Bhopal Gas Tragedy: Paternalism and Filicide

—Shruti Rajagopalan

This article analyzes the failure of the Indian state in providing compensation to victims of the Bhopal Gas Leak. On its thirtieth anniversary, most of the known victims have not received their compensation or adequate healthcare and have spent three decades dealing with the state bureaucracy for their claims. This is a case where the state’s paternalistic takeover of victims’ claims and compensation, through the Bhopal Gas Leak Disaster (Processing of Claims) Act, 1985 (BGLDA), may have killed thousands because of bureaucratic delays and errors. This article critiques the BGLDA from the economic point of view.

The BGLDA gave the Central Government the exclusive right to represent and act in place of all the victims and claimants. The processing of claims of victims of the gas leak is fraught with Type I and Type II errors. Funds were diverted to pay spurious claims (or Type I error) and after thirty years genuine victims have still not received compensation (Type II error). This paper argues that the adversarial system of litigation, due to its competitive nature in the production of evidence, minimizes both types of error. In addition, lawyers working on contingency fees within an adversarial legal process have the appropriate incentives to minimize both types of errors. The welfare commissioners and the bureaucracy set up under the BGLDA did not have the appropriate incentives to discover the knowledge generated in the adversarial system.

The BGLDA, in replacing the adversarial system with the inquisitorial state bureaucracy, circumvented the discovery process, which led to high error and delayed compensation.

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"If seven maids with seven mops
Swept it for half a year.
"Do you suppose," the Walrus said,
"That they could get it clear?"
"I doubt it," said the Carpenter,
And shed a bitter tear".

—The Walrus and the Carpenter

I. INTRODUCTION

This article analyzes the failure of the Indian state in providing the promised compensation to victims of the Bhopal Gas Leak from the economic point of view. Even after thirty years there is no accurate official count of victims. Most of the known victims have not received their compensation or adequate healthcare and have spent the greater part of the last thirty years dealing with the state bureaucracy for their claims. This is a case where the state’s paternalistic takeover of victims’ claims and compensation may have killed thousands because of bureaucratic delays and error.

The Bhopal Gas Leak (hereinafter referred to as BGL) is one of the worst industrial accidents in the last century and certainly India’s worst industrial disaster. There is no question that the blame falls upon the management of Union Carbide Corporation (UCC) and Union Carbide India Limited (UCIL) due to their criminal and fraudulent behavior before, during and after the gas leak. However, the victims in Bhopal were also failed by the Indian state on many levels - the lack of regulatory oversight of the chemical plant prior to the incident and the poor emergency services during and immediately after the gas leak. This is especially true of the post-incident period; state failure to provide immediate medical care and rehabilitation, under-assessment of liability, environmental rehabilitation, psychological and long-term health, mental well

1 Carroll Lewis, Through the Looking Glass and What Alice Found There (Clarkson N. Potter 1973) (1872).
7 Peter Foster, India Still Suffers 20 Years After Tragedy: Failure to Clean Up Pollution Keeps Wounds Festerling, The Telegraph, The Calgary Herald (Alberta) 962-965 (3-12-2004).
being of the victims and the callousness of the state in compensating victims after the incident.9

In thirty years, virtually every area of the BGL has been analyzed but there is little analysis of the paternalistic takeover of the victims’ claims through the Bhopal Gas Leak Disaster (Processing of Claims) Act, 1985 [hereinafter referred to as BGLDA]. In the aftermath of the gas leak, the Indian Parliament passed the BGLDA on March 29, 1985, because it wanted to exclusively represent gas leak victims in American courts, in order to prevent American lawyers (working on contingent fees arrangements) from exploiting victims.

In much of the existing literature, either the BGLDA is mentioned but not addressed or it is assumed to be a well-intentioned policy that failed due to poor execution. The main and perhaps only critique has been with respect to the challenge is of the constitutional validity of the BGLDA in the judiciary.10 Even its few critics argue that “the failings of the Bhopal Act do not point in favor of a return to individualized justice. Serious as the problems were, it is crucial to remember that the majority of the victims were poor and had no other means of legal redress.”11 Overall, there is no analysis on the BGLDA and the unintended consequences of state paternalism.12

This article critiques the BGLDA from the economic point of view.13 It analyzes the incentives created by the BGLDA for the various parties to

10 In Charan Lal Sahu v. Union of India, (1988) 3 SCC 255, the petitioners challenged the constitutional validity of the said Act on the grounds that it violated the fundamental rights guaranteed under Articles 14, 19 and 21 of the Constitution. There were four main arguments: (1) Violation of the principles of natural justice: because Union of India was a joint tort-feasor as it permitted establishment of such factories without necessary safeguards and therefore had no locus standi to compromise on behalf of the victims. (2) The victims were not given the opportunity of being heard, before the Act was passed. (3) That in the guise of giving aid, the State could not destroy the rights inherent in its citizens, nor could it demand the citizens to surrender their rights to the State. (4) That vesting of the rights in Central Government unreasonable because the Central Government 22% share in UCIL and that would make the Central Government a judge in its own cause.
12 On two occasions I have critiqued this paternalistic legislation. Shruti Rajagopalan, An Indian Tragedy Many Times Over, The Wall Street J., 13-6-2010; Shruti Rajagopalan, Are We Free to Be Foolish?, MINT, 10-12-2007.
13 Economic analysis has been used to analyse non-market behavior in areas such as law and politics. This method extends the self-interest individual assumptions from the market to behaviour within legal and political institutions. To my knowledge, there has been no economic analysis of the BGLDA. However, given BGLDA’s validity, P.G. Babu has analysed the bargaining model between UCC and Government of India, in light of asymmetric
discover information and reduce error, and compares it to incentives in an adversarial legal system. The failure to accurately assess compensation for the victims of the gas leak was a result of state paternalism (through the BGLDA) substituting an adversarial system of litigation with a bureaucracy. Through economic analysis, it becomes clear that this was not merely a case of poor execution of a good system, but that the incentives created by the BGLDA for state actors were not conducive to enable discovery of relevant information on the victims and their injuries to determine liability and calculate compensation.

