Why don't we learn from disasters? – David Slater

The Problem

After every disaster there comes a government minister to announce to the nation that a Public Inquiry will be held. This will examine all the circumstances and make recommendations so that we can 'learn the lessons' and ensure it can 'never happen again'. This mantra is followed by years of agreeing terms of reference, rules of procedure, consultations and quasi legal deliberations. Finally, when most of the nation, except the victims, survivors and those implicated have moved on, or lost interest, an 'Official' report is published. It is expected to make suitable and insightful recommendations, but for which there seems to be no mechanism for adoption or audit. They are usually a three-day wonder in the press and then seem to disappear for ever. Why? Because on balance of probabilities, this fortunately rare event is unlikely to reoccur anyway. (If in doubt do nowt?)

The classic case quoted is the spate of domestic gas explosions which occurred in London in the 1960s following an exceptionally long spell of drought conditions. The old gas mains were laid in the London clay bed, which ensured that even when corroded away, the clay tunnels still enabled a leak free supply. The unusually hot weather – for then – caused some of the clay layers to dry and crack, resulting in leakages of essentially hydrogen to build up in buildings. The Inquiry duly met and reported, by which time the weather had returned to 'normal', leaks and explosions settled down to their 'normal' frequency and everybody seemed happy that the problem was solved. In fact, very little had actually changed, but the process was deemed successful and further cemented the slow and ponderous (thorough?) public inquiry as the way to do it, in the governmental policy and 'how to' manuals.

But more recently as infrastructure and technology gets more complex and public opinion gets more risk averse, it is no longer acceptable to go through a perceived 'playing for time' process. Lessons are there to be learned and changes actually have to happen. Accountability and justice need to be seen to be done. There are two issues that we have to address, if we are to have a demonstrably appropriate way to learn (and implement) lessons from serious events. There are problems with the process itself, but there is also, increasingly a realisation that we have to follow up on dealing with the consequences, both human and systemic. Insurance is some form of compensation, but closure and peace of mind are priceless. More and more questions are being asked about whether public inquiries are in fact good value for money. For example, Nicholas Timmins of the Institute for Government sets out some of the presumed aspirations which are clearly not being delivered:

"Public inquiries have many purposes. They include exposing the truth after a scandal or major controversy. Sometimes they are there to decide who is culpable. Sometimes – perhaps too often – to make recommendations. Quite often to provide a moment of genuine catharsis – if not "truth and reconciliation" then at least a healing of wounds, or a public acknowledgement of a real problem or injustice."[133]

The Process

There are two separate and conflicting drivers behind most investigations of accidents: the need for understanding what happened, and the need for justice. This inevitably presents us with what James Reason has described as "the balance of blame".[134] The first, the need to learn from what really occurred and why, may not focus so much on individual roles, and hence promotes a lack of accountability. The second driver, the need to assign blame, often leads to the investigations stopping, once a blameable ('root') cause has been agreed. Neither outcome is

universally acceptable, which is why most inquiries to date seem to have fallen between these two stools. There is a further recognition these days that, not only does the blame game inhibit learning, there is a growing belief that we should treat people who have suffered in these disasters (victims and survivors) with compassion, not just focus on finding fault and culpability. [135]

But if we step back and ask what the objective of the process is, we may agree that it is primarily to reassure the public that all is under control and being dealt with. Now if we examine the process more closely, we can see that the current way we 'do inquiries', does not satisfy even this primary goal. The current system has difficulty coping with the balance of blame tussle between legal and scientific needs. It has not really addressed the real issue of how to reassure the public, which requires an appreciation of the realities in how the public think and form rapid and often unjustified opinions.

The Social Psychology

Humans have evolved to cope with dangerous environments where the emphasis was on survival and instinctive (fight or flight) responses. Consequently, rather than being the cool, rational, logical, reasoned and reasonable people we like to think we are, we:

- • make judgements on situations very quickly (within a minute of meeting?)
- • make most decisions instinctively, automatically, without consciously thinking.
- • are very reluctant to change our minds (he who hesitates . . .)

Subsequently we are not very receptive to contrary arguments, open discussion, etc. (confirmatory bias). Our thinking is subject to a whole range of unconscious biases and prejudices. We automatically look for a 'story' that makes sense of the total perceived picture.

[133] https://www.instituteforgovernment.org.uk/blog/are-public-inquiries-worth-time-money-and-resources [134] "Managing the Risks of Organizational Accidents" illustrated edition by James Reason (ISBN: 9781840141054)
[135] https://www.sciencedirect.com/science/article/pii/S0925753520300746

With these insights we can see that the inquiry process falls at the first hurdle. It takes too long. After the event there is a lack of authoritative response (waiting for the verdict – don't anticipate the party line). Within this vacuum, the media (social and mainstream) feel pressured to provide the 'stories', officially unchallenged, which become folk lore – everybody knows, rightly or wrongly. These stories can then instigate unjustified grievances and psychological damage, but most of all can make any objective and impartial inquiry process unachievable.

