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## A TRAGEDY OF ERRORS

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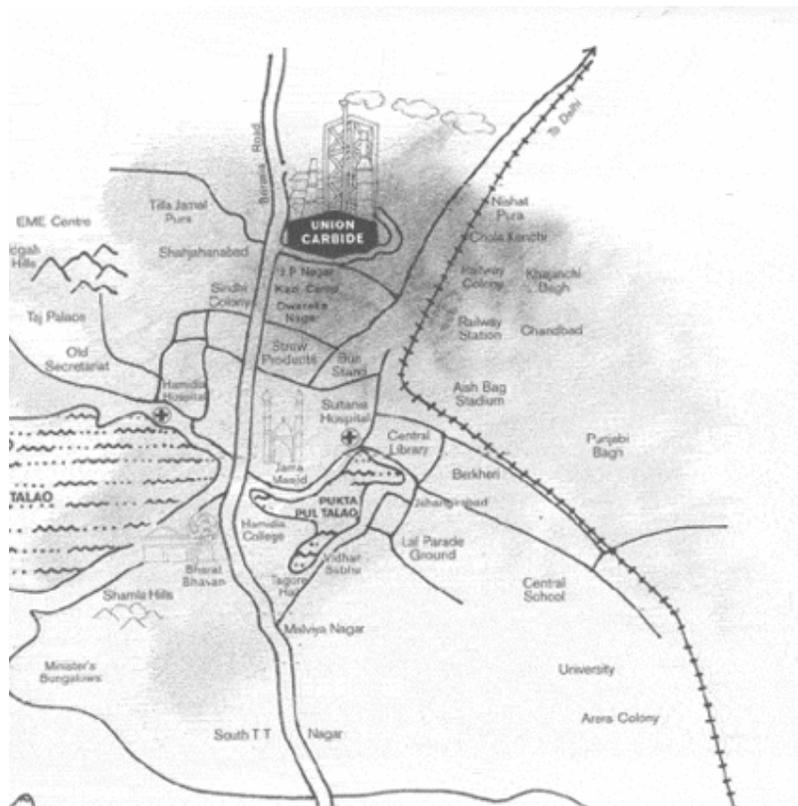
I had moved to Bhopal in January 1983. Year 1984 was a difficult one for me. I was struggling to set up my business of interior designing and furniture with practically no capital. I did not have many clients. Of the few clients that I had, not many treated me with any level of respect. But this gentleman was different. Dr. was an ex-academician who had moved to corporate research with Union Carbide India Ltd. (UCIL). He was always very courteous, polished and humble. I had done some small work for his residence in the hope that I shall be able to get work at the company where he worked. The hopes were dashed when gas leaked out from UCIL's factory at Bhopal. Gas killed many. I was not directly hit but my business took a big hit.

A few weeks after the accident, one evening I met Dr. and asked him about his version of events. As usual he was most courteous. He explained to me patiently in great detail almost as if I was a student and he was a teacher. What he told me made me understand the picture. In the weeks that followed I met many more people and confirmed all that Dr. had told me. I found that every word of what he had told me was correct. It has been almost 25 years since then. I wanted to write an article based on all that Dr. had told me and also based on what I knew from various other sources. Yet, I stopped myself since I did not want to be accused of promoting the interests of UCIL.

To this day, Bhopal Gas Tragedy continues to provide material to media, politicians and activists for whipping up emotions. There are renewed calls for blood by people who believe that revenge is the best form of justice. In the midst of all the emotion-whipping, please allow me to take a dispassionate look at the tragedy. The purpose is neither to act as a judge nor to be a prosecutor – not even to point fingers. Every tragedy is a great teacher and surely Bhopal is no exception. Unfortunately, Indian politicians, bureaucrats, activist, media and society have never looked at Bhopal gas tragedy with that perspective. I guess it is never too late.

