

## Assessing Responsibility: Fixing Blame versus Fixing Problems'

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In the midst of even the most tragic circumstances attending the aftermath of disaster, and co-existing with a host of complex emotions, arises a practical consideration: how might similar tragedies be prevented in the future? The complexity of such situations must not be neglected. More than mere prevention must usually be taken into consideration. But the practical question is of considerable importance.

In what follows, I will offer some reasons for being concerned that efforts to **fix** the problem-efforts, that is, directed toward insuring that similar tragedies do not occur in the future-can easily be obstructed by attempts to **fix** blame-that is, efforts directed toward determining which agent among those involved is guilty of Gong-doing. This is the case, I shall contend, even where some agent or another really *is* guilty of wrong-doing.' The problem is further complicated by a pervasive human tendency to imagine that some agent or another must be responsible in some way for any tragedy that occurs-even when this is not really true-but its influence is not at all limited to such cases.

As I shall suggest, philosophical attitudes toward issues of determinism and free will may be implicated in the different approaches people take to the problem of assessing what has gone wrong in a particular case and how to **fix** it, but such deep philosophical problems need not be resolved here. The point is not that humans are never guilty of wrong-doing (since their actions, the argument might go, are all products of outside forces), but rather that *whatever* the case may be about guilt, tracking down guilty persons is a different business from **fixing** institutionally-embedded problems so as to lessen the likelihood of their recurrence.

Because it has received such widespread attention, I shall take as my illustrative example the case of the Challenger disaster. But I

presume that the lessons learned from consideration of this case could just as well be applied elsewhere. The situation is the same, I think, for assessing what went wrong at Three Mile Island, at the Kansas City Hyatt-Regency hotel, or in the cases of the DC-10 cargo door locks or the Pinto gas tanks?

Whether blame and censure should be attached to particular individuals or not in any such case is one thing, I shall **argue**, and what may be done to prevent similar events in the future is quite another. Failure fully to appreciate this often leads to a confusion of the two issues, and to a tendency to feel that the practical concern for prevention is taken care of once culpable human beings have been replaced. This is more often than not a mistake.

Whatever social, legal, *or* corporate action may be required in cases where human failure really is part of the problem, it is rarely the case that that is **all** that is going on. Agents with bad or even malicious judgment have the effects that they do because of specific circumstances in their social **and** institutional settings. Attempts to **fix** the problem must focus on these institutional circumstances, since even when a culpable agent is removed the setting remains the same, waiting for another agent to occupy the slot. Unless the degree of culpability in a particular case is plainly unusual or outrageous, one can imagine that so long as the institutional circumstances are **not** adjusted, the potential for future similar disasters remains.

In those cases where almost anyone would act similarly in a particular institutional situation, agents are actually being set up. In **these** cases, assessments of guilt may very well be mistaken and the right conclusion may be that no one is to blame, even though we may be able to take steps to change the setting and thus fix the **problem**.<sup>4</sup>

It is not so much that the characteristic features of the institutional settings are **ignored** in common analyses, but rather that they are frequently overwhelmed by attempts to nail down just which person or persons must finally be assigned **blame**.<sup>5</sup>

For all the care that may be exerted in understanding the pressures, the unique perspectives, the special responsibilities and circumstances—and perhaps, in many cases, the temptations—that have roles to play in the real making of decisions, it is too easy to abandon the wisdom involved in seeing these factors as important in favor of a

not-so-wise capitulation to the general need to **find** a culprit. Regrettably, analyses that do not pick out guilty human agents may very well appear to many—for that reason alone—to be too soft, too forgiving.