The fundamental feature of BGLDA was that the Central Government had the exclusive right to represent and act in place of all the claimants in order to protect them from high legal fees and provide them a speedy, fair and equitable judicial process. The BGLDA authorized the establishment of a ‘Claims Scheme’ and created the office of a Commissioner whose function would be to administer the scheme - registering, recording, and processing individual claims.

The BGLDA had three immediate consequences. First, it eliminated representation of victims by lawyers working on contingent-fees. Second, it replaced the adversarial system of litigation with an inquisitorial system. Third, it placed a bureaucrat or the ‘Welfare Commissioner’ as the principle searcher under the BGLDA.

There are some implications of all three consequences. The story of Bhopal victims’ settlement and compensation is rife with two types of errors; the first being those victims who should have got compensation but did not and the second, being the spurious claims which should have been invalidated but in fact received compensation. It was a colossal task to separate genuine

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information. See P.G. Babu, Suit and Settlement under Asymmetric Information: The Case of Bhopal Gas Disaster, in Economic Analysis Of Law In India: Theory And Applications [P.G. Babu et al. (Eds.), 2010].

14 Bhopal Gas Leak Disaster (Processing of Claims) Act, 1985, Section 3.
15 Id., at Section 9. In exercise of the power under Section 9, the Central Government framed a Scheme known as the Bhopal Gas Leak Disaster (Registration and Processing of Claims) Scheme, 1985.
16 Bhopal Gas Leak Disaster (Processing of Claims) Act, supra note 14, at Section 6.
17 It must be noted that the entire legal system was not replaced with an inquisitorial system. Instead, only the claims processing was turned into an inquisition led by the Welfare Commissioner. This kind of inquisitorial claims processing was conducted within the shadow of an adversarial system, which dealt with the constitutional issues, settlement with UCC etc., but did not deal with claims processing.
from spurious claims. The adversarial system, due to its competitive nature in
the production of evidence, minimizes both Type I\(^9\) and Type II\(^{20}\) error.\(^{21}\)

Second, I argue that “ambulance chasers” working on contingent fees
within an adversarial legal process have the appropriate incentives to mini-
mize both Type I and Type II error. Third, the bureaucracy set up under the
BGLDA did not have the appropriate incentives to discover the knowledge that
is produced in the adversarial system

The BGLDA replaced this adversarial system with the inquisitorial state
bureaucracy and circumvented the discovery process, which led to high error
and low and delayed compensation.

Part II of this paper, provides the background for the BGLDA and the
circumstances under which the victims of Bhopal were denied representation
in the adversarial litigation process. Part III details the magnitude of error in
estimating the number of victims and the extent of their injuries and outlines
the consequences of the paternalistic BGLDA. Part IV discusses the incentives
created by (1) lawyers working on contingency fees, (2) incentives within an
adversarial legal system minimizing Type I and Type II errors and (3) search
costs in an adversarial system. Part V outlines the incentive and knowledge
problem of the paternalist in determining the relevant information for settling
the liability of UCIL and compensation of victims. Part VI provides conclud-
ing thoughts.

II. The Bhopal Gas Leak and its Aftermath

On the night of December 2, 1984, Methyl Iso-cyanate (MIC) and
other highly toxic gases leaked from a plant set up by UCIL for the manufac-
ture of pesticides in Bhopal. UCIL was a subsidiary of UCC.\(^{22}\) By the morning
of December 3, 1984, at least 2,660 deaths were attributable to the leak and at
least 200,000 people suffered permanent, temporary and mild injuries.\(^{23}\) In the
aftermath of the gas leak, the state response for emergency and medical needs
of victims was inadequate.

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\(^9\) Type I error, also known as a “false positive” is the error of rejecting a null hypothesis when
it is actually true.

\(^{20}\) Type II error, also known as a “false negative” is the error of not rejecting a null hypothesis
when the alternative hypothesis is the true state of nature.

\(^{21}\) For Type I and Type II errors, see Section IV Part B of this article.

\(^{22}\) The plant was operated by Union Carbide India Ltd., owned 50.9% by Union Carbide, USA,
and 49.1% by Indian shareholders. At the time, the maximum investment permissible for a
foreign investor was 40 per cent. However, the Central Government waived this requirement
for UCCs technology and exports. See B.K. Khanna, All You Wanted To Know About
Disasters 156 (2005).

\(^{23}\) Hanqin Xue, Transboundary Damage in International Law 27 (2003).
Soon after, an army of American lawyers invaded Bhopal, contracting with victims and family members to represent their case against UCC in American courts. Bhopal experienced what Marc Galanter calls “the great ambulance chase” as American lawyers sought to profit from representing the victims of the gas leak.24 These lawyers worked for contingency fees – they were typically paid one-third of the compensation they secure for the victims in case of a win or settlement and were paid nothing if they failed to secure compensation. American lawyers filed almost 150 claims in various United States courts up to 50 billion dollars. On February 6, 1985, the Judicial Panel on Multidistrict Litigation ruled to consolidate all of the federal court suits filed against Union Carbide on behalf of the Bhopal victims in the Southern District of New York, presided over at the time by Judge Keenan.25

This posed many problems for the Government of India. First, the Government feared that American lawyers and ‘ambulance-chasers’ working on contingency fees, sometimes as high as 50%, would exploit the victims of the BGL. Second, there was the question of the venue and forum of the legal proceedings. The Government of India argued that the United States was the best venue for legal proceedings and that hundreds of claims were being filed in various American courts. However, there were fears that the government might not have the locus standi to represent the Bhopal victims in American courts unless a law was passed to enable it to sue on behalf of the victims.26 A third problem for the government was that American lawyers, on behalf of the victims, would also sue the Government of India as a 22% shareholder in UCIL.

To overcome these problems, exercising its role as parens patriae27, the Government of India passed an ordinance on February 20, 1985, allowing it to act as the sole legal representative of all Indian victims in matters related to

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27 India has always been a nation State where paternalism is assumed to be one of the duties of the State. In ancient times it was the dharma (or duty) of the Hindu king to make policies for the welfare of his subjects, as a parent would treat the child. Once under the rule of the British, Indians were subjects of the Crown and the English doctrine of parens patriae extended to them. Post-independence India was envisaged as a socialist welfare State; Part IV of the Constitution of India includes various Directive Principles stated as guidelines for the local governments, which are mainly paternalistic in nature. Under English Law, the Crown as parens patriae is the constitutional protector of all property subject to charitable trusts, such trusts being essentially a matter of public concern. According to the Indian concept, parens patriae recognises the sovereign as the protector of citizens as a parent protects the child. In particular, State paternalism in India is visible in times of disaster such as famines, drought and natural calamities. For details on the use of parens patriae in the BGL, see Lisa Moscati Hawkes, Parens Patriae and the Union Carbide Case: The Disaster at Bhopal Continues, 21 CORNELL INT’L J. 181 (1988).
their claims emerging from the BGL. On March 29, 1985, the BGLDA was passed.