The story begins on the day in the end of sixties when UCIL decided to set up a factory in Madhya Pradesh and approached Government of Madhya Pradesh for land allotment. UCIL had disclosed to the government that the process involved use of hazardous chemicals. UCIL wanted land on a location which was not near any dense population. Government of Madhya Pradesh wanted to promote industrialization of Bhopal and hence, suggested this site on which the ill-fated factory was built. There was hardly any population in a radius of about 2 km around the site at that time. Government assured UCIL that they had declared the area around the site as 'Obnoxious Industrial Area' and no population would be allowed to reside in the area. Believing the assurances given by the government, UCIL set up the factory. In the years that followed, the government

forgot all about its assurances and watched silently as slums sprang up in the area that was supposed to be a no-population zone. A day came when slums were actually touching the boundary wall of UCIL. This was most alarming and UCIL was well aware of it. Every month or so, UCIL used to send a letter to the government asking the slums to be removed in view of the hazard involved. The letters were filed away in some dusty file. To make matters worse, a few months before the tragedy struck, the then Chief Minister of the state gave settlement rights to the slum dwellers and regularized all the slums around the UCIL factory. Majority of the deaths that occurred on the fateful night of 2/3 December 1984 were in the slums. Obviously if the government had indeed kept its word of the area being an obnoxious industrial area and no-population zone, the number of death would have been a fraction of the actual figure.



Now, let us come to the actual accident. There was an underground tank for storage of Methyl Isocyanate (MIC). The tank had no connection with any water supply. In fact there were clear instructions in the factory to keep water away from the tank since it was well-known that water in contact with MIC would lead to a run-away exothermic reaction that would be dangerous. No body knows how or why, but it appears that some disgruntled employee connected a water hose to the tank. The hose remained connected to the tank for hours and tons of water gushed into a tank which was supposed to be kept dry. Simultaneously, all the safety systems of the tank were disconnected. It could not have been a coincidence that all the safety warning systems became inoperative just on the day when someone played the dirty game of pushing water where no water should have

ever gone. From all available evidence it appears that this was a planned affair with many factory records falsified in a systematic manner by the criminals. UCIL officials believed that this was the handiwork of some employees who wanted to create a small accident so that their trade union could negotiate harder during the wage talks that were scheduled to begin in the first few months of the New Year. Surely, the employee(s) who did it never realized the devastation that their mindless act could bring on the whole city and above all on themselves. After the accident, UCIL officials were in no position to investigate the accident since they were denied access. CBI and other government agencies that initiated investigations were in no mood to catch small fry.

At this point it is interesting to give two examples that illustrate the Indian psyche. Let us imagine a hospital and medical college run by government. In such a medical college, a minister or secretary of health comes for inspection and finds a toilet dirty and stinking. Anywhere else in the world, action will be taken on the sweeper who is supposed to keep the toilet clean. But in India, the Dean of the medical college will be suspended, while no one will even point a finger at the sweeper. Similarly, in case of Bhopal Gas Tragedy everyone wants the blood of some Manager or Director or Chairman, but not of the low-level employee who did the crime of actually connecting a water hose to the tank of MIC. In fact, till today no one has even bothered to find out the name of the criminal.



The second example is from railways. Fish plates are used in India to join rails on a railway track. In many other countries welding is the preferred method of joining. There can be debate about the advantages and disadvantages of welding vis-à-vis bolted fish plates. Often railway accidents occur in India because of sabotage of fish plates. Let us consider a case where a railway lineman (responsible for checking the track) decides to remove a fish plate and cause a devastating accident of a train. Common sense will dictate that the person to be prosecuted and punished is

the lineman and no one else irrespective of the number of people who died in the accident. Indian media, activists and even judiciary seem to think differently. The logic in India seems to be that if only one or two people are killed in the accident, it may be the lineman or his officer that should be punished. On the other hand if say one thousand people are killed in the accident, the blame should go to someone high-up. It may be found logical to punish the track design engineer who decided to use bolted fish plate joints instead of the more secure welded joints. The underlying principle in status-conscious Indian society is that one should catch low status persons for petty crimes and high status persons for grave crimes. This relationship of gravity of a crime to the status of the accused is unique to India. It is not unusual to see Railway Minister take blame for accidents. By this logic if 20,000 people are killed in a rail accident, the President of India will have to be prosecuted since he is the ultimate owner of Indian Railways. This sounds ridiculous but it is exactly the same logic that is being used to implicate Warren Anderson for the tragedy at Bhopal.

