**Safety Culture and Leadership**

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**Patrick Hudson speaking:**

In 2007, Exxon Mobil's drillers asked if they could call a halt on drilling the Blackbeard West well just 2,000 feet short of their 32,000 foot target that promised to be massively profitable. Those on the spot felt it was just too dangerous for them to continue any deeper. At the same time the geologists wanted to go deeper to reap expected massive rewards, especially in the light of the investment already made in drilling that deep. The decision whether to halt or proceed was passed right up to Exxon Mobil CEO Rex Tillerson. Rex decided to go for safety saying, "It's only cost $170 million." Since then, Tillerson and his company have been accused of not having the guts by the financial markets, but no lives were lost.

He could easily have given in to the Wall Street analysts, but that would not have been safety leadership. He did have the guts just because he stuck out for the safety of his people, whatever the analysts were going to think.

In contrast, BP's similar Macondo well, also in the Gulf of Mexico, was drilled on to disaster in 2010. No one at BP called a halt. Eleven lives were lost, the Gulf massively polluted and BP was nearly ruined. Tony Hayward, BP CEO, admitted he had known nothing about the well and its increasing difficulties leading to the explosion. Exxon Mobil's drillers knew they both should, and could, signal their unease. Exxon Mobil's management knew they had to listen and take them seriously despite the costs and the potential for criticism from a risk-hungry market.

While some of BP's contractors voiced their unease on the Deepwater Horizon, BP's own staff carried on regardless. Leaving their superiors in the state of ignorance, they took the lead but clearly, this was not safety leadership.

What made the difference?

Deep down, the two companies have very different cultures and very different leaders. One took safety seriously as well as making money. Exxon has never been shy about making a profit, but has held safety and care for the environment high ever since the Exxon Valdez disaster. The other company also took making money seriously, but had behind it a track record of disasters such as at the Grangemouth in Texas City Refineries and the Alaskan oilfield.

My name is Patrick Hudson. I was Professor of the Human Factor in Safety at Delft University of Technology in the Netherlands. I want to examine leadership in the context of the cultural safety that an organisation has. Unlike other forms of leadership, safety leadership is for everyone and involves publicly reaching for one level higher on the culture ladder than the organisation is currently placed.

So, what do we mean by leadership? What is a safety culture? Can you become a safety leader? Can you engineer a safety culture? Numerous academic studies of safety culture have found culture hard to capture but all agree on one dimension - the importance of leadership and safety leadership in particular.

Let's start with leadership. One common idea people have is of the autocratic charismatic leader making fine speeches, exhorting the workforce to move forward while always finishing with, "And be safe." This sounds good, but leaves a lot to be desired especially when we know who’ll be blamed if there's an incident.

Another approach to leadership is transactional where we all agree about what the workforce is going to do, often in great detail, to make sure they don't have accidents. We still know who will be blamed when there is one and it's not usually the managers who lead by setting tasks and targets for others.

A better style is called transformational where leaders work to engage people and create consciousness for safety, often by appealing to their better selves and using emotionally-loaded examples to get the message home. Blame is much less of an issue with transformational leaders, but the results of such appeal is often to improve the safety climate and the workforce's perception of the leader - not necessarily to actually make them work more safely.

What do good leaders do? Why would people want to follow them and make extra effort? There is a list most people, when asked, would agree about leadership in general, and safety leadership in particular. Leaders have a clear vision. They know what they want. Leaders communicate, making their vision and expectations public. Leaders set a personal example of how to behave. Leaders have integrity. They can be trusted. Leaders apply clear consequences for those who meet or fail to meet expectations.

This type of model works well in describing leadership practice such as in politics, business or the military. Usually we add some leadership styles. The influential study in the '30s by an American scientist called Kurt Lewin distinguished three styles:

* the first was autocratic: "Do what I say"
* the second was democratic: "Let's decide together what to do"
* and the third was laissez-faire: "Do what you like"

In the Hearts and Minds program, we use a version of Hersey and Blanchard's model to identify four styles that leaders might adopt. We added their associated failure styles:

* telling and yelling
* teaching and patronising
* participating and do it all
* delegating and advocating

All of these map onto Lewin's styles. You can do the same for pretty much any other division of styles and activities. The crucial question here goes beyond style to, "What is the substance?"