This attitude seriously obstructs the project of **fixing** the problems in question in a number of ways. To see this, it is useful to turn to a specific example, not only of a particular disaster, but of a particular analysis of a **disaster**.<sup>6</sup>

### *The Challenger Incident*

In an excellent recent paper,<sup>7</sup> Patricia Werhane offers the following suggestion:

. . . [T]he Challenger incident was a result of at least four kinds of difficulties: differing perceptions and priorities of the engineers and management at Thiokol and at NASA, a preoccupation with roles and role responsibilities on the part of engineers and managers, contrasting corporate cultures at Thiokol and its parent, Morton, and a failure both by engineers and by managers to exercise individual moral responsibility.<sup>8</sup>

Werhane begins by offering a very nice capsule sketch of the history of the shuttle booster's O-rings. The key points are these: from even the earliest stages of booster development, concern about the strength and the flexibility of the O-rings was widespread among Morton Thiokol engineers. As successive shuttle flights mounted up, these concerns appear to have been put somewhat to the side. It seems that the absence of outright failure of the O-rings in the many successful shuttle flights before Challenger gave many people the impression that the safety of the boosters was adequate. More particularly, damage to the O-rings was evident in the earlier flights, but this was not regarded as outside the boundaries set by concern for safety. After seventeen successful flights, in fact, the manager of the solid rocket booster project for NASA at the Marshall Space Center suggested that damage to the O-rings was "accepted and indeed expected—and no longer considered an anomaly."<sup>9</sup>

By January of 1986, the Morton Thiokol engineers had become especially concerned about the performance of the O-rings at very low temperatures. On the 27th, the day before the launch, the weather was cold and the next day was supposed to be even colder. The launch had already been delayed several times, however, and constant launch delays in NASA's schedule had tainted the entire space shuttle program. Another delay was thus to be avoided if it **was not** really necessary. It was under these circumstances that somewhere between 14 and 22 engineers in the solid fuel rocket unit of Morton Thiokol formally protested against the launch. They directed their protests both to their own corporate bosses and to NASA directly. The manager of the engineering-design team refused to sign a needed go-ahead release for the launch.

The vice president of engineering at Morton Thiokol initially supported his engineers, and refused to agree to the launch. He was an engineer himself. But NASA was arguing that there was no sound evidence on which to base the concern about O-ring performance at cold temperatures, and upon being asked to take off his engineering hat and put on his management hat, this official "capitulated" and agreed to the launch.

Werhane shows considerable sensitivity to many of the institutional pressures that bore upon several of the actors in this drama. She is also cautious to observe that the demands we make on **specialists**—she makes special mention of specialists in engineering and in management—may require that they make use of different methods and take different things to be important as they make judgments about the world. They have, after all, different objectives in most cases. Special concern is devoted to different methods of assessing risk, since in the Challenger story managers appear to have assessed the risk of launch differently from the engineers, but the issue is considerably more pervasive than that. As Werhane puts it,

We all perceive and deal with the world through a perspective or set of perspectives, we each run our 'camera' of the world through certain selective mechanisms: intentions, interests, desires, points of view, or biases, all of which work as selective and restrictive **filters**. That is, we each have

what I shall call our own metaphysical movies of the world. These are *metaphysical* movies because they entail projections of one's perspective on whatever is the given data of experience. They are analogous to *movies*, because, like movies, each of our perspectives varies from stark realism to fantasy and even error, and because, like movies, the selective process leaves a great deal of the data of experience 'on the cutting room floor.'"

Werhane uses this device of "metaphysical movies," finally, to highlight the fact that different people perceive things differently, that sometimes this is a function of the role they are playing in a given circumstance, and that people can occasionally **find** themselves in situations where the different ways they perceive things in their own several different roles-their different metaphysical movies-may come into *internal* conflict. This, she **argues**, is part of what happened to various people in the Challenger incident:

. [I]n the Challenger case organizational structure, corporate culture, engineering and managerial habits, and role responsibilities precipitated events contributing to the Challenger disaster. At the same time, a number of individuals at Morton Thiokol and NASA were responsible for the launch failure. Differing world views, conflicting priorities of the engineers and managers on this project, and the failure of either engineers or management to take personal responsibility for decision-making contributed significantly to the event."

All of this, I take it, is probably correct. And Werhane may very well be right when she points to particular individuals as having born special responsibility for what happened-it may be that these people should have acted differently. Werhane offers the suggestion that a "television" test might help us **all** in such situations: we should make only those decisions that we would be proud to defend in public as well as to our colleagues.

