BEYOND HUMAN FORESEEABILITY: RETHINKING REMOTENESS OF DAMAGES IN ERA OF AI AND AUTOMATION

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Abstract:

The Researcher in this paper analysing the concept of remoteness of damages which was prominently evolved in 19th century. It is an outcome of judicial interpretations. This concept first evolved and discussed in contractual matter in the celebrated case of Hadley v Baxendale (1854) 9 Ex 341. Since then this concept is evolving and extended in the matter of contractual liability if there is breach of contract and in case of civil wrong in imposing tortious liability. The doctrine of remoteness of damage is a fundamental principle in tort and contract law that determines the extent of liability by assessing whether the damage suffered was a foreseeable consequence of the defendant's actions. In a due course of time industrialisation to massive digitalisation and automation in all most all sectors of the human life, be it commodity or services followed by the Artificial intelligence. This doctrine was evolved by taking into consideration of human error, negligence, or forcibility but now moot question is whether this principle is applicable to algorithmic error beyond human foreseeability?

Originating from landmark cases such as Hadley v Baxendale, Re Polemis (1921) and The Wagon Mound (1961), this principle has evolved to balance fairness in liability determination both in Contract and Torts. In today's legal landscape, the concept is increasingly applied in cyber law, environmental law, corporate liability, and artificial intelligence regulation. In this paper the researcher would like to explore the evolution of the remoteness of damage, its application in contemporary legal disputes, and the challenges posed by emerging technologies and global E-commerce. By analyzing judicial trends, case laws, and legislative frameworks, this study highlights the modern relevance and future path of this legal principle.

Keywords: Remoteness of damage, Artificial Intelligence, Liability, Contract, Tort, emerging technology, Algorithmic error.

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Research Objectives :

1. To examine the doctrinal foundations of remoteness of damages in contract and tort law.
2. To study landmark judgments that defines remoteness in contract and tort law.
3. To evaluate the effectiveness of remoteness in balancing claimant rights and limiting excessive liability.
4. To assess whether traditional tests *(Hadley v. Baxendale, Wagon Mound)* remain effective in addressing AI-related risks.
5. To suggest policy and legislative reforms for a more adaptive legal approach to digital-age disputes
6. To suggest policy recommendations for a more consistent approach to remoteness in India.

Research Questions (based on its applicability on the Digital Age) :

1. How does the doctrine of remoteness apply to e-commerce disputes, including data breaches and service failures?
2. In robotic surgeries, who bears liability for unexpected complications whether doctors, hospitals, or AI developers?
3. To what extent can manufacturers or programmers be held liable for self-driving car accidents, considering the unpredictability of AI decision-making?
4. Should courts reconsider the foreseeability test in cases involving algorithmic decisions?
5. Can existing contract and tort principles effectively address damages from automated systems and artificial intelligence?

Research Methodology:

The Researcher opted for a doctrinal method for writing this research paper wherein the Researcher mostly relied on the existing secondary sources as Bare Acts, text book, reference books, Court's decision (Precedent) and the webpages on similar topic

Introduction :

The remoteness of damage is a principle in Law of Tort and the Law of Contract that limits a defendant's liability by determining whether the damage caused was a foreseeable consequence of their action. This doctrine ensures that liability is fair and does not extend

indefinitely. The concept of remoteness of damage is derived from two key doctrines which were eventually evolved by common law courts in two English cases:

1. Direct Consequences Test (Re Polemis Case)
2. Foreseeability Test (Wagon Mound Case)

Law of Contract and the doctrine of Remoteness of Damages:

Under the Law of Contract, section 73 addresses the compensation for the loss or damage caused by a breach of Contract. It stipulates that when there is a breach of contract, the party suffering from the breach is entitled to receive compensation for any loss or damage naturally arising in the usual course of events from such breach, or which the parties knew, when they made the contract, to be likely to result from breach. However, compensation is not to be given for any remote and indirect loss or damage sustained due to the breach. The issue of remote damages arose in the landmark English Contract Law case *Hadley v. Baxendale (1854) 9 Exch 34* Hadley, a mill owner, contracted Baxendale, a carrier, to transport a broken mill crankshaft for repairs. Baxendale delayed the delivery, causing Hadley's mill to remain closed, leading to loss of profits. Hadley sued for damages, including lost profits. The court ruled that damages are only recoverable if they were foreseeable at the time of the contract. Since Baxendale was unaware that a delay would cause Hadley's mill to shut down, lost profits were deemed too remote and not recoverable. Two-part test for remoteness was established in this case

a. Ordinary Damages- Losses arising naturally from the breach.
b. Special Damages-Losses that were foreseeable due to special circumstances communicated at the time of the contract.

The Hadley lost the case but this case established and clarified the legal principle of foreseeability in Contract Law, limiting liability to losses that were either naturally occurring or reasonably contemplated by both parties. It influenced later rulings in tort law regarding causation and foreseeability.

In Titanium Tantalum Products Ltd. vs Shriram Alkali And Chemicals on 11 May, 2006 the Delhi High Court held that the defendant is liable only for reasonably foreseeable losses those that a normally prudent person , standing in his place possessing his information when contracting would have had reason to foresees probable consequences of future breach

Extension of Remoteness of Damage to Tort Law:

In Law of Tort, the concept of remoteness is crucial to determine the extent of a

defendant's liability. Judiciary have predominantly adopted the test of reasonable foreseeability, as established in the Wagon Mound case. According to this test, a defendant is liable only for those damages that could have been reasonably foreseen as consequences of their wrongful act.

The doctrine of remoteness of damages originated in contract law, but it was later extended to tort law to fix the liability of the respondent in a tort cases, particularly in negligence cases. The key difference between contract and tort law in this context is:

Law of Contract	**Tort Law**
Remoteness is determined based on what was reasonably foreseeable at the time of contract formation.	Remoteness is assessed based on what was reasonably foreseeable at the time of the wrongful act (i.e., the negligent act or omission).

The remoteness of damages extended in further cases and evolved two tests to fix the liability in tortious liability.

a. Direct Consequences Test *(Re Polemis and Furness, Withy & Co. Ltd. [1921]).* The defendant was held liable for all damage directly caused, regardless of foreseeability. This test was later considered too broad, as it imposed liability for all consequences, foreseeable or not.
b. Foreseeability Test (Overruled in *The Wagon Mound Case [1961*]) The Privy Council introduced the foreseeability test, limiting liability only to damages that a reasonable person could

In *Re Polemis and Furness, Withy & Co. (1921)***,** a worker negligently dropped a plank into a ship's cargo hold, which caused sparks and ignited vapours, destroying the ship. The defendants argued that the fire was not a foreseeable consequence of dropping the plank. The direct consequences of an act, regardless of foreseeability, were held to be not too remote. This case followed the "direct consequences test", meaning if damage is a direct result of negligence, the defendant is liable, even if the extent of the damage was unforeseeable.

In *Overseas Tankship (UK) Ltd v Morts Dock and Engineering Co Ltd*, commonly known as ***Wagon Mound (No. 1)***, , is a landmark tort law case, which imposed a remoteness rule for causation in negligence. 1961. In this case the Oil negligently spilled into Sydney Harbour. Two days later, welding sparks ignited the oil, causing a fire and significant damage occurred. The ship owners argued that the fire damage was too remote because it was not foreseeable that oil on water would ignite. The court overruled Re Polemis and held that only foreseeable consequences of negligence should be recoverable. In this case the court established the "reasonable foreseeability test", by replacing the direct consequences test. This decision made it harder for plaintiffs to claim damages in tort, as they now had to prove that the specific type of harm was foreseeable.