So what is a leader to tell or teach? What are leaders participating for, and in? What are leaders delegating? Our model taught me that there is not just one preferred style for those following a leader and any style can go astray. If people believe there is one style of perfect leadership that fits all sizes, they are wrong. Sometimes people in the situation are best met by an autocratic telling style - emergency and crisis situations that have not been trained for. Sometimes a laissez-faire style is most appropriate when the group is highly competent and anything other than leaving them alone will become interference, especially when the leader may know less than the followers.

Lewin had data favouring the democratic style, but that may be an artefact of averaging studies. Like so many experiments, Lewin used students and the results were projected onto real people facing real dangers.

A friend of mine was appointed a Shift Supervisor at an aluminium smelting plant in South Africa. As a white man, although young and inexperienced, he was put in charge of a highly competent local team. He quickly spotted that what they needed to be highly productive and safe was for him to be a participating leader, setting an example from within the shift. One day there was a major incident involving flowing molten aluminium and he instantly realised that this was new to all of them - with highly dangerous molten metal. This was a crisis and he changed an authoritarian telling style as he stood back to ensure he could oversee everyone and keep them all out of harm's way. Once the crisis was over, he reverted to the friendly guy he always was.

What we learned is that real leaders have to know what their followers need, not what they can give them - what is appropriate for them at that particular moment and specific conditions. But, there is a big difference between the standard notion of leadership, outside of the safety arena, and what we can call safety leadership. Whereas we can usually recognise leaders and followers - bosses lead, workers follow - in safety, everyone can have a clear idea of what it means to be safe and act upon it in public. So anyone can lead. Everyone can follow in safety. Managers lead workers but workers can also lead their managers and their colleagues by their example as well.

I pointed out in the last talk what most studies have identified as the components of a safety culture are really an ideal end state requiring a number of intermediate states to help people obtain the higher level cultures. The same applies to the substance of what a leader means by safety. Rex Tillerson set a shining example, but safety leadership is far more than doing the right thing when such a critical moment arises. Tony Hayward failed, not just because he didn't make the right speech at the right time – he certainly failed there – but because he'd failed to have his workforce, wherever in the world and no matter how lowly, know exactly what he would have wanted them to do. He made some fine speeches and like his predecessor and his successor, promised that "BP gets it," but that was about as far as it went.

So, what I've learnt about leadership and safety leadership in particular, is that it is not just about the style but more about the substance. The most glaring gap, the bit people find hardest to do is substance. What do we, as individuals, and as an organisation - actually mean by safety? This really has to be a lot more than just the emotional call to be safe. If you have that articulated idea in your head then you can create the clear vision, you know what you want and you can communicate it much more easily. Integrity and trust become simpler to develop and maintain, you know what kind of example you have to set and to whom.

But surely all that's required is to say “the vision is safety first”. Well, no. That's a pretty meaningless vision for someone faced with a choice at 3:00am, when production beckons and we feel we can get away with it, "just this once," - a personal and smaller Tillerson moment that still calls for real guts in the face of temptation. Saying "safety first" seems pretty simple to the outsider - someone operating with 20:20 hindsight, often sitting in an office on the other side of the world. Reality requires more than a slogan. At 3:00am you need to know what to do, how to do it and why.

What people understand by safety, how they understand messages about safety and how they understand the risks they face, is not absolute. It's determined by the culture, the common set of values, beliefs, attitudes and working practices that determine people's behaviours. This collection is what we call “the safety culture” and can be distinguished into a number of different cultures that are increasingly better in terms of the safety culture ladder - from pathological through calculative, to generative.

In my previous talk, I discussed how we can become a better safety culture, moving up the ladder towards the proactive and even generative cultures. I mentioned leadership in passing as essential if you want to move up the ladder, while a lack of leadership is one of the best ways to slip down. I've come to realise that safety leadership, at least its content rather than its style, can be framed in terms of going one step higher than those around you. So if the culture is reactive, then leadership involves setting out a calculative vision and behaving in ways that make that come about. If the culture is already calculative, then the leader has to be dragging everyone else up towards the proactive stage, and if the culture is still predominantly pathological, and many unfortunately are, then reactive is where you have to be. Shooting for proactive is doomed to fail. No one will understand what you say and they lack the skills to build on.

An example of early safety leadership, one simple enough for the organisational safety culture of the time – 1984, was given by a member of Shell's committee of managing directors. Simply he said, "We are killing too many people," and instituted a reactive process, kept up to this day, whereby his top colleagues personally reviewed every fatal accident with a top manager of the country where the accident happened. This instituted a companywide habit of reacting seriously to accidents, no longer accepting them as the price of doing business.