The case of the Costa Concordia[136] illustrates this process failure well.

On 13 January 2012, the cruise ship Costa Concordia attempted a sail-by salute past the island of Giglio. The captain, Francesco Schettino, had been in charge when the ship had performed this manoeuvre before. But this time, the ship struck an underwater rock off the island, partially capsized and listed on its starboard side, resulting in the deaths of 32 people. Schettino indicated in his defence that the underwater rocks the ship struck were uncharted, the helmsman did not speak English or Italian, and the ship's generators malfunctioned, impeding the rescue effort. Regarding his dry and early departure of the vessel, Schettino explained that he slipped off the ship when it turned over and he fell into a lifeboat. The Coast Guard ordered Schettino to leave the lifeboat and return to the stricken Costa Concordia. Schettino's recollection of his reason for not returning to his vessel was because it was "too dark" and the

lifeboat had "stopped moving". Schettino was vilified in extensive media coverage that dubbed him "Captain Coward" and "Captain Calamity". He was subsequently convicted of multiple counts of manslaughter, causing a maritime accident, abandoning a ship with passengers still on board, and lack of cooperation with rescue operations. He is currently serving a 16-year jail sentence.

Many experienced maritime professionals are very unhappy with the findings and seminars are being held regularly to attempt to understand the implications. There has been speculation that Schettino was a convenient culprit to blame for the failure of the systems operated by Costa Cruises, which had disassociated itself from, but must have been aware of the practice of a sail-by salute, possibly even requesting it. There were clearly missed communications and failures by the whole bridge team. Some suspect that the same culture of not daring to speak up as a junior, to seem to correct a superior, was a major factor. Similar examples can be seen in aviation (Korean Airlines[137]) and healthcare. As Captain Schettino said in his own defence, "I believe that for the Concordia, the bridge team failure was not limited to the failure in not executing the turning on the indicated wheel over point, or having planned the navigation at 0.5 miles from the shore." Touching on training and human behaviour, he says "any officer, part of a bridge team, is

[136] https://www.bbc.co.uk/news/world-europe-16646686
[137] https://www.researchgate.net/publication/305883101_KOREAN_8509__A_CASE_OF_CULTURAL_VARIABILITY)

expected to be able to reckon and detect the peril in order to be in the position to offer his contribution to the whole team". There was no professional background available to the court lawyers and "the relevant arguments have been neglected and misinterpreted." There was, he states, nobody with "nautical legacy and practical experience for understanding the various limitations aroused after the collision for handling the emergency on a mega-cruise ship." He asks how, in the absence of such professional expertise, can the "behaviour and conduct" of a person be properly judged? "How can they see their actions through the eyes of others without such knowledge?"

It is a very valid point. It is worth asking whether it is right that this individual should have carried the whole responsibility for the accident and the subsequent developments, when his employers, their deficient procedures and his navigational team, were allowed to escape the severe punishment of his singular sentence. There were 33 lives lost that night. Should all the blame for this be heaped onto the head of one wretched man?

The Adversaries

The structure of the public inquiry follows this classic, two-sided, adversarial, advocate led, legal model. This requires entrenched and opposing positions: investigators (prosecution) and investigated (defence). This model has the advantage of historically being seen as a mechanism to assign liability (blame) so that justice eventually can be seen to be done and demonstrate that this particular lesson has been learned. But this seemingly ignores other interested parties.

These include the affected organisations, victims and survivors, popular villains, as well as the independent safety and scientific professionals who also urgently need to know and learn from what happened. Currently the inquiry process does not seem to provide for these needs, although many inspectors have tried to incorporate modifications, for example to more formally include victims.

Importantly as well, the independent, objective, 'scientific' investigations needed for establishing the facts, under the current inquiry model, become part and subservient to, the

adversarial 'justice' process. This mind-set is a legacy from the 19th and 20th centuries, when first Victorian determinists, and later safety thinkers, were convinced that the universe obeyed simple laws and that effects can be mathematically and precisely related to causes in the simplified and assumption laden theories and models they proposed. There should therefore be no dispute as to the causes and effects.

Unfortunately, in today's ever more complex systems, these simplistic, linear thinking, predetermined models no longer hold. There needs to be a space to really probe the real- world effects and implications in a nonpartisan forum. This should allow a dialogue with experts, with the time and inclination to think more deeply and suggest explanations which recognise and allow for the realities and complexities of the systems involved.

The 'Injured' Parties

But there is yet another set of parties, the victims, survivors and implicated, whose needs should be addressed and the lessons from their experiences taken notice of. There is a whole section that needs to be included here on how we could better treat the victims and survivors. Learning the lessons from healthcare that time spent just listening, talking and explaining the realities of situations, sympathetically and empathetically, is often much more helpful and cathartic than building up the expectation of retributive justice that often results from initial legally required defensive stonewalling.

