

The Revelations of Asphaliah

(Presented at: CCPS 17th International Conference and Workshop)

C. Robert Nelms, Failsafe Network, Inc.
PO Box 119, Montebello, VA 24464
540-377-2010
bob@failsafe-network.com

Abstract

Because of our human tendency to avoid questioning the familiar, the author of this paper was stymied when Safety and Risk were studied from a different perspective. Asphaliah (phonetic spelling) is the Greek word for safety. Beginning with the Greek, and then exploring our human understanding of Safety and Risk from a variety of perspectives, this paper draws some conclusions that are thought-provoking, and a bit disturbing.

Human beings do not want to be safe. We love taking risks – we make a habit of it – it is part of our human nature. Even in those cases where we DO want to be safe, we cannot. We tend to make unsafe things invisible.

Whereas it is important to devise systems to help us manage risk, safety and risk management is, in the limit, an extremely personal issue. Executives, managers, technical staff and the hands-on workforce ALL have an equally vital role in managing risk.

Background

Several years ago (in 1997), I was asked to develop a series of workshops to be presented to Paper Mill employees that would help them think differently about safety. People were being injured at increasing rates. A death had even occurred in the previous year.

I am not a safety professional. As a root cause analysis teacher and consultant, however, I felt qualified to address the issue. Besides, I have always appreciated the value of an outside perspective, especially when a long-term, chronic situation (such as the safety problem at the paper mill) is being evaluated. Therefore, I agreed to develop and present this series of workshops.

Having been a chemical plant employee myself for 12 years, I understood the mentality that goes along with the word “safety.” Although no-one wants to get hurt, and certainly no-one wants to be responsible for hurting anyone else, the mere mention of the word “safety” often yields yawns. Although injuries are devastating, safety is boring. It shouldn’t be, but it is.

I decided, therefore, to look at the subject of safety through a different lens. Having had access to a Greek dictionary, I looked up the Greek word for “safety,” and found the word “Asphaliah” (phonetic spelling). It was here where my journey began – looking first at the Greek understanding of the CONCEPT of safety, and then other “outsider’s” understandings. My journey led me to some startling discoveries.

The Merry-Go-Round

I prepared for the series of workshops in the fall season of the year – the season of County and State Fairs. With this subject (asphaliah) in mind, my wife, daughter, and I attended the Virginia State Fair in Richmond. While on a merry-go-round, I couldn’t help but remember a series of incidents that occurred in my youth.

I remembered one of my first visits to the fair. My father had taken me on a merry-go-round – a first for me. I was probably about 4 years old. He placed me on a horse – one that went up and down. Being the first time, I didn’t know what to expect. The merry-go-round began turning. I remember being petrified. I screamed something like “Daddy, take me off!” He responded, taking me in his arms. I couldn’t wait for the ride to end.

A year passed.

I remember actually looking for the merry-go-round when I returned to the fair. I wanted to try it again! My father found it for me, and placed me back on one of the horses that goes up and down – that’s what I wanted. But this time I was prepared – I had a whole year to think about it. Sure I was scared, but I bit my lips and stuck it out – I conquered it! It felt good.

For some reason, however, I became aware of the pole that I was holding. I followed it upwards to see where it went. I saw that it was attached to some crazy mechanism that chugged up and down, like the peddles on my bike. I suppose it was the up and down motion, as opposed to the circular motion of the merry-go-round – something about it made me queasy. I was dizzy, I lost my perspective on things – I remember crying, once again, to my father to GET ME OFF THIS THING!

Another year passed.

We went through the same routine – we found the merry-go-round, and my father put me on the horse. The ride started. I grimaced as the horse started turning. Faster and faster we spun, eventually getting up to speed. Once I felt comfortable (although I was never really comfortable), I INTENTIONALLY LOOKED UP – almost as if to DARE that crankshaft mechanism to make me dizzy (as it did last year). It threw me a bit – but once again I gritted my teeth and WON! I was a pro now. I conquered the ride.

When my father noticed that I was doing just fine, he said to me “well, since you’re doing so well on this ride, maybe its time for you to try THIS!” As the merry-go-round was turning round and round, he pointed to a stationary object standing at the side of the ride. It looked like a box with an arm sticking out its side. Every revolution, I looked at it again. At the tip of the arm, which hung strangely near the edge of the merry-go-round, was a metal ring – inserted into a slot on the arm. My father explained that I was to reach as far as I could and try to put my FINGER into the ring. He said if I could get the ring to come out of the slot by catching it with my finger, I’d get a free ride! I reached and reached – my finer tips just barely hung onto the pole of the horse, but my arms were not long enough to capture the ring.