Another example of the same transition, when much of the company, indeed the industry at the time, was pretty pathological or early reactive, was Dick. The then Production Director for a major oil and gas company for the whole North Sea. Normally such person would have a stack of reports on his desk which were then delegated for processing, even someone professing to be as passionate about safety as Dick was. Not him. He had the cleanest desk you ever saw. He was hard to meet in his office as he was always offshore. People knew he was coming and lined up to tell him about problems and issues that he did his best to have fixed before he flew back on the last flight when I could meet him in his office. He showed that problems were worth identifying and would get fixed - by responding directly to workforce concerns, Dick moved safety reporting way up the agenda, creating trust by actually taking reports seriously.

Nowadays, these examples might not be regarded as particularly unusual but at the time, they formed powerful messages appropriate for what people could understand - given their culture at the time. Articulating a more advanced vision, would frankly, have gone over people's heads and been a waste of time - making for fine speeches but little, if any, impact. Safety leadership is also not just repeating the message of the day, knowing what the script is, because that will never be enough to shift people - the culture towards a better place.

Two people I’ve both known well, again in the same oil company – I'll call them Cose and Richard – who showed safety leadership by first devising, and then implementing safety management systems. Cose, although an Engineer, felt that the next step in safety management had to take account of the people and hired a group of us, including myself and Jim Reason, even before the Piper Alpha disaster. This led to Swiss cheese as well as SMS that were still in the same department. Cose was, and still is, unremittingly focused on HOC and made sure that his top management knew what was going on. He left them with a clear understanding that this was where the company was going and they had to be part of it. They in turn, supported him and left him as Group Head of Upstream HOC to get the job done. What we all put in place was essentially early calculative - an approach to safety that transcended responding to the immediate events but started to look at the underlying factors and collect data.

Richard was his successor and he took up the next task - getting the system into operation worldwide whether required by regulators or not. This involved managing the transition from in­­ place to in operation. Many of the old problems arose from locations where they frankly, didn't wish to change their ways but again, with the support of even more senior managers, he got it done. Moving from design to operation is not always straightforward and when our clever ideas on safety management didn't work as expected, he yet again showed leadership by giving us the possibility to go over and get things right.

At the time their boss, an Australian I'll call Rob, showed his leadership by backing them up even though it meant he had to change his own habits and show publicly, he truly believed in safety. Crucial to all these individuals was their emphasis on reaching out to all levels. I remember a safety conference in Melbourne where Rob and I shared a dinner table with an aviation refueller from Sydney who could hardly believe his ears when Rob was showing his workforce members where he wanted them to go next, and start doing it themselves, proactively as senior management started to take a step back out of the limelight. This was exactly what my next example did.

Michael Abrashoff was not the brightest and the best in the US Navy. He graduated from Naval College in the bottom half and when he got command of a destroyer he didn't get the best, he got the worst – the USS Benfold. Reenlistment on the Benfold was nought percent. Presumably the crew hated the ship and the Navy. Mike Abrashoff selected reenlistment rate as his measure of success and started to create what we now recognise as a proactive culture, building on and past the calculative culture that is the US Navy. He documented his efforts and how successful he was, in a book called *It's Your Ship* with a following set of chapter titles that reads almost like a description of the proactive culture for leaders:

* "Take command"
* "Lead by example"
* "Listen aggressively"
* one of my favourites - "Communicate purpose and meaning"
* "Create a climate of trust"
* "Look for results, not salutes" - effective, not just operational
* "Take calculated risks"
* "Go beyond standard procedures" - effectiveness again
* "Build up your people"
* this is where you have to give power back -"Generate unity"
* the move from "I" to "We"
* "Improve your people's quality of life"

Mike made his crew members work to make themselves better and then recognised their successes in public. One thing he did to win the trust of his crew members was to insist that the ship bought its food supplies from better suppliers rather than take the easy way out and accept what they were normally given. This both saved the US Navy a lot of money and led to a well-nourished crew for a change. He only had one autocratic demand, no country music when they partied in harbour. This kind of non-standard thinking is related to both engendering trust but also in moving processes and procedures and making them effective, not merely requiring strict compliance but making things work. Reenlistment shot up to nearly 100 percent. His crews' competence scores became stellar but he discovered that he had missed one vital component. He never communicated what and why he was doing to his fleet peers who became jealous, leading to problems he documented in the second book, *It's Our Ship*.

