law’s development has been affected not only by the risks created by technical innovation, but also by its interrelationship with other legal technologies that were introduced to control or mitigate those risks—especially insurance, regulation, and social welfare. On one level, these have raised practical problems concerning how the different legal mechanisms ought to be coordinated. At a deeper level, their presence poses fundamental questions about tort law’s proper function in modern society.

A. Insurance

Though marine insurance is ancient, and even insurance against property damage caused by fire dates to the seventeenth century, accident insurance did not emerge until the “friendly society” movement that be-


\textsuperscript{103} [1932] AC 562 HL (Scot), [1932] ALL ER Rep 1.
gan in the late eighteenth century. The friendly societies sought to allow artisans to make provision by way of a small weekly payment against sickness and old age. With the advent of the railways, a new form of accident indemnity insurance emerged, and by the 1850s railway passengers were able to buy single-trip insurance to cover against suffering injury. The take-up, however, was very low: only one passenger out of every 183 purchased the protection.

It was liability insurance—necessarily parasitic on tort—that had the larger impact on tort’s development. It was created toward the end of the nineteenth century, initially as a mechanism for protecting employers against damages claims by their employees. However, it was not at all free from controversy: until “well into the twentieth century there were doubts about the legality of insuring against the consequence of one’s own wrongdoing.” But ultimately, it was realised that liability insurance served the interests of the victim, and Parliament passed legislation to require the commonest targets of personal injury litigation—car owners (from 1930) and employers (from 1969)—to take out compulsory insurance against their potential liabilities.

Aside from the immediate practical problems to which the spread of insurance gave rise, more fundamental changes were to be observed in the tort system. The personal quality of tort litigation dissipated as claims were increasingly defended by a faceless insurer rather than the individ-


105 Hastings, supra note 104 at 1–2.

106 Hastings, supra note 104 at 2.

107 Bagshaw, supra note 34 at 14, n 10.

108 See White, supra note 102 at 146–50.


110 See Road Traffic Act, 1930 (UK), 20 & 21 Geo V, c 43, s 35 (now Road Traffic Act 1988 (UK), c 52, s 143); Employers’ Liability (Compulsory Insurance) Act 1969 (UK), c 57.

111 E.g. should the value of an indemnity under a personal accident policy be subtracted from the damages the plaintiff was entitled to recover from the defendant? Answer: no, because it was a bargained-for benefit (Bradburn v Great Western Railway Co (1874), LR 10 Ex 1).
ual responsible for the accident as a matter of law. And, more and more frequently, insurers brought claims too—exercising their right of subrogation under first-party insurance taken out by the victim. Rather than litigate in the courts, insurers preferred to resolve their mutual liabilities informally, even to the extent of agreeing to forego their strict legal entitlements in the interests of administrative economy. In such cases, tort law was transformed into an administrative process in which losses were shifted between institutional actors. The expectations of accident victims changed too, as it became apparent that losses could be spread widely and relatively painlessly rather than left to fall on the injured person. By the middle of the twentieth century, scholars were explicitly identifying tort law’s function as the transfer of losses away from the victims of accidents and the distribution or spreading of those losses throughout society by means of liability insurance.

This change of attitude was less frequently adverted to in judicial dicta; the predominant judicial attitude has always been that the insurance position of the parties should have no influence on the adjudication of individual cases, or even be disclosed lest it should influence the court in deciding questions of liability or damages. However, a few iconoclastic judges have spoken with greater candour about the changed nature of the judicial task consequent on the spread of insurance. A well-known dictum of Lord Denning may be cited by way of example:

[A] person injured by a motor car should not be left to bear the loss on his own, but should be compensated out of the insurance fund. The fund is better able to bear it than he can. But the injured person is only able to recover if the driver is liable in law. So the judges see to it that he is liable, unless he can prove care and skill of a high standard.

This frank admission that a judge might manipulate the formal legal rules to ensure compensation for the victim out of the insurance fund should, however, be regarded as exceptional.