Another year passed.

Needless to say, as a 7-year-old I only had one objective in going to the fair that year. I wanted to get on that merry-go-round, and I wanted to put my finger through that ring.

The same routine occurred. Round and round we went. After becoming comfortable, I began looking for the stationary arm at the side of the ride. I couldn’t find it. More revolutions occurred as I looked for the arm with the rings inside. I asked my father “where is the machine with the rings?” He looked at me apologetically and said “I’m sorry son – it’s not here anymore. Last year a little boy like you reached so far that he fell off the ride and was seriously injured. They took away the ring machine.”

As I said, I remembered these things in a flash as I was taking my own daughter onto the merry-go-round. As I put her onto the horse, I remember asking myself:

Why do people get onto merry-go-rounds?

Why do we have amusement parks? Why do the rides get more and more aggressive?

In general, why do people INTENTIONALLY expose themselves to dangerous (risky) situations?

Asphaliah

From the Greek dictionary, the definition of the word asphaliah is:

The condition of being safe; freedom from danger, risk, or injury; dwelling without fear or harm.

This definition made me think – especially considering the merry-go-round story. Did I, as a child, WANT to be “free from danger?”

Further exploration of the word lead to the following discovery:

Synonyms of Asphaliah

security
protection
invulnerability
refuge
shelter
sanctuary
asylum
safeness
impregnability

Antonyms of Asphaliah

peril
jeopardy
hazard
risk

Even more, according to the thesaurus and dictionaries, to achieve “asphaliah,” one must:

be cautious
lurk
escape
move fast
seek refuge

I can recall certain times of my life where I certainly wanted to “be cautious.” Even on the merry-go-round I desired to be cautious. After all, I didn’t want to actually get hurt! On the other hand, if I really wanted to be cautious – if I really wanted to assure my safety (respecting the merry-go-round), I wouldn’t have gotten onto it in the first place.

How safe do we really want to be?

At the time I was developing the workshops for the paper mill, I had just purchased a new computer. I was switching back and forth between developing the workshop, and playing with the computer to discover its capabilities. The computer came with an encyclopedia, along with a book of quotations. I decided to see what the quotations said about “safety.” I was shocked.

The following quotes are representative of what I found. Usually, one is able to find quotes to support almost any imaginable position. Such was not the

case with the concept of “safety.” All the quotes had essentially the same point:

The secret of revealing the greatest fruitfulness and the greatest enjoyment of existence is: to LIVE DANGEROUSLY! Build your cities on the slopes of Vesuvius! Send your ships out into uncharted seas! Live in conflict with your equals and with yourselves.... Friedrich Nietzsche

The things that will destroy America are prosperity-at-any-price, peace-at-any-price, SAFETY-FIRST INSTEAD OF DUTY-FIRST, the love of soft living, and the get-rich-quick theory of life.... Theodore Roosevelt

The high sentiments always win in the end, the leaders who offer BLOOD, TOIL, TEARS, and SWEAT ALWAYS GET MORE OUT OF THEIR FOLLOWERS THAN THOSE WHO OFFER SAFETY and a good time. When it comes to the pinch, human beings are heroic... George Orwell

A man who has nothing which he cares about more than he does about his PERSONAL SAFETY is a MISERABLE CREATURE who has no chance of being free, unless made and kept so by the existing of better men than himself.... John Stuart Mill

There is safety in reserve, BUT NO ATTRACTION. One cannot love a reserved person..... Jane Austen

The danger of the past was that men became slaves. The danger of the future is that men may become robots. True enough, robots do not rebel. But given man's nature, robots cannot live and remain sane, the become “Golems,” they will destroy their world and themselves because they cannot stand any longer the BOREDOM of a meaningless life.... Erich Fromm

Avoiding danger is no safer in the long run than outright exposure. Life is either a daring adventure, or nothing.... Helen Keller

I spent time with my 4 year-old grandson this past weekend. His father was pushing him on a swing. My grandson kept saying, higher, higher, faster, faster! He even twisted the swing back and forth as he was swinging – so much that he FELL OFF THE SWING. My grandson laughed, got up off the ground, got back on the swing and asked ME to push him even higher! I remember asking his mother – “I wonder if this is just a boy thing.” She said, “nope – I did the same thing when I was a kid!”