Overseas Tankship (UK) Ltd v The Miller Steamship Co or Wagon Mound (No. 2) (1966) The Judicial Committee of the Privy Council held that loss will be recoverable where

the extent of possible harm is so great that a reasonable man would guard against it (even if the chance of the loss occurring was very small). A more flexible approach has taken by the Court, in subsequent case (same oil spill) ruled that if even a small risk was foreseeable, the defendants could be held liable. This slightly relaxed the strict foreseeability test of Wagon Mound No. 1.

Jurisprudential Value in the Indian Context :

The doctrine of remoteness of damage serves several jurisprudential purposes within the Indian legal system:

a) **Fairness and Justice:** By limiting liability to foreseeable consequences, the doctrine ensures that defendants are held accountable only for harms they could have anticipated, promoting equitable outcomes.
b) **Legal Certainty:** It provides a clear framework for assessing damages, aiding courts in making consistent and predictable decisions.
c) **Economic Efficiency:** Encourages parties to assess potential risks and liabilities during contract formation, leading to more informed and efficient agreements with fewer breaches.

Present-Day Application in AI and Digital Age :

The traditional principles of remoteness of damages as established in *Hadley v. Baxendale (Contract Law) and Wagon Mound (Tort Law)* were developed in a human-centric world. However, AI, autonomous systems, and digital technologies introduce complexities with lack of clear legal rules for their applicability on such cases as there is missing thread in the current legal framework. Integrating the principle of remoteness of damages into the context of modern digital technologies such as e-commerce, robotic surgeries, and autonomous vehicles presents unique challenges.

With AI-driven accidents, data breaches, and robotic automation errors, courts now face new challenges in determining remoteness:

1. AI Glitches- If a self-driving car misinterprets road signs and causes an accident, should the AI manufacturer be liable if the mistake was unforeseen?
2. Data Breaches- If an AI-driven financial system is hacked, leading to identity theft, is the software provider liable for remote damages like psychological distress?
3. Medical AI Errors- If an AI misdiagnoses a patient and leads to complications years later, should hospitals be liable for damages that were not immediately foreseeable?

Challenges and Evolving Trends :

a. Artificial Intelligence and Automation: difficulties in determining foreseeability in AI-driven decisions.
b. Climate Change Litigation: Companies may argue that their emissions had only a remote impact on environmental damage.
c. Expanding Corporate Liability: Courts are broadening foreseeability standards in consumer protection and human rights cases.

E-Commerce:

ChemImage vs. Johnson & Johnson-ChemImage, a biotech firm, sued Johnson & Johnson (J&J) for $1.5 billion, alleging breach of contract over AI-powered imaging software used in surgical robotics. ChemImage claimed wrongful contract termination and sought damages for penalties and missed payments. This case underscores the complexities in determining liability and assessing damages when AI technologies are involved in contractual agreements.

Robotic Surgeries:

Liability in Autonomous Surgical Robots**,** the integration of AI in surgical procedures raises questions about liability when adverse outcomes occur. A study explored public attitudes toward responsibility allocation as surgical robots gain autonomy. Determining foreseeability of harm and the extent of liability becomes complex as decision-making shifts from human surgeons to autonomous systems.

Autonomous Vehicles Waymo's Safety Performance Waymo, an autonomous vehicle company, reported significant reductions in property damage and bodily injury claims compared to human-driven vehicles.While improved safety records are promising, incidents involving autonomous vehicles still raise questions about liability and the application of the remoteness doctrine in determining damages.

Legal Precedents on Remoteness in Digital Contexts *Armstead v. Royal & Sun Alliance Insurance Company Ltd [2024] UKSC 6* the Supreme Court of UK addressed issues related to remoteness of damages in negligence, emphasizing the defendant's burden to prove that a loss is too remote to be recoverable. This case highlights the evolving interpretation of remoteness in the context of modern technologies and their associated risks.

Recent legal developments have begun to address the liability of AI developers and digital gadget manufacturers under the doctrine of remoteness of damages.

