

DECIDING HOW TO DECIDE

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Is Your Retirement Community Afflicted with Any of These Governance Pathologies?

January 28, 1986 is a day we all remember. On that day NASA launched the space shuttle *Challenger*. Public interest in the launch was intense because one of its seven crew members was Christa McAuliffe, a high school social studies teacher from Concord, New Hampshire, who was expected to become the first teacher in space. It was planned that she would carry out experiments and conduct two teaching lessons from the shuttle.

Seventy-three seconds into its flight, when it was at an altitude of 48,000 feet, the shuttle began to break apart. Hot gases intended to provide thrust as they emerged from the tail of a solid rocket booster escaped instead from a leak in its side, destroying critical structural elements of the vehicle. The two solid rockets exploded, and the crew compartment of the shuttle, the most robust part of the vehicle, was propelled by the explosion away from the other debris and it tumbled toward the sea in a ballistic arc. It hit the ocean at 207 miles per hour. It is not possible to know how long the crew survived. There is solid evidence that at least some crew members were alive after the initial breakup, but whether they were still alive when their compartment hit the sea depends upon whether or not the cabin pressure was maintained through the disaster, which it has not been possible to determine.

I write that we all remember this day because, although the specific date may not be retained in memory, the entire nation was deeply shocked and saddened. It is estimated that 85% of the American people learned of the tragedy within one hour of its occurrence. Many schoolchildren had been enabled to watch the launch live on television. The disaster is often compared to the assassination of President John F. Kennedy in its impact upon us – as with Kennedy's death, many people can remember the exact circumstances under which they heard the news of the *Challenger* disaster.

The fatal leak was caused by an O-ring failure, an O-ring being a device intended to seal a joint and prevent hot gases from escaping. That the O-rings were a problem was well known to NASA officials since 1977, or as early as the second space shuttle mission. Evidence of their erosion by escaping hot gases was clearly evident upon post-flight examination. The joints in question were even in the process of being re-designed, yet flights were not halted. Moreover, clear evidence existed that the erosion was related to ambient weather conditions, particularly to cold temperatures. Yet on January 28, 1986 NASA managers decided to proceed with a liftoff on a day colder by far



Space shuttle *Challenger*'s smoke plume after its in-flight breakup, resulting in its crash and the deaths of all seven crew members.

than any on which a launch was ever previously attempted.

When the shuttle program resumed after the *Challenger* disaster, NASA engineers began to notice that insulating foam meant to protect the rocket boosters from ice formation tended to break away from the vehicle during launches. The separation from the vehicle of debris during a launch is obviously dangerous, since such pieces can strike other parts of the shuttle, damaging them. Such separating foam debris was clearly outside of NASA's design specifications. On one mission separating foam striking a booster rocket had caused a dent four inches wide and three inches deep, although the shuttle itself returned safely. Yet, in a pattern of behavior remarkably similar to that which had preceded the *Columbia* disaster, launches were given the go-ahead in spite of the unresolved problem of foam debris separation.

On January 16, 2003 NASA launched the *Columbia* with a crew of seven, including two women aerospace engineers, one born in India, and an African-American physicist. During the launch a piece of foam insulation approximately the size of a small valise hit the leading edge of the wing of the shuttle. The foam strike occurred when the *Columbia* was at an altitude of 66,000 feet and traveling at 1,870 miles an hour. Foam may sound harmless to a lay person, but it is far from harmless under these conditions, as engineers well know. Post-disaster studies indicate that it caused a six to nine inch hole in the wing, which is covered with special tiles to absorb the intense heat caused by re-entry into the atmosphere. That this mishap had occurred was not apparent until twenty-four hours later, when films of the launch were developed and examined. On the day of take-off, Mission Manager Linda Ham declared to the press that this was a "picture-perfect launch," although the really significant pictures had not yet been developed.

Once the rather grainy photographs were available, there followed an intense and much-documented series of deliberations within NASA regarding how aggressively to explore the extent of the possible damage while the mission was in progress. NASA management adamantly refused to forward three requests by its engineers to the Department of Defense seeking help in obtaining high resolution photographs of the damage which could have been gotten from satellites. Management also refused suggestions that an astronaut take a space walk to examine the wing. The excuse used was that nothing could have been done about possible damage anyway, although this was not, in fact, true.