B. Regulation

The Industrial Revolution also gave rise to a desire among various politically active groups for regulation to prevent accidents, and received a sympathetic hearing from the vigorous social planners of the Victorian era. The Factories Act of 1844 introduced minimum workplace safety standards, reinforced with criminal sanctions. The reluctance of justices to convict, however, frustrated the Act’s successful operation in practice. The Act made some provision for payments to the injured worker, but the compensation clauses were discretionary and rarely invoked. In some circumstances, compensation under the Act was contingent on the employer being successfully prosecuted, but this rarely occurred. Safety and accident prevention remained at this time matters that were mostly subject only to specific statutory regulation, reinforced by inspection and criminal sanctions. But by degrees, encouraged by social reformers such as Edwin Chadwick, an enthusiastic proponent of Jeremy Bentham’s Utilitarianism, the idea emerged that tort law could contribute to industrial safety. In fact, Chadwick had first suggested using tortious liability and financial incentive to promote this objective in 1833. Regulation followed in other contexts too, including railways, road traffic (involving the prescription of speed limits and use of the infamous red flags), and environmental pollution.

For judges, the immediately pressing question was how the common law of tort should be adapted to accommodate the statutory standards. In particular, should tort law provide a remedy in damages where the statute itself makes no provision for compensation in the event of a breach of duty (and even where the statute provides for an alternative sanction)? In a famous passage in Comyn’s Digest, there appears the bold and unqualified pronouncement that “in every case, where a statute enacts, or prohibits a thing for the benefit of a person, he shall have a remedy upon the same statute for the thing enacted for his advantage, or for the recom-

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116 See Oliphant, “Landmarks”, supra note 66 at 47–48. It is worth noting that justices were frequently fellow industrialists and may well have applied the same practices as the prosecution impugned.
117 Bartrip & Burman, supra note 78 at 55–63.
118 Ibid at 16–17.
119 Bagshaw, supra note 34 at 34–35.
120 See Part I-C(3), above.
pence of a wrong done to him contrary to the said law.”\textsuperscript{122} In 1854, then Chief Justice Lord Campbell went further, ruling that there was a right to sue for “breach of a public duty” notwithstanding the existence of a criminal penalty for the wrong in question.\textsuperscript{123} But the courts quickly resiled from this position, no doubt as a result of fears that the bounds of civil liability would otherwise expand far beyond the common law negligence liabilities of the time, as well as out of a concern not to allow the common law’s fault principle to be sidestepped by adoption of the strict (or, at least, stricter) standards laid down by statute.\textsuperscript{124} The one context in which actions for breach of statutory duty received general acceptance—employers’ liability\textsuperscript{125}—is the exception that proves the rule, because the common law defences had already rendered the action in negligence largely redundant. Consequently, allowing the claim on the statute served only to redress an existing—and notorious—deficiency of the common law liability for negligence.

At a more fundamental level, the rise of regulation began to cast doubts on tort law’s utility as a mechanism for preventing accidents. For many, tort law’s fundamental flaw was, and remains, that it is almost exclusively backward-looking and does not address risks as such (i.e., before they have eventuated).\textsuperscript{126} Indeed, the risk of negligent injury is generally not considered enough for the award of an injunction:\textsuperscript{127} tort steps in only after the accident has occurred and the injury sustained. It should also be noted that courts are not monitoring agencies, so the task of ensuring compliance falls to the victim.\textsuperscript{128} The lack of specification of what precisely must be done to comply with the duty of reasonable care could be thought a further disadvantage. However, supporters of “responsive regulation”, for whom it is important that subjects of regulation are left free to decide themselves how best to attain the desired standard of conduct or outcome, might view this last-mentioned factor as a positive advantage.\textsuperscript{129} And they would find allies among proponents of the economic analysis of tort law, whose basic tenet is that tort damages provide the appropriate financial


\textsuperscript{123} \textit{Couch v Steel} (1854), 3 El & Bl 402 at 414, 118 ER 1198.

\textsuperscript{124} See e.g. \textit{Phillips}, supra note 62.

\textsuperscript{125} See especially \textit{Groves v Wimborne}, [1898] 2 QB 402 (CA).

\textsuperscript{126} See Peter Cane, “Tort Law as Regulation” (2002) 31:4 C L World Rev 305 at 316.

\textsuperscript{127} See e.g. \textit{Miller v Jackson}, [1977] 1 QB 966 at 980 (CA), Lord Denning MR.