Following are cases wherein this doctrine applied in tune with AI

In **Air Canada Chatbot Misrepresentation**: In *Moffatt v. Air Canada (2024),* a customer relied on inaccurate information provided by Air Canada's website chatbot regarding bereavement fares. The Chabot incorrectly stated that reduced fares could be applied retroactively, leading the customer to purchase a full-priced ticket with the expectation of a refund, which was later denied. The tribunal held Air Canada responsible for the Chabot's misinformation, emphasizing that the airline is accountable for all content on its website, including automated responses. This case underscores the principle that companies cannot deflect liability by attributing errors to autonomous digital agents.

In Amazon Alexa's Unauthorized Purchases: In 2017, Amazon's Alexa voice assistant misinterpreted a television broadcast and initiated unauthorized purchases of dollhouses. This incident raised questions about liability when AI systems perform unintended actions based on external stimuli. Discussions centred on whether Amazon, as the developer,

should have anticipated and mitigated such risks? This incident highlights the challenges in applying traditional liability doctrines to AI algorithmic decisions.

Liability in AI-Generated Content:

The Singapore Law Gazette discusses scenarios where deplorers (users) of AI systems have been held liable for misinformation provided by AI, especially when there's a duty to ensure accuracy.

These cases illustrate the evolving application of the remoteness of damages doctrine in the context of AI and digital technologies. As courts navigate these complexities, they assess factors such as foreseeability, the developer's duty of care, and the directness of the causal link between the AI's actions and the resulting harm.

Need of new Principles to tackle the new technological issues in various sectors ranging from e-commerce to robotic services in multiple levels of machine precision for the comforts of humans to unmanned vehicle etc.

Why?

1. AI's Unpredictability: Unlike human actions, AI can make autonomous decisions that are not foreseeable, even to its creators.
2. Multi-Layered Causation: Liability may involve multiple actor's developers, manufacturers, and end-users.
3. Evolving Decision-Making: AI systems learn over time, making it difficult to determine liability at a fixed point.
4. Cross-Jurisdictional Impact: AI operates globally, raising conflicts between different legal systems on remoteness standards.

Possible answer to the question of Why-New Principles of Remoteness in the AI Era :

"Reasonable Algorithmic Foreseeability" Test: Instead of the traditional foreseeability test, Courts could assess whether a well-trained AI system should have anticipated the damage based on its training data and operational parameters.

"Dynamic Foreseeability" in AI-Driven Systems: Unlike static foreseeability in contracts/torts, AI foreseeability should evolve based on system updates. Developers might be held liable if they fail to update AI models to prevent foreseeable risks

Tiered Liability Approach :

a. Developers: Liable if the AI's actions result from inadequate programming or training.
b. Users of AI: Liable if they misuse AI beyond its intended scope.
c. Manufacturers are Liable for hardware malfunctions affecting AI behaviour

"AI-Specific Causation" Doctrine :

Courts might require proving a "causal chain of AI decision-making" rather than simply

applying traditional causation principles. If AI-powered trading software causes an economic crash, regulators might analyze whether the AI acted beyond its programmed intent rather than simply whether the loss was foreseeable.

"Proactive Duty to Mitigate AI Risks" :

a. Companies deploying AI should prove that they have sufficient safeguards in place.
b. Failure to take reasonable steps to prevent AI malfunctions could lead to liability for even remote damages.

Impact on Legal Frameworks :

a) **Contracts:** AI-driven contracts may require dynamic risk assessment clauses, updating foreseeability as AI systems evolve.

Torts: AI's learning ability may require courts to adopt a continuous foreseeability standard, rather than assessing foreseeability at the time of the act.

Legislation: Governments may introduce AI liability laws.

Conclusion:

The doctrine of remoteness of damages must evolve to balance technological progress with accountability. Courts and lawmakers should consider flexible foreseeability standards, multi-tiered liability models, and AI-specific causation tests to adapt legal principles to the digital era. The doctrine of remoteness of damage remains highly relevant today. While it prevents excessive liability, Judiciary are increasingly expanding the foreseeability standards in areas like environmental law, cyber law, and AI regulation. This balance ensures justice while fostering responsible conduct in an evolving digital legal landscape.

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