Keeping all this in mind – the quotes, the above example, and the opening story about the merry-go-round, how can Corporate America continue to say:

Safety is #1?

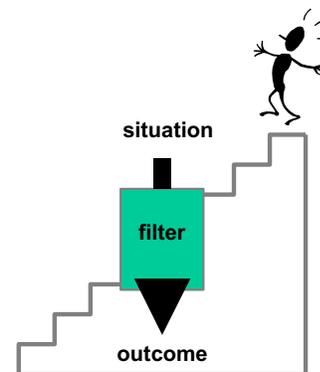
The preponderance of this statement in American business is an affront to any thinking human being – it's an outright lie. Safety is NOT number 1. It never has been. It never will be. We don't even want it to be!

Instead, we want to push things to their limit, getting as close to the edge as possible. No-one wants to fall over the edge. No-one wants to get hurt. But everyone has the desire to experience the presence of “the edge” in one form or another.

Why don't we see unsafe things?

The first revelation of Asphalialah, therefore, is that human beings do not always want to be safe – it's against our nature. We LOVE the feeling of “getting away with it.”

The second revelation is that even when we intentionally try to be safe, we cannot – at least not for long.

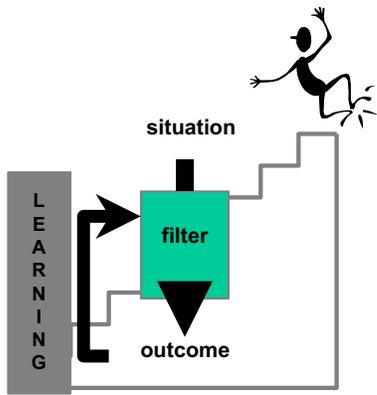


First attempt down the stairs:
Extreme Caution

Consider how an toddler descends a set of stairs the first time. They proceed with extreme caution. They usually turn around, and slide down the set of stairs on their bellies, one step at a time. Most toddlers take a LONG TIME to descend, especially the first time.

What about the second descent? The third? The tenth? The ten thousandth descent?

As we LEARN how to descend the stairs without getting hurt, we do two things. First, we don't think about it as much. Secondly, we increase the speed of descent. The toddler slides faster and faster down the stairs, obviously not giving it much thought. Eventually, the toddler stands, like an adult. Faster and faster they go, with less and less thought, until they fall.



Succeeding attempts:
FASTER!
LESS CAUTION!

Interestingly, the hazard has never changed! If anything, the potential for harm has increased as the toddler gains in height and weight. But as opposed to staying aware of this danger, he makes it invisible.



It's important to understand that the HAZARD (the potential for injury by falling down the stairs) is very VISIBLE to the toddler, especially the first time down the stairs. The graphic helps to drive home this "revelation of asphaltiah." The first time we confront the hazard, we are very cognizant of it. We deliberate as to whether or not to proceed. If we decide to proceed, we do so with utmost caution.

If we succeed, however, the second time we confront the SAME hazard we do not deliberate as much. We are not as cautious. The ten thousandth time we confront the SAME hazard, we don't even remember the confrontation. **We've made the hazard INVISIBLE.**

It is interesting to consider the relationship between "making hazards invisible" and "progress." It seems that the entire notion of progress would be meaningless without a corresponding notion of hazard – the two go hand-in-hand.

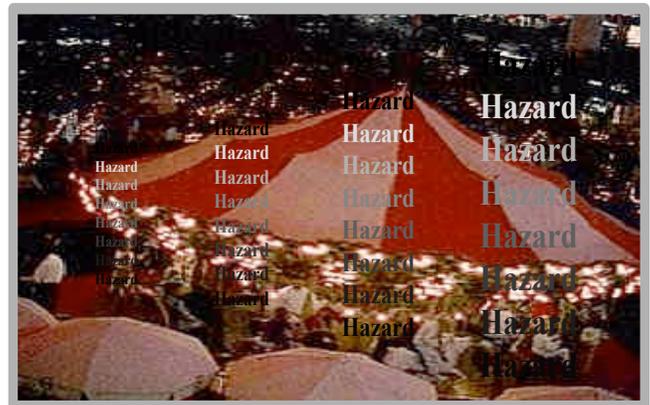
Consider the merry-go-round. The crying youngster, upon coming in contact with the hazard, cries in terror. When he learns to deal with the hazard – when he learns that he won't necessarily get hurt when confronting it, we say that "he has progressed."