The BGLDA enabled the Union of India to become the sole plaintiff in substitution of all of the victims. This power included (a) the institution or withdrawal of any suit or proceeding; and (b) entering into a compromise. The tribunals for categorization, processing and adjudication of claims were completely under the control of the Central Government, which had power to frame a Scheme in relation to adjudication and compensation. Further, the BGLDA and any related Scheme had overriding effect over every other statutory enactment. In terms of legislative power and authority, the BGLDA left no stone unturned and hoped to deliver justice.

As the sole representation for all victims of BGL, the Government of India turned down a $200 million settlement offer from UCC on April 6, 1985. Soon after, on April 8, 1985, the Government of India filed suit against UCC in Federal District Court for the Southern District of New York representing the victims of the BGL.

On July 1, 1985, UCC motioned the court to dismiss the action from America on grounds of forum non conveniens. The main question was the appropriate venue for the legal proceedings between BGL victims and UCC. In an ironic twist, experts on behalf of UCC praised the Indian judiciary and the development of tort law in India, while the Government of India argued the shortcomings of the Indian legal system in handling a case like the BGL. An important aspect for determining forum was the ability of the Indian legal system to handle class action suits. As an expert witness on behalf of Government of India, Marc Galanter pointed out the lack of past precedent in India as only 613 tort cases had been reported from 1914 to 1965. Also in these cases, there had been no class action procedure in India, which would make speedy litigation very difficult. On behalf of the UCC, Nani Palkhivala argued “the Indian system is undoubtedly capable of evolving the law to cope with advances in technology in the unfolding future. The Bhopal litigation represents an opportunity for the further development of tort law in India; that chance should not be denied to India merely because some might say that

28 Supra note 14, at Section 3(i).
29 Supra note 14, at Section 3(ii).
30 Supra note 14, at Section 9. In exercise of the said power, the Central Government framed a Scheme known as the Bhopal Gas Leak Disaster (Registration and Processing of Claims) Scheme, 1985.
31 Bhopal Gas Leak Disaster (Processing of Claims) Act, 1985, Section 11.
32 UCC arrived at the $200 million because that was said to be the insurance coverage for UCC. Government of India rejected it on grounds that it was insufficient.
the American legal system is ahead in development.” UCC directly pointed to the BGLDA and argued that the Government of India could settle the matter at home, as it had the power to represent all victims, and avoid the complications of traditional class action suits.

Judge Keenan, on May 12, 1986 dismissed the class action on the ground of *forum non conveniens* conditional upon UCC submitting to the jurisdiction of Indian courts and agreeing to satisfy any judgment rendered by an Indian court.

Judge Keenan’s order had two consequences: the first was the legal consequence of the forum moving to India; and the second was that questions of interim compensation and final compensation were left to be resolved by the Government of India.

III. PROCESSING OF CLAIMS: ERROR AND IGNORANCE

After the forum for litigation was transferred back to India the constitutionality or the prudence of the BGLDA was not questioned. There was no detailed analysis of whether the Government of India was the best entity to represent the victims once the venue was moved to Indian courts. Claims, their categorization and associated compensation were to be decided by Deputy Welfare Commissioners (Civil Judges on deputation to the Directorate of the Welfare Commissioner) with one appeal to the Additional Commissioner. On their part, the Additional Commissioner and the Welfare Commissioner could *suo motu* revise any order of the Deputy Welfare Commissioner. The BGLDA essentially substituted the adversarial process and turned it into an inquisitorial process, which was not legal but bureaucratic. Specifically, only the claims processing was turned over to the bureaucracy. The larger battles of the constitutionality of BGLDA, the validity of interim relief, and the overall settlement, were all negotiated in the adversarial legal system of India.

This bureaucratic procedure would take a long time to sort through claims and compensation, at a time when victims were struggling to survive

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34 The full text of the affidavit dated 18-12-1985 of N.A. Palkhivala is reproduced in, *id*, at 222, 227-228 (Upendra Baxi & Thomas Paul prepared, 1986).
35 Against the order dated 12-3-1986 of Judge Keenan, appeals were filed by the 145 individual plaintiffs and the UCC. By order dated 4-1-1987, the Court of Appeals for the Second Circuit disposed of the appeals by modifying the conditions subject to which the suit by Union of India had been dismissed. Union of India’s further petition for a writ of *certiorari* against the order of the Court of Appeals was declined by the US Supreme Court on 5-10-1987.
36 Bhopal Gas Leak Disaster (Registration and Processing of Claims) Scheme, 1985. Para 11 of the Scheme relates to determination of quantum of compensation payable to claimants. Clause (3) of Para 11 provides for appeal against an order passed by the Deputy Commissioner to the Additional Commissioner.
37 *id*, at para 13.
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and often did not receive basic medical care. First, the Government of India filed a suit in the District Court of Bhopal against UCC. The District Judge of Bhopal ordered Interim Relief of Rs. 350 Crores (3.5 billion) on December 17, 1987. On appeal to the High Court, Judge Deo ordered a modified Interim Relief of Rs. 250 Crores (2.5 billion) on April 4, 1988. UCC and the Union of India thereafter filed appeals in the Supreme Court, which were admitted and referred for hearing to a bench of five judges. During the pendency of the appeals, UCC and the Union of India negotiated a settlement and on February 14, 1989, the Supreme Court approved the settlement of $470 million or Rs 750 Crores (7.5 billion). This amount absolved UCC and UCIL of all past, present and future liability making the Bhopal settlement unique. The final settlement of $470 million was based on the assumption that there were 3,000 fatalities and 52,000 victims with different degrees of injuries.

The details of this initial settlement are important for two reasons. First, it was the baseline on which all the curative petitions followed. Second, it gives us a sense of how badly the Government of India and the judiciary underestimated the damage caused by the BGL.