What is troublesome in all of this, though, is that a promising line of trouble-shooting analysis appears to get abandoned as soon as we

have tracked down the culprits.<sup>12</sup> The “metaphysical **movie**” analysis—while some might not really want to give it this particular name—offers a way of understanding how things might have looked from the inside. Sometimes it is bound to be the case that the *reason* that a particular person looks at things as being embedded within a particular framework involves, in a fundamental way, the fact that they are in that particular position. One can *predict*, for example, that people will feel defensive if they are being accused of inefficiency, as NASA was. One can thus predict that the consequences of *not* launching would necessarily loom large for anyone wearing a “managerial” hat. Were lives at risk here? Of course they were. They were for *all* the launches. And every launch so far had been successful. But this launch was *different*: the temperature was significantly lower than at any previous launch time and the engineers were recommending that the launch be scrubbed.

Yes, the circumstances were different. NASA then asked the engineers to substantiate their concerns. But the flexibility of O-rings had never *been* officially tested below 47 degrees, and apparently no one took seriously the results of less formal experiments like the one performed so dramatically *offer* the tragedy by Richard Feynman, before a presidential investigative commission and national television *cameras*.<sup>13</sup> So the engineers hesitated, and when the decision to go ahead with the launch was made, they did not think it the right course to blow the whistle. One suspects that, as risky as they may have thought the O-rings to be, they were not as certain as they would have liked to be about what exactly the risk *was*.

I am not sure that metaphors of different hats and different metaphysical movies help here. As useful as such images may be in *some* circumstances, they yield the suggestion that, by virtue of being a manager, say, one is bound to see things differently than would an engineer. But when the Morton Thiokol engineering vice president was asked to think like a manager, he “capitulated.” And when the engineers were asked to substantiate their concerns, they appear to have felt helpless. Could it be that anyone—even an engineer (or a professional ethicist, for that matter)—who thought deeply about what was at stake for NASA and for Morton Thiokol if the launch were delayed yet *again—might* have looked one more time at those risky O-rings, and

wondered again about how serious that risk was? The risks to NASA and Morton Thiokol of *going ahead* with the launch were, as events tragically proved, considerable. Does one have to be an *engineer* to appreciate this?

### *The Genesis of Perspective*

I submit that if *any* of us were in that situation, under those pressures, we would have found *either* decision very difficult. This is an artifact of the *situation*. And it *may* even be that, if any one of us were in the place of the engineers who “capitulated,” freighted with all the responsibilities and pressures that it was in fact freighted with, we *too* would have made the same decision. It is important, as one considers this possibility, to make sure that *all* the pressures and responsibilities and available information are taken into consideration.

What is missing-or at least underemphasized-from the different hats/different movies line of thinking is a certain key fact: there are *reasons* why different professional hats and different individual perspectives have their various characters. This is not at all arbitrary. Managers look at things in a certain characteristic way in large part because of the character of the typical kinds of projects they undertake. The same is true for engineers and philosophers and everyone else. Asking someone to put on a different hat is really just a way of asking that certain considerations be taken into account. And while there are individual differences in how easy this is to *do*, *most* of us can do it to some extent, at least with help. And the more considerations that get thrown into the pot, the tougher decisions become.

If we want to know how to *fix* institutional frameworks in such a way as to prevent repetitions of problems that have arisen, we must pursue the details of the lines of influence that motivate people as far as we can. Did someone at some juncture make a decision that was influenced too much from one direction and not enough from another? We must ask why that was. Were there institutional pressures that made it *likely* that any person trying to act responsibly in just that position would do the same?

One must track these things down as precisely as possible if one wants to get to the bottom of such events as the Challenger disaster.