In any event, at 9:00 a.m. on February 1, 2003, as the *Columbia* was executing its re-entry maneuvers, mission control lost contact with the crew. This in itself is not a cause for undue alarm during re-entry. However, amateur space flight aficionados taking videos from the ground near Dallas, Texas immediately recognized as a grave abnormality the fact that the shuttle was leaving multiple contrails and had, in fact, broken up. Hot gases had entered the hole in the leading edge of the wing and had, in effect, melted the vehicle from the inside out. The crew module remained mostly intact during the breakup, but this time it suffered enough damage that it lost pressure, and the crew was almost certainly dead by 9:00:53 a.m. Shuttle debris and human remains were found at over two thousand sites scattered from Nacadoches in east Texas to counties in western Louisiana and southwestern Arkansas.

The *Challenger* and *Columbia* disasters are frequently used as case studies in the ethics and the pathologies of organizational decision-making. One of the best-known studies, *The Challenger Launch Decision*, written by Diane Vaughan, was published on the tenth anniversary of that disaster, which was seven years *before* the *Columbia* tragedy. She describes in vivid detail the dysfunctional decision-making culture which existed at NASA prior to the *Challenger* launch. Her book quickly became standard reading in universities around the world where business administration is taught. It won various prizes. It became apparent after the second tragedy, that is, after the *Columbia* disaster, that although the technical cause was different – foam rather than O-rings – the institutional causes were almost exactly the same. Naturally enough, Diane Vaughan was asked if NASA had ever contacted her during the seven years which had elapsed between her book’s publication and the second disaster. She responded that she had heard from the *New York Times*, from *NBC News*, and from *The Wall Street Journal*, and had even received a call from her high school boyfriend, but that NASA had never been in touch with her about a book which was being cited by scholars all around the world. She was, however, finally put on the commission which did the post-mortem study of the *Columbia* disaster.

We all know that there are many misfortunes besides the shuttle disasters which stem from errors of human judgment, in particular, human judgment functioning in organizations. The Bay of Pigs invasion; the invention of “new” Coke; the 1994 friendly fire shutdown over northern Iraq of two U.S. Army Black Hawk helicopters by Air Force F-15 fighter jets; Polaroid’s failure to comprehend the possibilities of the digital revolution despite its commanding lead in the field of instant photography; the nuclear industry accidents at Three Mile Island and Chernobyl; the 1996 Mount Everest disaster; the Vietnam War; the slide into second-class status of the American automobile industry; the intelligence community’s failure to “connect the dots” prior to September 11, 2001; the Daimler/Chrysler merger; the Mann Gulch (Montana) Forest Fire (1949) in which twelve smoke jumpers lost their lives, and the South Canyon Fire (Colorado) of 1994, where fourteen fire fighters lost their lives, which many believe happened because the lessons of 1949 were gradually forgotten.

Some of these events, like the NASA tragedies themselves, may seem to outsiders to be “accidents,” but to those who have studied them carefully, they are catastrophic failures with long incubation periods that stretch out over many years within the organizations involved. Moreover, the officials and staff members implicated in them were, for the most part, highly educated and competent, were attempting to be rational, and had the best of intentions. (I have deliberately omitted from the list of calamities such things as the Savings and Loan crisis of the 1980s and 1990s, the financial meltdown of 2008, the marketing of Vioxx and tobacco, Enron, Watergate, and the nuclear meltdown at Fukushima, where greed, dishonesty, and crime, whether prosecuted or not, were significant contributing factors).

Although there is no way to insure human and organizational infallibility, it is very possible to identify organizational practices and decision-making pathologies which greatly escalate the probability of catastrophic failure in spite of the good intentions of the people involved. These include:

Premature convergence. Settling on one view of a problem or situation without eliciting diverse views and defining several alternative approaches to it for honest consideration.

Failure to encourage “brainstorming.” Failure to stimulate constructive debate.

Confirmation bias. Gathering and relying on information that confirms existing views, and downplaying or avoiding information that contradicts prevailing hypotheses.