Within two years of the Supreme Court order finalizing the settlement, in a review petition order on October 3, 1991 the Supreme Court acknowledged that there had been around 4,000 deaths and those injured far exceeding 50,000.

After the settlement was finalized, a 5-judge constitutional bench of Supreme Court heard petitions challenging the validity of the settlement. The court held that if the settlement amount fell short, the Union of India was bound to provide for the shortfall in compensation. By then, it was clear that the state had grossly underestimated the number of victims and the Court did not want this to affect the medical and legal compensation for victims of the gas leak.

Dr. D.K. Satpathy, the doctor who performed the highest number of autopsies on Bhopal gas victims, signed 10,000 death certificates within a

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39 The settlement was to be distributed in the following manner. 3000 fatal cases were to receive Rs 300,000 each. 30,000 victims with permanent disabilities were awarded damages between Rs 50,000 and Rs 200,000 each. 20,000 victims with temporary disabilities were awarded damages between Rs 25,000 and Rs 100,000 each. 2,000 victims with utmost severe injuries were awarded up to Rs 400,000 each. Rs 25 crore (250 million) was set aside for expert medical facilities and rehabilitation of victims. Rs 220 crore (2.2 billion) was set aside for minor injuries and destruction of property. The total came to Rs 750 crore (7.5 billion).
41 Justice A.M. Ahmadi dissented questioning the principles on which Indian taxpayer should be liable for damages in a case where Union of India was not held liable and the BGLDA and the following settlement were held constitutionally valid. See Union Carbide Corp. v. Union of India, (1991) 4 SCC 584.
fortnight of the gas leak. Some reports and citizen groups claim that his team maintained meticulous records and ordered all bodies to be photographed and tagged with a number to facilitate claims for compensation.\textsuperscript{42} None of this entered the official search conducted by Welfare Commissioners, and were not reflected in the reports submitted by the Attorney General to the Supreme Court while signing the final settlement.

According to an independent study by Amnesty International, 7,000 to 10,000 people died within three days of the gas leak. This estimate is two to three times that of most official sources. Further, Amnesty International believes that at least 15,000 people have died between 1985 and 2003 because of the gas leak. This takes the total death toll to well over 20,000 within the first two decades after the gas leak.\textsuperscript{43}

The government did not have an estimate of official claims filed until much after the settlement was completed. The BGLDA brought into existence the Scheme under which claims of compensation by the Bhopal gas victims had to be registered and processed. The actual process of registration of claims took place in two phases. In the first phase during 1985-89, about 640,000 individuals filed claims. Another notification invited claims not only from the 36 severely affected wards of Bhopal but also from 20 other wards.\textsuperscript{44} By 2003, a total of 1,029,515 claims were filed.\textsuperscript{45}

It is not just individuals and NGOs representing the Bhopal victims who argue that the number of victims was incorrectly estimated. By 2003, even official estimates were completely different from those in the settlement. According to the Office of the Welfare Commissioner, the total number of claims was 1,001,723 out of which 553,015 cases were collectively awarded approximately Rs. 1,400 crores. The number of claims for deaths registered was 22,149 out of which the Office of the Welfare Commissioner awarded compensation payments to 15,180 claims.\textsuperscript{46}

Despite the impressive figures in the settlement order, the tragedy of the gas leak remains one of non-payment of compensation to victims and a gross miscalculation of the number of deaths and injuries.

\textsuperscript{42} Shiba Prasad Sahu, \textit{A life-giver called Dr. Death}, \textit{THE INDIAN EXPRESS}, 20-6-2010.
\textsuperscript{44} Notification GSR-548 dated 2-12-1996 issued by the Office of the Welfare Commissioner, Ministry of Chemicals and Fertilizers, Government of India and published in the Gazette of India dated 3-12-1996.
\textsuperscript{45} Affidavit dated July 2003 of Veena Gupta, Director, Department of Chemicals and Petrochemicals, Government of India in WP (C) No. 167 of 2003 (later renumbered as IAs Nos. 46-47 in CAs Nos. 3187-88 of 1988) in the Supreme Court of India, at 5.
Finally, each claimant was underpaid on an overall suspicion of the genuineness of the claim. As a result, in 2004 there was a balance of over Rs.1,503 crores remaining to be disbursed, after nearly 570,000 claims had been settled. By 2009, on average, 6,000 gas-affected patients visit hospitals in Bhopal every day, about 2 million visits per year.47

The Government of India, after years of adjudicating and dealing with claims reached the same conclusion. In a curative petition filed by Union of India on December 2, 2010, Attorney General GE Vahanvati contended that the figure of $470 Million was approved by the apex court on “incorrect and wrong assumption of facts and data in the impugned judgments.”48

The government sought the enhancement of compensation from Rs. 750 crore to Rs. 7,700 crore (77 billion).49 To this end, the government’s argument is that the number of fatalities is over 5 times and the number of injuries is over 10 times the respective numbers assumed in the settlement. This case was scheduled for August 5, 2014 before a constitution bench led by the Chief Justice of India, but the matter was deleted on August 4, 2014. The Government of India has undertaken no new legal action since August 2014.

One could cite half a dozen other estimates that environmental experts, NGOs, organizations representing the victims, and the government agencies have produced.50 While there is no single set of estimates of fatalities and injuries that everyone agrees with, almost every estimate, including estimates by the state and central government, clarifies that the numbers based on the original settlement of $470 million were a gross underestimation.

Further, when the settlement was to be distributed among victims, there was the colossal task of separating genuine from spurious claims. The settlement was based on 3,000 fatalities and 52,000 injuries.51 But by 2003, a total of 1,029,515 claims were filed in all.52 Funds were diverted to pay spurious claims (or Type I error) while genuine claims were not compensated (Type II error).

49 *On 26th Anniversary, Govt. Seeks 7,700 Cr for Bhopal Victims*, The Indian Express, 3-12-2010.
50 For details of the chronology and different estimates of victims and damage see S. Muralidhar, *Unsettling Truths, Untold Tales The Bhopal Gas Disaster Victims ’Twenty Years’ Of Courtroom Struggles For Justice*, IELRC WORKING PAPER, (2004).
51 In *Union Carbide Corp. v. Union of India*, (1989) 3 SCC 38, the Supreme Court finalised a settlement between UCC and the Government of India for a final settlement of $470 million dollars absolving UCC and UCIL of all past, present and future liability.
52 *Supra* note 46.
It is clear from the consequences of the BGLDA that the knowledge of the victims required to compensate them appropriately was unavailable to the welfare commissioners and the government officials and judges involved in the 1989 settlement.