To offer an overly simplistic suggestion, if there is a **consensus** that the safety of the crew is a **fixed** point, to be the main driver of all decisions concerning space shuttle launches, then it may be best to enforce that consensus by requiring that launches be approved by some agency carefully protected from the normal pressures found within NASA or within its contractors. If the consensus is something short of that, then some other solution may offer itself. But only when we have a clear picture of *why* the “metaphysical movies” of the individual actors looked just the way they did will we have clues about what really went wrong.

None of this implies that people are *never* to be held morally responsible for their actions, or *never* to be fired or otherwise penalized for doing wrong. It is admittedly true that putting on the institutional analyst’s hat makes it difficult to see things in quite the same way one might while wearing the legal theorist’s hat—not to mention the police officer’s or the government prosecutor’s hats. But the institutional analyst might very well be able to offer a plausible necessary condition for findings of genuine *guilt* in these situations: it is plausible to **find** a **person guilty** of wrong-doing only if it is not the case that *anyone* acting *responsibly* in his position would have done the **same**.<sup>14</sup> Thus, if disaster **occurs** because of a decision made by someone who agonized over it and tried hard to make the right decision, and did not *culpably* neglect information that was realistically obtainable, then the person ought not be held guilty.

Werhane certainly takes this into consideration. Yet she appears to think the evidence shows that at least some of the actors do not meet this criterion. Here is her reason, for example, for thinking that the engineers should have blown the whistle after management had decided to go ahead with the launch:

The problem is that we become enmeshed in our own movies of the world, in our roles, our idealizations, and in institutional structures in which our decisions take place. Seldom do we stand back and evaluate not merely a decision but the perspective out of which that decision is being generated, the institutional and social structure in which it occurs, our roles, and the limits of those roles in the larger context of moral decision-making. The engineers in this case



identified themselves with their role responsibilities. They did not take a more general account of the decision about which they were intimately informed and connected. They allowed themselves to be 'managed' and did not think carefully about their primary duties, the duty to consider first safety and welfare.<sup>15</sup> Nor did they reevaluate their responsibilities in the context of the new company, Morton, with a set of open door policies that were in contrast to Thiokol's. They too, then, are **responsible**.<sup>16</sup>

Perhaps this is correct. But can one be so sure that they did not consider things more generally? And if they *did* do so, is it really so obvious that they would have acted differently? Or even that they should have acted differently? One needs to know more about how things looked from there. And if we are so sure that the wrong decision was made, then the least we can do in the name of prevention is to alter the institutional setting so that it is less likely that people trying to behave responsibly will make that decision, or that it is *available* as an option for people acting less than honorably in that position.

The method urged by Werhane-careful consideration of the entire institutional fabric within which decisions get made-is the right one for pursuing the practical questions about future prevention that arise out of tragedy. The positions in any complex social situation are often freighted with stresses and pressures, opportunities and temptations. These things require at least as much attention-and in many ways attention of the same kind-as do O-rings. *Perhaps* there are idiosyncratic problems with the particular individual who occupies some particular sensitive position, and surely it is proper to assign guilt in some cases. But one makes a serious mistake-one with potentially severe ethical implications-if one underestimates the possibility that *any* position-holder, given stresses and pressures objectively obtaining in the particular position in question, might have "failed" like an O-ring. Where *that* is the case, the best solution will clearly be in the direction of relieving those characteristic stresses and pressures.

*Notes*

1. This paper was read and discussed at the Second Annual Meeting of the Association for Practical and Professional Ethics, held at the University of Maryland in March of 1993. It has benefited from suggestions made by members of the audience, and especially by comments made there and elsewhere by Robert Baum, Paul Petersen, Victoria Varga, Arne Vesilind, Vivian Weil and Patricia Werhane.