\textsuperscript{128} See Cane, supra note 126 at 316.

\textsuperscript{129} \textit{Ibid} at 314–315.
incentive to produce an efficient level of accident prevention.\textsuperscript{130} Even those who doubt such a claim is susceptible of proof\textsuperscript{131} are generally prepared to accept that tort law has some beneficial effect in the deterrence of accidents.\textsuperscript{132}

\section*{C. Social Welfare}

By the end of the nineteenth century, the prevailing political mood was beginning to change. An intellectual shift occurred that has been characterized as one of the transformative factors of English tort law in the twentieth century:

\begin{quote}
The acute individualism which had characterised Victorian England began to give way to a more communitarian approach: no longer was it obvious that an individual who caused harm to another while pursuing his own economic self-interest should be liable only if it could be shown that he had not taken reasonable care.\textsuperscript{133}
\end{quote}

The new philosophy was embedded in new institutions that sought to mitigate the inevitable risks of industrialized society in a more coordinated fashion than could be achieved through the patchwork of support mechanisms that contributed to this task in the nineteenth century. The poor law and the master’s legal obligations to menial servants have already been mentioned,\textsuperscript{134} as have the disaster funds established through public charitable appeals.\textsuperscript{135} These were supplemented by other forms of private beneficence, as well as by mutual aid through such organisations as the friendly societies, cooperatives, and trade unions. The intellectual shift was clearly signalled by the introduction of workers’ compensation in 1897.\textsuperscript{136} This may be regarded as the first step on the road to the welfare state created in the years immediately after the Second World War.\textsuperscript{137} From that point on, the principal burden of providing compensation for the victims of accident, illness, or other misfortune was to fall upon taxpayers, not charity or self-help, nor even tortfeasors.

\begin{footnotes}
\item[133] Ibbetson, supra note 109 at 259.
\item[134] See Part I-D, above.
\item[135] See text accompanying note 18.
\item[136] See text accompanying notes 90–91.
\item[137] Beveridge, supra note 95 at 41.
\end{footnotes}
Here the practical matter calling most urgently for resolution—whether and to what extent the receipt of social welfare benefits impacted upon the damages recoverable in tort—itself raised fundamental questions about tort law’s function in modern society. In practical terms, could the victim accumulate welfare benefits and damages, or should the value of such benefits be deducted from the damages? Should the defendant be relieved of tortious liability to the extent that the victim received welfare benefits, or was the state and its agencies to have the power to pursue the defendant for their value? From the perspective of fundamental policy, is accidental injury first and foremost a social responsibility, to be addressed by the state through the provision of welfare benefits, with tort law stepping in to provide damages only for losses not compensated by the welfare scheme? Or is it primarily an individual responsibility falling upon tortfeasors, who should reimburse the state for its expenditure on those whom the tortfeasors injure?  

In the years immediately after the establishment of the welfare state, English law adopted an unsatisfactory compromise approach, deducting half the value of specified welfare benefits from the damages recoverable by the victim, but without any provision for reimbursement by the defendant to the state; it was only in 1989 that the whole system was reformed and a general principle of reimbursement of social security benefits introduced. The reimbursement of public healthcare expenditure on accident victims is treated separately, and initially applied only in road traffic accident cases. It was extended to all personal injury cases in 2007. However, only hospital charges and not primary care costs are reimbursed, so a measure of State subsidy for tortfeasance remains.

Conclusion

English law has still to develop a convincing and coherent vision of tort law’s true function in modern society. This task necessarily requires an assessment of tort law’s proper place relative to other institutions—notably insurance, regulation, and social welfare—that have developed in response to the risks created by technological innovation, especially in the period since the Industrial Revolution. This paper has sought to give an account of how tort law’s own development was shaped by the technological and consequent social changes, and subsequently by its interaction with the new legal technologies introduced to control or mitigate the risks.


139 See Lunney & Oliphant, supra note 1 at 895–99.

140 Ibid at 887–89.
However, the somewhat downbeat conclusion is that English law’s overall response to accidental injury is excessively marked by ad hoc responses to historical circumstances, and that sustained intellectual engagement is still required to provide a consistent and principled basis for further legislative reform.