In the next section, I explain the process of discovery of knowledge and error minimization in an adversarial legal system. It is the subversion of this adversarial process that led to poor estimates and high error by bureaucrats in the Bhopal case. The process used by welfare commissioners under BGLDA could not accurately discover knowledge of the state of victims and the required extent of compensation.

IV. Adversarial Litigation: Error and Discovery of Knowledge

In the Indian legal system, disputes are resolved through the adversarial process, where each party hires his own lawyer to discover facts and present his parties’ view of the case, with respect to both the law and the facts. This approach can be distinguished from the inquisitorial system (prevalent in continental Europe), where the judge conducts most fact-finding activity centrally.

After the gas leak, the BGLDA replaced the adversarial system with an inquisition led by a bureaucrat - the welfare commissioner under the claims scheme of BGLDA - a move that Upendra Baxi dubbed the nefarious “bureaucratization of justice.”53 The inquisition aimed to establish an accurate count of victims and the extent of their injuries, in order to first determine the appropriate settlement amount with UCC, and then distribute the amount to the rightful claimants.

In an adversarial system, much of this is done individually by parties, and not by the bureaucrat or judge. In any adversarial system, the plaintiffs must determine whether or not to file suit. Once the suit is filed, the plaintiff and defendant must decide whether they want to settle out of court, or proceed with a trial. The plaintiff will sue only if the expected cost of the suit is less than the expected benefit, which may include settling out of court or the damages won from the trial.54

The adversarial process has been compared to the competitive process of the marketplace while describing its tendency to be efficient. The reason is that the parties in an adversarial system face the appropriate incentives. The victim

of the unlawful conduct (through his lawyer), investigates the circumstances, organizes the information obtained by the investigation, determines whether he should use the legal system for appropriate allocation, feeds the information gathered in the appropriate form to the legal system, checks the accuracy of the information provided by the defendant, attempts to change the rules if necessary, and ensures the collection of the final judgment.\textsuperscript{55} In short, the party internalizes the costs and benefits of each action.

Though the parties involved have the correct incentives within an adversarial system, often, there are concerns that it is not the parties but the lawyers making important decisions. This leads to the next question – are the incentives of lawyers aligned with their clients? There are many different arrangements between lawyers and clients for different legal services, ranging from hourly fees, fixed fees, contingent fees etc. In many legal systems outside India, especially in the US, typically in tort cases, the lawyer-fee arrangement is on a contingent fees basis, (also known as success fees), where lawyers receive a percentage of the damages awarded. In contingent fees arrangements, the incentives of the lawyers and plaintiffs are aligned. Both have an incentive to see through the completion of each of these steps, to gain a favorable verdict.

Standard economic analysis of legal systems predicts that police, public prosecutors and attorneys, and other bureaucrats operating the legal system, “would be less highly motivated than a private plaintiff, since their economic self interest would be affected only indirectly by the outcomes of particular cases.”\textsuperscript{56} Compared to public officials, parties and their lawyers internalize both the costs and benefits arising from a suit.

The adversarial system aligns incentives to discover the relevant knowledge, since such discovery can help each party win. As the BGL was a case fraught with the problem of accurate information, this aspect of the adversarial system merits some analysis. In the Bhopal case,\textit{ex-ante} the government wanted to minimize wasteful litigation and search costs and therefore appointed welfare commissioners under BGLDA to conduct the appropriate inquiries. The problem faced \textit{ex-post} by the government was the high degree of error in identifying the victims and their compensation.

The question is whether the adversarial system of litigation or the bureaucratic methods employed by BGLDA would better facilitate the discovery process. This analysis has three parts; (1) the incentives of lawyers working on contingency fees arrangements in an adversarial system; (2) error minimization in the adversarial system; (3) search costs in an adversarial system.


\textsuperscript{56} Posner, \textit{id.}, at 708.
A. The Benefits of Ambulance Chasers

Government of India, and many citizens, shared serious concerns over the army of American lawyers contracting with BGL victims and filing almost 150 claims in various United States courts.\(^{57}\) The main concerns were that lawyers working for profit, through contingent fees arrangements would exploit victims of the gas leak, a demographic that was relatively poor. Especially given the asymmetric wealth between UCC and the victims and asymmetric information between American lawyers and Indian victims.

However, every single aspect of American lawyers working on contingent fees that worried the Government of India is solved by the very same contingent fees arrangement.

The budget for evidence gathering is endogenous to the case and is established by the parties. In the adversarial system, lawyers for the parties have strong incentives to pursue and uncover all evidence relevant to their respective cases. Thus, if both parties are wealthy, ample resources will be available for evidence gathering and production of arguments on each side of the case. One argument against the adversarial system is that if one or both sides lack resources, then it seems probable that the adversarial system will produce results inferior to the inquisitorial system. Where there is a lot of asymmetry in the budget constraints of the two parties, the wealthy party tends to win because it invested more resources in the search. This was an important consideration during the BGL, where UCC had tremendous legal and monetary resources at its disposal, while the victims of the gas leak were the poor citizens of Bhopal.

While there is no simple way to avoid the problem of asymmetric wealth between parties in an adversarial litigation, there are ways to reduce its harmful effect on the outcome of the case. An important way is to align the incentives of lawyers with their clients using success fees or contingency fees arrangements.

In a world where the plaintiffs are resource-constrained and cannot easily borrow money to finance a claim (even genuine claims that would win compensation), there may be too little litigation due to such resource constraints. Lawyers, who understand the merits of a case, as well as the legal system, are willing to take on the case based on a success or contingent fees arrangement. Entrepreneurial lawyers pursuing such cases on behalf of poor plaintiffs are often pejoratively called ambulance chasers. However, theoretical and empirical

research shows that contingent fees may be a mechanism for financing cases when the plaintiff is liquidity constrained and capital markets are imperfect.58

Another problem between the victims of the BGL and American lawyers was asymmetric information. The victims of the BGL did not know much about the tort law system, the chances of success and failure, or the magnitude of compensation, within India or outside in the US courts. Asymmetric information between the lawyer and plaintiffs creates problems during the litigation, especially in terms of determining the appropriate amount of effort and time invested in the case. In the BGL matter, the Government of India was worried about victims being exploited by lawyers, in anticipation of compensation.