There is a lot of talk about poor design and maintenance of the UCIL plant at Bhopal. It has been argued before the courts that the unit was running in loss and hence, necessary maintenance was being ignored. That is not disputed and may well be true. Yet, the fact is that it is largely irrelevant to the case. No technology of the world can provide protection against internal sabotage. Let us take a case of gasoline storage tanks. The safest tank in the world will burst into flames if a disgruntled employee drops a burning matchstick in it. And no supervisor or manager or procedures or systems can prevent such a suicidal act. The issues of outdated technology, poor maintenance, inadequate safety systems etc. come into play when accident occurs in the course of normal operation or by normal wear and tear or in situations that can be anticipated by reasonable men. Just as World Trade Centre Towers could not have been designed to withstand damage caused by planes flown by terrorists, it is not possible for any company to design a factory that can withstand intentional acts planned by internal or external saboteurs to cause devastation. It would have been ridiculous to prosecute the designers of Twin Towers for inability of the towers to withstand impact of planes and fire caused by thousands of gallons of burning aviation fuel. In the same way, it makes hardly any sense to blame various high officials of UCIL and the parent company for Bhopal Gas Tragedy.

Let us come back to the accident. As soon as the news of leakage of poisonous gas reached the Collector (head of district administration in India) of Bhopal, the first thing that the Collector did was to order evacuation of the city and flee in his official car. The privileged officer did not know the principle of Captain of the ship to be the last to leave. After reaching a place which was far away from the city, he rang up Dr. and informed Dr. that he had ordered for the city to be evacuated. The Collector asked Dr. about what else should be done. Dr. was aghast. Dr. asked the Collector about who had told him to get the city evacuated. The Collector viewed this as a challenge to his royal authority. The Collector told Dr. that as Collector he was within his powers to evacuate the city and the matter should rest at that. Dr., despite his soft nature, was angry. Dr. told the Collector that he had done the worst possible thing that could be done. Dr. told him that the only thing people had to do was to cover their face with a wet thick cloth (towel) and in a few minutes the gas will be gone. Running away from gas was the worst thing that could have been done. Sure enough, almost everyone who died that night was someone who ran to escape from gas. I have many friends who shut themselves indoors and either hid under quilts and blankets or kept washing their face with water. All such friends have faced practically no ill effects of exposure to gas.

It is interesting to understand the science behind Dr.'s advice. Methyl Isocyanate (MIC) is absorbed by water. If MIC gets into lungs, it gets absorbed by water in the lungs. If there is a cloth with water in it blocking the path of gas, the absorption takes place in the cloth with no damage to the lungs. The problems of running to escape from gas are multifold. It is natural for a person to flee away from the source of gas to escape from gas. In this way, one tends to move with the direction of wind and in fact moves with the cloud of gas. If one remains stationary, the cloud of gas passes over with the wind. There were, of course, some 'mad' fellows who ran with anger towards the UCIL factory instead of running away. Their intention was to bring damage to the killer factory. Everyone who ran towards the factory suffered hardly any injury. Of the ones who fled to escape from the gas, the worst sufferers were the poor who were running on foot since while running one tends to breathe harder and inhales more gas. The lucky ones like the Collector of Bhopal who had some vehicle did not suffer much. There can be no disputing the fact that if

Bhopal district Collector had been less arrogant and had listened to expert technical advice before issuing orders, the death toll that night might have been significantly lower. Of course, almost no one would have died if the government had taken expert advice before the tragedy and educated the people living in the promised 'obnoxious industrial area' (which should have been a no-population zone).