The Alternatives

There have been suggestions about alternative approaches – for example Nicholas Timmins again:

"In some cases, there may well be alternatives. The recent - highly revealing and highly cathartic - report on Hillsborough, was handled not by a public inquiry but by an independent panel. Lawyer free, much cheaper and quicker, and, in that case, chaired by a bishop".[138]

But most do not address the inherent problems, the speed of response of the 'official' story and the trust and credibility of the source, which tend to form public opinion very early on in the process and if not addressed promptly, can cause the frustration and disillusionment with the entire process.

One of the more unsatisfactory aspects of this legalistically modelled process is then, the way that everything is put on hold until this 'public inquiry' has established facts, causes, and legal liabilities. Until then everything is sub judice and the corporate lawyers assume control. Cynical observers might refer to long grass and tin cans, but as outlined above, there are real consequences for delays in dealing with the human and technological implications of the lessons that need to be learned. People need closure and protection.

Rules and regulations need to be challenged if inappropriate. We cannot afford to wait years before definitive actions are taken on 'established' facts. What does the cost (millions) really buy us but time, important as that might be politically, or for compensation calculations?

The suggestion of a rapidly convenable independent panel (accident board) to identify the issues, the parties and the appropriate follow up is a model worth examining. This can be followed by more formal and legal processes in due course, but the wider lessons, appropriate immediate recommendations (but probably not the knee jerk blame), can be seen to be

discussed and public opinion satisfied. Subsequent follow up can then be more measured and less pressured. Later the inevitable dissenting conspiracy theories

[138] https://www.instituteforgovernment.org.uk/blog/are-public-inquiries-worth-time-money-and-resources

and special pleadings will be able to make less impact on a public which already has a credible story to refer to.

Is there a way that this independent, trusted, non-conflicted group could create a 'safe space' for an inclusive examination of the incident? This could be a slim agile, independent accident board (similar to the aviation accident boards), with investigative powers and Chatham House rules, (with some overriding provision for national security or serious issues?). This could assist the government and reassure the public by tabling, as quickly as possible, a warts and all, working hypothesis? This would need to be extensively caveated with health warnings and not be used for legal actions (exceptions?), or liability evidence. Its findings may be over hasty, or overtaken by emerging evidence, but it will be able to rely on a safety net of a more formal and focussed legal inquiry / follow up report, to confirm and modify its first response. But some sort of legal exemption seems now to be in demand for the Grenfell Inquiry. What took them so long? Science and the law are essential pillars of society, but many people are thinking along the lines of, first, let's sort out, agree, or arbitrate a consensus on the science, before we have the legal battles.

We should be recognising that the real and immediate needs of the survivors are every bit as important as the need for the professionals and politicians to understand and really learn from these disasters. Many people feel that there needs to be some auditing of how actually the key findings from the various inquiries are followed up as they seem to have no formal standing in law or statute.

For most of these disasters, the main issues are not difficult to tease out. For example, an analysis of the Grenfell Tower fire[139] was produced in less than a week after the event.

It does not appear that in the intervening years the formal proceedings have thrown up anything which invalidates these initial findings. So why not get on with it and recognise and address promptly these humanitarian as well as the financial implications. Otherwise we will continue expensively, tragically and with real social consequences, not to learn from disasters.

Postscript

Since this was written, we have become involved in a very different type of disaster (pandemic), to the 'accident' genre on which this report focusses. It is clear that here also, there will inevitably be calls for a "public inquiry" into how it has been handled. Nevertheless, much of the discussion on the tensions between blame and enlightenment will still hold. The major difference is the length of time that the disaster takes to unfold. This further strengthens the case for re-examining the wasted time and opportunities to learn, which are a consequence of deferring our learning opportunities until later. Such

[139] https://www.researchgate.net/publication/319183242_Gren 5

a timetable calls for thinking about a real time process of continuous learning and adaptation[140] to add a measure of resilience to our processes. The formal legal niceties can then follow in due course.

David Slater was educated at the University College of Wales and Ohio State University and initially taught chemical engineering at Imperial College, London. Through the 1970s and 1980s, as founder of Technica, he led the pioneering application of risk assessment techniques to the offshore and petrochemical industries. As Her Majesty's Chief Inspector of Pollution and Director of the Environment Agency, he had a leading role, through the 1990s, in developing and implementing risk-based pollution control legislation in the UK and Europe. He is currently a Director of the regulatory strategy organisation Cambrensis and holds a Royal Academy of Engineering Professorship at the University of Manchester.

[140] https://www.linkedin.com/pulse/coronavirus-learning-lessons-from-current-crises-david-slater/ 53