However legal and economic scholars provide theoretical and empirical arguments to the contrary; that, in fact, contingent fee structures may be the ideal response or solution to the problem of asymmetric information between the plaintiff and his attorney.59

The contingent-fee contract represents an optimal contractual relationship between the client and his attorney. Since the attorney has a financial stake in the case, he is inclined to drop suits with a low expected return and devote resources to more meritorious claims. Therefore the contingent-fee system may reduce the proportion of frivolous lawsuits. This system solves the problem of too few lawsuits when plaintiffs are poor and too many frivolous lawsuits when plaintiffs don’t face such a resource constraint.60

Such a fees arrangement also reduces the problem of moral hazard. If the client cannot observe his attorney’s effort, then regular fee arrangements like hourly fees would lead to inefficient levels of litigation. In these circumstances, linking lawyers’ fees to the outcome of the trial would encourage lawyers to invest a more efficient level of effort.61 Further, contingence fees arrangement allow the attorney and the client to share risk in an efficient way.62

60 Id.
There were also concerns over filing frivolous claims attempting to gain compensation without injury. However, empirical evidence shows that contingency fees arrangements in fact reduce the number of frivolous claims. 63 Because lawyers stand to gain no fees with such claims, while bearing the costs of representing the claims, fewer such claims are represented.

It is ironic that BGLDA was passed specifically to prevent lawyers working on contingency fees to represent the victims of the BGL. In India, where the victims suffered from asymmetric information, and wealth and liquidity constraints, it is even more crucial to have a system where lawyers can represent clients through a contingency-fees system.

In the discussion of BGLDA saving victims from ambulance chasing lawyers it is also important to note the humane aspect to this choice. Severely injured victims or who had lost their families, friends and homes, were asked to go to a government run hospital, not for treatment, but to get their injury claims attested by a state approved medical practitioner. Similarly, victims’ families had to go to the municipal corporation to get the death certificate for the victims who died. They were required to collect the requisite paperwork and file these documents in government bureaus; all this while they had lost their health, and/or loved ones. In a world allowing ambulance chasers to work on contingent fees, these lawyers seek out clients and convince the victims to use their counsel, as opposed to injured and orphaned victims standing in long lines waiting to seek counsel. Ambulance chasers, by their very label, stand outside hospitals while victims get treated and complete the required procedures. In this case, such a service might have proved particularly useful.

Even in the absence of BGLDA, the rules of Bar Council of India do not allow lawyers to charge contingent fees. 64 This is an important reason why tort law has had a stunted development in India. In a country where plaintiffs face resource and liquidity constraints as well as asymmetric information, it is essential for lawyers working on contingent fees to develop a well functioning private law system.

B. Type I and Type II Error in Adversarial Litigation

Error costs are most relevant to this analysis of the BGL. It is well established now that the welfare commissioners and therefore the Government of India grossly underestimated the extent of the damage by the BGL. As a

64 Under the Rules formulated under Section 49(1)(c) of the Advocates Act, 1961, an advocate shall not enter contingent fees arrangements with their client. Bar Council of India Rules Part VI, Chapter II, Rule 20, states “An advocate shall not stipulate for a fee contingent on the results of litigation or agree to share the proceeds thereof.”
result of this error, the Supreme Court of India approved a settlement between Government of India and UCC in 1989 for $470 million—based on an estimate of 3,000 deaths and 52,000 injury victims. By 2003, the office of the Welfare Commissioner announced that the total number of claims registered were 1,001,723 of which death claims were 22,149. Even 20 years after the BGL, it was unclear how many claims were spurious.65

This situation gives rise to the possibility of two types of errors that can affect the accuracy of a given dispute-resolution system; Type I error or false positives, and Type II errors or false negatives.66 Total error cost is the sum of all false positives and false negatives produced by the system.67

Applied to adjudication, a false positive occurs when the Court/bureaucrat erroneously imposes liability; a false negative occurs when the Court/bureaucrat erroneously fails to impose liability. In the BGL case, Type I errors are imposing liability on UCC to pay spurious claims and Type II errors are failing to make UCC liable by denying genuine claims. As discussed in the previous section, the BGL settlement was rife with both Type I and Type II errors.

The adversarial method of litigation is essentially a competitive model of evidence production. The budget for evidence gathering is endogenous to the case and is established by the parties. In adversarial litigation, lawyers for both/all the parties have strong incentives to pursue and uncover all evidence relevant to their respective cases. This results in more than one search. Where lawyers work on a success-fee or contingent fees arrangement, they get paid only if they win the case. Over the long run, trial lawyers’ compensation is based largely on the basis of their success at trial, thus they have strong incentives to develop evidence favorable to their client and to find flaws in their opponent’s case. The lawyers thus internalize the costs of their errors (and triumphs) through the impact on their market reputations.

Compare this to an inquisition, as under the BGLDA, where the welfare commissioner is the only principle searcher, and therefore conducts a single search. This search is conducted without the aid of individual parties

65 Nariman, supra note 18.
66 Type I error, also known, as a “false positive” is the error of rejecting a null hypothesis when it is actually true.
67 Type II error, also known, as a “false negative” is the error of not rejecting a null hypothesis when the alternative hypothesis is the true state of nature.
68 It will be assumed for purposes of the analysis here that the costs of false positives and false negatives are symmetrical. This is likely an accurate assumption for civil litigation. For criminal law enforcement, the costs of a false positive that results in wrongful imprisonment is greater in magnitude than a false negative (erroneous acquittal), as reflected in the ancient aphorism that “it is better that n guilty men go free than one innocent man be wrongly convicted.”
or lawyers, who have an incentive to minimize error. The advantage of the adversarial system is not just that more extensive searches are conducted, but whether such extensive searches in an adversarial system lend themselves to error minimization.