Taking expert advice is something that does not come naturally to Indian officialdom, who are trained to be arrogant since the colonial days. The sad part is that the same attitude has rubbed off on even doctors working in government hospitals. When people suffering from MIC gas reached Hamidia Hospital (the biggest hospital of Bhopal at that time, attached to Gandhi Medical College) the doctors there did not know the antidote to MIC (in fact, they did not even know that the gas was MIC). A normal sensible person would have asked the people at UCIL about the antidote, but that is not how Indian officialdom with its know-all attitude operates. The doctors searched their medical books and came up with something that they believed was the antidote (if my memory serves me right, it was Atropine). Shots of the so-called antidote were administered without any delay. Almost everyone who received a shot of the antidote died within a few hours. UCIL officials had collected medical records from all hospitals of Bhopal for all deaths that occurred after the tragedy. If the civil liability suit had proceeded, UCIL would have pleaded that medical ignorance, ill-preparedness and arrogance were as much to be blamed for the deaths as the lacunae at the factory.

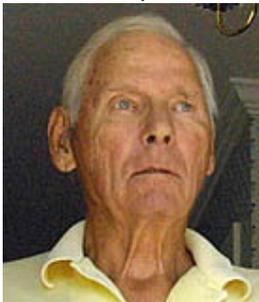
Before proceeding further about the attitude of government officials, let me pay tributes at this point to the "un-honored", "unwept" and "unsung" railwaymen who stood like "boys on the burning deck" and saved thousands of railway passengers on that fateful night. Forty five railway employees led by the then Station Manager, Harish Dhurve died on duty. These brave men refused to flee and died doing what was beyond a normal call of duty. They blocked all passenger trains coming to Bhopal and made arrangements for quick exit of all the trains that had already reached Bhopal station. The dead bodies of Harish Dhurve and his colleagues were found on their desks the next morning. It is indeed sad that the political class of India has never thought it worthwhile to posthumously honor these men who showed valor and great commitment to duty on a night when the Chief Minister and other officials of the state were fleeing.



Now let us come to the then Chief Minister – Arjun Singh. It took him a couple of days to come to grips with the situation. But as soon as he gained his senses, he started doing what he knew best – giving orders without consulting anyone with technical expertise. There was fear in the town that the gas might leak once again from the same tank. UCIL officers wanted to run the plant to be able to finish the MIC lying in the tank. UCIL officers also wanted to access the plant and investigate the cause of the leak – something that they have not been permitted to do till today. The government did not have many options in the matter of running the plant to neutralize the MIC in the tank. UCIL officers were confident that there was no risk in running the plant – after all they had operated it for more than 15 years. Arjun Singh agreed to

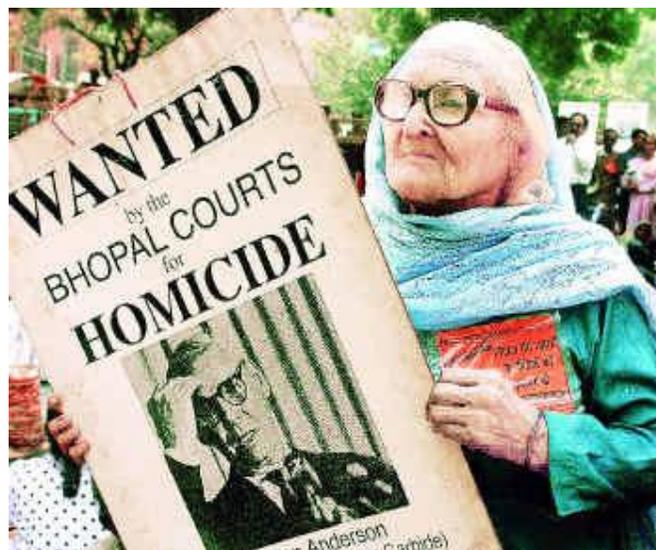
allow UCIL officials to operate the plant one last time on 16 December, but with his own style of melodrama added in. Arjun Singh and his team of bureaucrats called it Operation Faith and ordered for the city to be evacuated. They also ordered for helicopters to spray water on the plant when it was running. This helicopter-scene did not contribute in any way to the safety of the plant. It only helped create a grand photo opportunity which all newspapers dutifully flashed on their front pages. The evacuation was a painful experience for a city that was already traumatized. Almost a million people were made to flee without any reason. I was one of the unfortunate ones who were forced to leave the city at that time and had to take shelter in my relatives' houses as far away as Delhi, Haryana and Punjab. People of city of Bhopal have received no compensation for the troubles caused to them by the foolish Operation Faith.