Another example I worked with was a Vice President of part of a major Southeast Asian airline and maintenance company. He decided that his staff should go on a hazard hunt but they had to fix any problems they found as part of our program to improve the safety culture. This is proactive behaviour where power and responsibility are beginning to be handed back from management to the workforce. One group identified a major risk but they also knew it would be expensive to fix, so they held back. The VP and I went to look at what they'd found. We suggested some extra possibilities that reduced the price tag to only $1.5 million. Then he said "Do it," and walked away. As far as he was concerned it was cheap at the price.

Finally, I was lucky enough to find a generative organisation - a coal mine of all things - and learned about how they got there. Yet again, safety leadership by the General Manager, who I'll call Peter, involved Peter developing a vision of what a truly advanced safety and production culture might look like, and then driving the whole mine in that direction. The miners were not necessarily comfortable, at least to start with, as he devolved power over production planning, training and operations to the teams, stepping back over two years. One of his intentions was to deliberately counter the prevailing mining culture in which miners took out their brains and left them in a box at the start of the shift. He took away their boxes metaphorically, to make them take responsibility for their actions and develop mutual trust. The results of this, and many other actions, was that the mine had both the best safety and production performance in the region and stayed open and profitable long after it was originally planned to be closed down.

In all these cases, safety leadership appears to have involved the leader identifying and publicly pushing a vision that represented one step higher on the safety culture ladder than the organisation was at the time. The advantage of using this knowledge is that a safety leader can articulate for themselves a much more detailed vision of what they aspire to than just being safe or safety first. Anyone armed with a clear and more detailed vision – what, how and why - will find it much easier to communicate, to know how to behave whatever their personal leadership style. These three - what we do, how we do it and why – differ at the different levels of the safety ladder, changing as we learn to get better and progress. Learning a style without this kind of substance doesn't really get you very far. In fact, if the vision being developed is of a really advanced generative culture, then this will only work for a culture that is already proactive because only then will what someone does and says, make sense.

I've said that everyone can be a safety leader because anyone can show their colleagues where to go next. Nevertheless, there is still a special role laid out for those higher up in the organisation, especially those right at the top, those like Rex Tillerson and unlike Tony Hayward. If those at the top do not develop their own vision and seek out and actively support those who share this below them, then no matter how much transformation the workforce might attempt, they will always be shot down if those at the top are not leading in the first place. The inverse however, does not need apply. It's just harder for senior safety leaders to find ways of getting everyone on board with their vision, like Peter when he no longer allowed his miners to leave their brains in a box with their shifts. Senior safety leaders have to search out and publicly support those below them, right to the bottom, who are trying to be safety leaders as well.

I've covered what the vision might consist of, an articulated view of what safety means for everyone on the next step of the ladder. I've also stressed the importance of communication because leadership is a public activity. Setting a personal example, showing integrity and developing trust also take a lot of effort. A simple tool I like to give people is the idea of a walk/talk ratio. Whenever someone is communicating a vision, how much are they backing it up with deeds as well as words? You can use this to rate your bosses, your colleagues, even your reports, although doing it to yourself is harder. Someone with a ratio of one is walking the talk. Someone a bit lower is probably pushing the talk and has to follow up. Someone with a low ratio is really full of hot air.

I once met someone in Houston who I rated well above one because he was doing great things but was weak on the talk part, which is also so vital in leadership. This was Mike Abrashoff's lesson with his peers. A bit lower than one is probably where I would like people to be when that extra is where they want to get to and everyone else, which is what I've been equating with safety leadership. One may be fantastic, but it's also easy to get when you don't push past the envelope of your own comfort zone.

One last lesson I've learnt over the years, when we started out after Piper Alpha to define and implement the concept of a safety management system, we discovered that although you could generalise management systems to anything, such as environment, quality, occupational health, early efforts that did this fell flat. We realised that organisations have to start simply and then can generalise once they've acquired the managerial skills. Safety formed the point of the wedge as accidents are immediate, salient and hard to repair, unlike some of the rest.

Leadership is often taught that if you can learn to be a leader and then apply it to safety, but the lesson applies here too. Learn to lead in one area - I suggest safety - and get the hang of it. Integrating safety culture and safety leadership gets us around the style/substance divide. Even if you're not too good on style, you can always be good on substance, and honestly, if you can't lead on safety, what can you lead?

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