Applied to error minimization, the defendant’s lawyers have a greater incentive to discover faults in the evidence of the plaintiff’s lawyers to reduce their liability, and in the process minimize Type I errors, or a false positive which occur when liability is erroneously imposed by the Court/bureaucrat. Similarly the lawyers of the plaintiff have a greater incentive to provide more evidence of the harm, and in the process minimize Type II errors, or false negatives, which occur when the Court/bureaucrat erroneously fails to impose liability. Through this competitive system, both Type I and Type II errors are minimized.

The competitive character of adversarial litigation gives the individuals searching for evidence (essentially the lawyers) a greater incentive to search hard for relevant information. Additionally, the adversarial system also gives a greater incentive to lawyers on each side to find faults in the evidence of the other side. Therefore, the incentives are much greater to find good evidence under an adversarial litigation system than under a system where the search is led by a single judge or bureaucrat.69

Inquisitorial judges/bureaucrats will tend to stop searching for evidence once they believe that they have all of the information that they need to decide the case. The adversarial system is particularly effective at uncovering difficult to discover or private information, relative to the inquisitorial system. Even experimental research suggests that lawyers in an adversarial system may work harder and will produce more information than judges in an inquisitorial system.70

In the case of the BGL settlement, the welfare commissioners did not face incentives to minimize Type I and Type II error. The appointment, compensation, and promotions of the Welfare Commissioners were in no way linked to the speedy or accurate settlement of claims. Therefore there was little incentive to carry out an extensive search, seek out the genuine claimants, and minimize error. Many victims genuinely claiming harm by the BGL were dismissed, while many spurious claims were given compensation. Often the commissioners had no way of separating the genuine claims from the spurious claims. As of 2004, approximately 12,000 claims were not decided, even 20 years after the BGL.

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One method of disposing multiple claims quickly was the *en masse* dismissal of claims by the Deputy Welfare Commissioners for default where the claimant did not appear at the date fixed for the case despite the lapse of over fifteen years after it had been lodged. Therefore, all claims were treated as genuine or spurious *en masse*. Finally, each claimant was underpaid on an overall suspicion of the genuineness of the claim. As a result, it was found in 2004 that there was a balance of over Rs.1,503 crores remaining to be disbursed, after nearly 570,000 claims had been settled.

In another such approach adopted by the Welfare Commissioner, 8,752 cases of death claims were converted to injury cases. The strange phenomenon of conversion of death claims into injury claims was a result of a general suspicion that a claim filed could be a fraudulent one; the Welfare Commissioner, exercising *suo moto* powers, would take up any case in which an amount of over Rs. 100,000 was awarded in a death claim, and proceed to re-determine the compensation to be awarded. Where the death had occurred some years after the date of the disaster, the Welfare Commission would, without any basis, hold that the death was not as a result of the gas disaster and proceed to halve the compensation awarded by treating the claim as one for injuries suffered on account of the BGL. In one such case, the Supreme Court reversed the order of the Welfare Commissioner and remitted the case for a fresh determination.71 However, due to litigation fatigue, many such unjust orders remained unchallenged. This explains the wholesale conversion of death claims to injury claims.

If the government had allowed the adversarial system to operate in the BGL, instead of passing the BGLDA, lawyers of the victims would have an incentive to look for greater evidence of the harm caused to their client by UCC, and therefore minimize Type II errors. On the other hand, the lawyers of UCC would look for evidence to determine if claims are genuine or spurious, to ensure that liability is not erroneously imposed, and UCC does not have to pay for spurious claims, and therefore minimize Type I errors.

1. **Search Costs**

A decision in favour of one party over another is based on evidence and therefore each party has an incentive to undertake extensive search. Because the incentives are so strongly in favor of searching under an adversarial system, search costs are optimal for each private party, but may not be optimal socially.72 This is because there are two or more searches undertaken, often to search

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the same information, therefore spending valuable resources, compared to the judge or welfare commissioner who would choose to undertake a single search.

In a survey conducted of tort cases reported from 1975-84 Galanter found that it took an average of 12 years and nine months from filing to reach a decision.73 One way to interpret these findings is that the private parties in an adversarial system will have a greater incentive to investigate and produce information in a case than an inquisitorial system. In the inquisitorial system, judges, or, in the case of BGLDA, the welfare commissioners, essentially have a monopoly on evidence production. They would therefore internalize the administrative costs of searching for evidence.

At first glance, the search costs, suggest that the BGLDA was an excellent intervention, reducing wasteful searches. However, only a weak case can be made in favour of the BGLDA replacing the adversarial system due to search costs. First, in inquisitorial systems, the budget for evidence gathering is set exogenously and somewhat arbitrarily by the taxpayers, in terms of money, time, and support staff available for investigation. This divergence between private and social costs may lead judges in an inquisitorial system to exert suboptimal levels of effort.74 This became quite apparent in the BGL case. Despite the BGLDA, the state capacity did not match the intention of the legislation. Welfare Commissioners did not have the budget, manpower, or infrastructure, to deal with the scale of the disaster and conduct thorough investigations to disburse compensation.

Second, in case of the BGL, the prevailing legal rule was one of strict liability or its Indian variant, Absolute Liability. This rule is essentially no fault liability, and once it was established that UCC and UCIL were principally in control of the hazardous gas, which leaked, they would be liable, even if one could not establish fault or negligence. Strict liability minimizes search costs for the particular evidence, which is required to establish fault or negligence. For strict liability, judges only need to establish if the party controlled the substance in question. In 1987, the Supreme Court held that “where an enterprise is engaged in a hazardous or inherently dangerous activity resulting, for example, in the escape of toxic gas, the enterprise is strictly and absolutely liable to compensate all those who are affected by the accident and such liability is not subject to any of the exceptions which operate vis-à-vis the tortuous principle of strict liability.”75 Therefore, the search required in the BGL was only to the extent of the damage and victims affected.

74 Zywicki, *supra* note 56, at 45.
75 The rule of absolute liability was clarified in *M.C. Mehta v. Union of India*, (1987) 1 SCC 395 at 421. Following the English principle of strict liability, the Supreme Court interpreted the rule more strictly in light of industrial accidents in India. In *Rylands v. Fletcher*, (1868) LR 3
The rule of Absolute Liability, specifically in the BGL case, impacts the magnitude and the nature of the search undertaken by the legal system. In the BGL case, since it is clear that UCC is liable (whether they were negligent or not), the search effort was only to find evidence to determine whether the claims were genuine or spurious. As discussed in detail above, both, Type I and Type II errors, are minimized under the adversarial system, and the bureaucrat or judge leading a search do not face the appropriate incentives to minimize such error.