Foolishness and inadequacy of leadership have been demonstrated again and again in the tragedy at Bhopal. It is the duty of political leaders to act as voices of reason in times of crisis. Leaders must show the way based on universal values and not whip up negative emotions like anger, revenge, greed etc. Unfortunately, the political leaders of Bhopal did nothing of the sort. When Warren Anderson, Chairman of the parent company of UCIL, visited Bhopal immediately after the tragedy, he was under no legal obligation to do so.



Instead of appreciating his gesture, the Government of the state prevented him from even going to the factory. Knowledge and expertise of Warren Anderson and other officials of Union Carbide worldwide could have been used to identify the saboteurs, clean up or even remove the plant & machinery at the factory, carry out necessary research to identify appropriate medical treatment for victims, plan relief operations and such other activities. Instead raw anger of the people was allowed to dominate decisions. It took no time for the political leadership to initiate a hunt targeting Warren Anderson and various UCIL officials. Anger, revenge and

greed (of getting the maximum out of Union Carbide) dominated the actions of the governments of both state and center.



In this situation, justice for the victims has come to mean something than no one with any knowledge of jurisprudence can ever permit. The activists who demand the head of Anderson as justice for victims seem to believe in the barbaric rule of “An eye for an eye and a tooth for a tooth” and have no understanding of the modern legal systems. It shames me to say that in my land where Mahatma Gandhi is almost treated as a God and where everyone swears by the values of compassion, kindness and love, there is madness going on about getting the highest possible punishment for people who are only remotely connected to the accident. Have we really lost our ability to do KSHAMA (forgive / pardon) and move on with life with positive values?

KSHAMA is a great value in traditional Indian system of life but is not even recognized in Indian Penal Code (IPC). As someone who has always argued for incorporating KSHAMA in IPC, it pains me to see that the whole country seems intent on taking the road to other extreme – of increasing punishments to barbaric or Taliban-like levels. I have mentioned above about the wrongs committed by various people with regard to Bhopal Gas Tragedy. As I said before the intention is neither to pass judgment on any of them nor to punish them. As a part of the people of Bhopal, I most humbly propose that we do KSHAMA and remove the bitterness that has prevented us as well as humanity from learning lessons from the great tragedy. Learning lessons to prevent more such tragedies is more important than fighting court cases endlessly and even more important than punishing some old men on the way to their graves. Warren Anderson is already an old man and may not live for too long. Can we, the people of Bhopal, show greatness by inviting him to Bhopal as an honored guest giving him as well as us an opportunity to seek forgiveness and to work together towards learning ways of avoiding as well as facing painful tragedies? Can we also announce KSHAMA for the person who connected the hose of water to the tank of MIC, so that he can come forward and admit his guilt? Can we also announce KSHAMA for the then Collector, Chief Minister, Doctors and various other people who were involved with the aftermath of the tragedy?



Does that sound like a wish-list of an idealist out-of-sync with the present times and the mood of the people? Probably it does. Yet, I choose to stick my neck out and say all this because, unless we take suitable steps, future accidents may be worse than the one at Bhopal in 1984. The fire at Indian Oil depot at Jaipur, which caused more than a dozen dead and over 100 injured, is not too old. The oil depots at Bhopal are located in the thick of population. In the past few months, there have been serious fires at two petrol pumps in Bhopal. All this leaves me worried. Bhopal Gas Tragedy was a tragedy of errors. The sad part is that the errors continue to date. Isn't it time to put the long series of errors behind us and start a new journey? The key objective should now be to forget revenge, give up anger and get our heads together to prevent the sort of catastrophe that befell on Bhopal in the winter of 1984. Let compassion, love, empathy, kindness and universal good be our guiding forces in this new journey!



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15 June 2010

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