Enslavement to conventional wisdom. It is always important to surface and test underlying assumptions and orthodoxy. What does everyone in the field seem to believe? What is the conventional wisdom? Is it really true? It is important to recognize that things which once worked can become ineffective in changed circumstances.

Inappropriate use of experts. Seeking outside consultants who will agree with prevailing sentiments among managers. Expertise should certainly be part of any decision-making process, but in addition to the danger that managers tend to select experts who will confirm their own biases, it is also the case that when the environment changes and new challenges arise, experts are at a disadvantage. Expertise, by its nature, is about the past.

Secrecy. Making high stakes decisions behind closed doors, and presenting them as *faits accomplis* to the rest of the organization, de-motivating people who may have additional light to shed on the issue from sharing it.

Groupthink. Allowing a desire for harmony to over-ride a realistic appraisal of alternatives. A retirement community, where it is natural to aspire to congeniality and amiability, is particularly vulnerable to a loss of the advantages of independent thinking, as people self-censor in the interest of preserving comity.

Misuse of Surveys and Focus Groups. The pitfalls of these two very commonly used strategies to buttress decision-making are well known, especially the tendency of surveys to produce answers which are a function of the way the questions are asked, and of focus groups to confirm the biases of those conducting them. Managements will often retain the services of “impartial outsiders” to design and carry out surveys or focus groups. Such outsiders can be very sensitive to the leanings of managers who hire and pay them – managers who have the potential to hire and pay them again in the future. Even if it is quite unconscious, they can return a result pleasing to those who retained their services. Knowing this, some of the best and most successful business firms disallow surveys and focus groups in the product development process.

Hierarchy. Organizational leaders can use their status and power to exaggerate all of the above tendencies by dominating discussions themselves. Many of the calamities cited above were ones where early forceful statements by high status individuals inhibited an honest and unbiased exploration of alternatives. Wise leaders are directive in facilitating a group process while deferring judgment, drawing out the quiet people, being sure every possibility is put on the table, and that every angle is explored. Vigorous debate makes for sound decisions, with the proviso that having been genuinely heard, everyone will rally around a

decision which is fairly reached, and that conflict over the issue will not be institutionalized permanently.

Overcoming these various decision-making pathologies does not involve merely allowing people to express their opinions openly and candidly after a decision has been made in some sort of charade of consultation. A decision process steered toward a pre-ordained outcome will be just as vulnerable to failure, to being wrong, as one which is more frankly taken behind closed doors in secret.

Interestingly, Quaker decision-making practices, although established centuries before the problems of modern organizational life could even be imagined, if carried out with true conscientiousness, address many of the decision-making pathologies described. In Quaker practice, formal hierarchy is absent, although certain individuals may be recognized as having “weight,” regardless of their office or lack of it. During deliberations great care is made to listen with respect to every voice, while at the same time participants are also careful not prematurely to make dogmatic pronouncements or state immutable positions, always avoiding a quarrelsome tone of voice, and always being tentative out of respect for the spirit of truth in others who are present. In the end, after every voice who wishes to be heard is heard, after questions are looked at from every angle, and after the spirit moves the group to unity, people are prepared to lay aside the preconceptions with which they entered the deliberation and wholeheartedly support the decision reached. Releasing such preconceptions is seen as an important spiritual discipline. The often observed disadvantage of Quaker process is that it can be very long-drawn. But a delayed decision which is an authentic decision might be more powerful than one arrived at in haste.

The first responsibility of CCRC residents is to learn to recognize decision-making pathologies when they take place in our communities. When key decisions are being made, does the management express a preferred direction before residents have had a chance to consider all the options? Are residents sequestered in focus groups, rather than being allowed broadly to engage with the various perspectives among them? Are surveys a commonly used tool, soliciting each resident’s opinion in isolation from dialogue with others, and with the management announcing the outcome, rather than the residents analyzing the survey results? Are major decisions made by the Board of Directors behind closed doors and simply announced to residents?

While a CCRC will not explode and burn in mid-air, they can be vulnerable to the sort of decline which characterized Polaroid and General Motors, declines which, after all, can be quite swift. We owe it to our organizations and our organizational colleagues to be quite conscientious about avoiding decision-making pathologies. For, as Aristotle wisely said: “We are what we repeatedly do. Excellence is not an act, but a habit.”