Finally, bureaucrats in an inquisitorial system internalize the administrative costs of searching for greater accuracy, but can externalize error costs on parties and society unless the judge suffers some independent private cost from inaccuracy, such as reversal on appeal, and/or some sanction derived from such error.

V. PATERNALISM AND KNOWLEDGE PROBLEMS

The BGLDA is not just a case of well-intentioned paternalism gone wrong in this once instance. There is a more deep-rooted problem of knowledge with respect to paternalist policies. Rizzo and Whitman argue that if benevolent paternalists possess all the relevant information about individuals’ true preferences, biases, and the choice, then policymakers could potentially implement paternalist policies that improve the welfare of individuals. But lacking such information, there is no certainty that paternalism will make their decisions better; under a wide range of circumstances, it may even make them worse.76

Paternalism by social planners and bureaucrats has often been compared to central planners of the economy, as they face similar knowledge problems.77 There are two parts to this argument. First, the paternalist, in this case the Welfare Commissioner, does not have the requisite information required. Second, paternalist does not have the appropriate incentive to gather the information.

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77 Id.
Hayek discusses the first problem of dispersed knowledge. Socialists in the early twentieth century, argued that a central planner equipped with all relevant knowledge of resource endowments, technologies, and preferences, could design an efficient economic plan for society. Hayek argued that to assume the central planner possesses all the relevant information about endowments, technologies, and preferences is to assume the problem away.

This is eerily similar to the situation after the BGL. The Government of India assumed that the state machinery is equipped with the relevant knowledge required to calculate the accurate count of victims and their injuries. Therefore, the paternalist would simply distribute the compensation from the settlement negotiated with UCC. However, this knowledge did not exist. It had to be discovered through an adversarial litigation process where each party has the appropriate incentives to search for information.

Hayek could have been discussing the BGL when he wrote, the critical problem that any economic system must solve is to mobilize and use knowledge that “never exists in concentrated or integrated form, but solely as the dispersed bits of incomplete and frequently contradictory knowledge which all the separate individuals possess.”

He argues that the problem of economic calculation is faced by the bureaucrat but not by the entrepreneur. He identifies the problem of economic calculation that is faced by the bureaucrat but not by the entrepreneur. There is no signal of profit and loss in the world of a bureaucrat, and his criterion of success and failure is the ability to follow the rules and regulations that have been set by his superiors. A bureaucrat’s reward is based on his ability to follow arbitrary procedures and not profits and losses. On the other hand, an entrepreneur is bound by profits and losses determined by the demand of consumers of his services.

This analogy can be applied in the current context where the welfare commissioner faces incentives of the bureaucrat while the lawyers working on contingent fees act like entrepreneurs. Lawyers, have an incentive to get the maximum possible compensation for the maximum possible victims. Even if we attribute benevolence and intelligence to the welfare commissioner, it is the institutional mechanism that creates perverse incentives and causes the problem of calculation.

This was witnessed early on in the BGL litigation. Fali Nariman recounts, as the lead counsel for UCC, various efforts made to proceed with the trial following interim relief order in 1987. However, even an order for the mutual discovery of documents was resisted by Union of India. In June 1988, the Union of India stated to the Court that the ‘stage of mutual discovery has not yet reached’ and therefore the trial could not begin. Unlike ambulance chasers motivated by their profits, the Government of India had no incentive to ensure a speedy trial.

Similarly, the Welfare Commissioner did not rely on the success of his inquisition, or the accuracy of the claims disbursed, for his compensation, promotions, etc. Therefore, there is a higher likelihood of externalizing error costs. For instance, in an affidavit filed in 1996, it was stated that 65% of the victims’ claims had either been rejected or treated as injury cases. Over 28% of the death claims had been rejected and over 36% had been treated as injury cases. The reasons for conversion of death claims into injury claims was attributed to ignorance of the commissioners; lack of proper documentation and certificates of death among the affected population; absence of proper medical guidelines; and the claimants’ inability to pay sufficient bribes.

This is one such instance, but this trend is consistently witnessed in the Bhopal victims’ claims for the last thirty years.

VI. Conclusion

It is often quipped that the road to hell is paved with good intentions. The victims of the BGL have been on that road to hell paved by the BGLDA for thirty years. The institutional failure that followed rivals the actual gas leak in 1984. The paternalistic takeover of victims’ claims and compensation may have killed thousands because of bureaucratic delays and errors. While this cannot be undone, there are some broader lessons to draw from the BGL and the legal disaster.

The lesson from the failure of BGLDA is simple – incentives matter!

The first step in legal reform should be to amend Bar Council Rules to allow lawyers to receive contingency fees for cases. Contingency fee arrangements align the incentives of the lawyers with their clients, an indispensible tool in the legal system. Tort law cases, especially where plaintiffs are resource constrained, would have an opportunity to develop, by legitimizing contingency fees.

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82 Affidavit dated Nil 1996 of Deenadayalan in IAs Nos. 28-29 in CAs Nos. 3187-88 of 1988. Also discussed in Muralidhar, supra note 51, at 17.
Second, it is important to understand processes that lead to discovery of knowledge. These processes are not easily substitutable and depend on the incentives, knowledge, and local context of the individuals in the system. Paternalism implies substituting these with state bureaucrats, which may not replicate the information and knowledge generating processes. The BGL is an important lesson that not just markets are distorted by government regulation and paternalism. There are different types of private ordering, outside of the market that are distorted and disrupted by paternalism. Substituting a branch of government, like the judiciary, which relies on a competitive process of adjudicating evidence between individuals, with a bureaucracy, is one such case.

Third, the assumption of the BGLDA was that that there may be failures in private ordering, requiring the government to take over the problem. This assumption holds only if there is no possibility of government failure. However, the BGL is a case of government failure on almost all counts, especially in compensating victims. Almost all paternalists ignore the possibility of government failure and focus only on imperfect private outcomes. The BGL is an important lesson to also understand government failure arguments.

Finally, without paternalism, there can be no filicide.