2. I do not wish to deny, of course, that problems *sometimes* may be fixed precisely by finding culprits or incompetents and dealing with them—either by removing them from their positions or by finding ways of correcting their behavior. I am arguing only that this need not be the case. Indeed, as may be evident in what follows, I am of the opinion that such a situation is less common than one might think. Considerable attention has been devoted to the related idea that, in many cases where individuals within corporations or other large organizations are more or less naturally led to make bad decisions because of institutional set-ups, it is the organization itself that may be held morally responsible. See, for example, Peter French, “The Corporation as a Moral Person,” *American Philosophical Quarterly*, 16, 1979, 207-15. Surely this is correct. But this will not always be the case, and even where it is, the enterprise of **fixing** blame must still be distinguished from the enterprise of **fixing** problems. For a sustained example of how French’s thesis concerning the moral culpability of corporations may be brought to bear in a particular case, see his “What is Hamlet to McDonnell-Douglas or McDonnell-Douglas to Hamlet: DC-10,” *Business & Professional Ethics Journal*, Vol. 1, No. 2, 1982, 1-13. As French reminds his readers, “our **first** interest is with the ascription of moral responsibility to McDonnell-Douglas” (p. 5). It is not, therefore, his purpose to decide whether localizing blame in this way will help to prevent future problems of the kind he analyzes.

3. Indeed, the same case can be made in **all** kinds of situations where institutions (and people in them) are trying both to **fix** blame and to **fix** problematic institutional arrangements. Sometimes people will argue about which of these is the *right* approach to take, as if they were somehow mutually exclusive. Thinking of the matter in this way misses the point. The two approaches merely reflect different

concerns, and they need not be in *conflict* at all. It is just that one approach serves one kind of purpose, the other approach serves another kind of purpose. For discussion of some of this in connection with attempts by universities to control their research policies, see Wade L. Robison and John T. Sanders, "The Myths of Academia: Open Inquiry and Funded Research," in the *Journal of College and University Law*, Vol. 19, No. 3, 1993, and Sanders and Robison, "Research Funding and the Value-Dependence of Science," in *Business and Professional Ethics Journal*, Vol. 11, No. 1, 1992. It was in connection with these issues, and particularly in connection with discussion arising as a result of revelations about research and funding relationships between my own institution and the CIA, that I first became sensitized to the dangers of focussing too much attention on *fixing* blame.

4. There may then be some agent who has a responsibility for taking these steps. And if those steps aren't taken, we may have yet *another* problem to examine. Here we come upon one more thing that we may have in mind when we speak of "assessing responsibility" in tragic circumstances. It is actually the third that has come up in the paper. They are: 1) trying to figure out what went wrong (this may or may not involve a *culpable* agent, although it will probably involve agents and their actions); 2) trying to figure out who is to blame; 3) trying to figure out whose business it is to figure out what went wrong, and/or to take steps to *fix* things. As an aside, it is worth noting that it may be among the ethical responsibilities of professional ethical analysts to keep these several sorts of assessment straight as they name names in their papers.

5. The same may hold for the institutions in which people in such situations *find* themselves caught up. As Peter French writes, "If Mary's doing *b* is a natural or (within some organizational structure) a required response to John's doing *a*, we usually hold only John primarily accountable for the harm (or John and the organization). . . ." ("What is Hamlet to McDonnell-Douglas," p. 4). The same is true if organizational names get substituted for Mary's and John's. And if these relationships-whether among individuals or institutions or a combination of both-appear to be arranged in webs rather than in the chains that French seems to be thinking of, the effect is an institutional structure which yields harmful results that are no one's fault.

6. The case I have chosen to use as an example is chosen in part because it is almost surely the single best documented case in the literature. A great deal is known about the details of crucial decisions, about conversations among decision makers, and about pressures and problems that attended the entire process that led to the fatal launch of the Challenger on January 28, 1986. Further, there is fairly widespread consensus concerning these things. These facts, which might seem as if they ought to *facilitate* my argument in behalf of a distinction between the sorts of analysis suited to **fixing** blame and those better suited to **fixing** problems, can actually complicate the task. This is especially true where people have developed settled views concerning what, precisely, went wrong. I am especially grateful to Vivian Weil for helping me appreciate the extent to which one needs to be sensitive to this in approaching the Challenger case.

7. Patricia H. Werhane, "Engineers and Management: The Challenge of the Challenger Incident," *The Journal of Business Ethics*, Vol. 10, No. 8, 1991, 605-16. Werhane's paper does a singularly fine job of assessing the many institutional factors that surrounded the fatal decision to go ahead with the launch of Challenger, in spite of a virtually unanimous engineering recommendation—from the engineers at Morton Thiokol who had designed the rocket boosters—that air temperatures were far too low to be confident about the "O-rings" which sealed the joint connecting the booster segments. The engineers actually had more concerns than just this, but the O-ring concern was high on their list.

8. Werhane, *op. cit.*, p. 605.

9. Quoted in Werhane, p. 606.

10. Werhane, p. 607. I think this is all perfectly right, as far as it goes. See for example, John T. Sanders, "Experience, Memory and Intelligence," *The Monist*, Vol. 64, No. 4, 1985, and "Merleau-Ponty, Gibson, and the Materiality of Meaning," *Man and World*, Vol., 26 No. 3, 1993.

11. Werhane, p. 605.

12. The impression that fixing blame becomes the primary task of the paper is supported by the tenor of Joseph Herkert's response to Werhane. He argues that she is wrong about how blame should be **fixed**. See Herkert, "Management's Hat Trick: Misuse of 'Engineering

Judgment' in the Challenger Incident," *Journal of Business Ethics*, Vol. 10, No. 8, 1991, 617-20.

13. Feynman, at one of the public hearings devoted to determining the facts in the Challenger story, dropped some of the O-ring material into a glass of ice water. Its diminished flexibility was quite obvious. It is not, of course, that one needs to be a Nobel laureate in physics to think such things up. But it *might* have helped a great deal that Feynman was not, in his capacity as curmudgeonly investigator, under quite the same pressure as the Morton-Thiokol engineers. In connection with the general hypothesis that others did not think to perform this simple little experiment before Feynman did, however, it is intriguing that Feynman later came to believe that his work on the Presidential Commission on the Space Shuttle Challenger Accident was considerably less independent than he had thought at the time: "I found out later that when I thought I was doing something independently I was being worked . . . operated by somebody else who wanted to get something done without involving himself, and so forth . . . those guys are clever, you know? I think I'm running around on my own hook, getting a clue here and a clue there, but those clues were just little taps to make me run in the right **direction** . . . I was being had to a certain extent." One can't help but wonder what was going on here. The quotation from Feynman is taken from an episode of television's *Nova* series, available as Coronet Video #5920CVHS, "Nova: Last Journey of a Genius" (Northbrook, Illinois: Coronet Film & Video, 1989).

14. Interestingly, it may be that **some** of the differences between a focus on fixing blame and a focus on **fixing** problems parallel differences between what Carol Gilligan calls the "ethics of rights" and the "ethics of care." See especially Gilligan, *In a Different Voice* (Cambridge, Mass.: Harvard U.P., 1982). Hints about applications of an "ethics of care" to problems arising in professional contexts may be gleaned from Sara Ann Reiter, "The Gilligan-Kohlberg Controversy: Lessons for Accounting Ethics Education," unpublished manuscript.

15. I want to make two remarks in passing concerning this part of the passage: 1) there is some confusion here about what the real problem is supposed by Werhane to be. Is it that the engineers didn't look at things generally enough? Or is it that they did not look at it sufficiently in the way that engineers, in particular, are supposed to (in

terms of their “primary duties”)? 2) Which things are the “primary duties” of engineers may not be as clear as Werhane indicates. See, for example, John T. Sanders, “Honor Among Thieves: Some Reflections on Professional Codes of Ethics,” *Professional Ethics*, Vol. 3, Nos. 3 & 4, 1994. For an appropriately cautious argument concerning the question of whether engineers have extraordinary obligations, see Andrew Oldenquist’s “Commentary” to Kenneth D. Alpern’s “Moral Responsibility for Engineers.” Both pieces are in the *Business & Professional Ethics Journal*, Vol. 2, No. 2, 1983, 39-51.

16. Werhane, op. cit., p. 613.