The amount of confidence he has is somewhat a measure of the amount of his progression.



Similarly, we do the same thing with all the hazards of life. Who can remember the most about the last driving experience – the new driver or the old? Who is most scared of riding a roller coaster? Talking in front of people? Running a business?

It's the neophyte – the novice who is most likely to be concerned, to deliberate, or to be cautious. Sure, exceptions exist. But the vast majority of us are oblivious to the hazards around us. It's human nature!



Perhaps we ought to wonder about the trend that has emerged. Consider what humanity has done as the centuries have passed – we have made larger and larger hazards more and more invisible. For example, when we discovered "fire," we learned how to control it in our outside fireplaces. But what did we do when learned how to control fire?

We brought it INSIDE our dwellings, and invented fireplaces. What did we do when we learned how to burn fire inside? We built BIG fireplaces (furnaces), and began generating electricity. And then nuclear-powered generating facilities. We're making larger and larger hazards more and more invisible.

We ought not ever lose sight of the fact that people still get burned while sitting around the campfire. We also continue to have chimney fires – I personally experienced this one a few years ago. We occasionally hear about explosions and fires in our fossil fuel plants. We also have serious incidents in our nuclear plants, although not frequently.

We seem to be quite comfortable with ourselves, because the actual occurrences of catastrophic events seem to be decreasing in frequency. But THE HAZARDS STILL REMAIN. Are we becoming blind to these hazards? Isn't it similar to the toddler walking down the stairs – faster and faster, with less and less caution until XXXXXXX?

In summary, the second relation of Asphaliah is:

When we live with the same hazards every day, they become invisible. The more successful we become in dealing with the hazard, the more invisible it becomes.

What can we do about these issues?

As I said in the opening paragraphs, I am not a safety professional. Instead, I have been pursuing the subject of “why things go wrong” since 1974. I am a root cause analysis consultant and teacher.

One of the major, even shocking discoveries I've made since 1974 is the intensely personal and individual nature of the “root” causes of things that go wrong. Whereas I started my career by focusing on the physics of failure, I eventually realized that PEOPLE cause all “failure” (where failure is defined as an unacceptable event that had been intentionally addressed, but nevertheless occurred).

We are the cause of things that go wrong.



I was even more shocked when discovering that ALL failure can be traced to one characteristic of humanity – a characteristic that seems innate and immovable:

As human beings, we love to try to get away with things.

The Challenger Explosion is an example. So is Bhopal. September 11th is also an example. So is World War 2.

When my riding lawnmower doesn't start, I can trace its root to the same habit. When my relationship with my wife goes temporarily astray – same thing.

I'm not speaking of not knowing the “right” thing to do. I'm speaking of KNOWING it, and yet not doing it.

A recent incident in at a nuclear power station (Davis Besse) has been creating much discussion. Although the details of this incident are outside the scope of this paper, suffice it to say that an incident occurred which alarmed many people – not because of its consequences (no radiation escaped, no people were injured, etc), but because of the way it was handled.

I found one of the comments about this incident to be especially meaningful:

*The only way to try to get out of the position of public mistrust is to start the process of being totally forthcoming, showing we have nothing to hide and demonstrating that we are **committed to doing the right thing. It always comes back to that.** Admittedly, doing the right thing is often very difficult, and sometimes unpleasant, and being brutally honest and totally forthcoming may make it harder in the short term. Ultimately, this is, however, the only path that will allow recovery of public trust and support necessary for the nuclear industry to have any substantial future in the US.*

In other words, even erroneous public opinion is caused by “trying to get away without doing the right thing.” As another person stated:

The expedient thing and the right thing are seldom the same thing!

Knowing the right thing, but not doing the right thing (in hopes of being able to get away with it) is apparently at the root of everything that goes wrong. But it doesn't stop here – it gets much more consequential.

A few years ago, I heard an expression that caused me to wonder – it actually tied a lot of loose ends together for me. I heard someone use the term: Conservation of Wretchedness. Since hearing that term, I have come to realize that the Conservation of Energy, Mass, and Momentum – as well as the physical principals of cause and effect, and action/reaction are not limited to physics. These principals might govern ALL of human existence.

Conservation of Wretchedness

Human existence, in all its totality, is incapable of absorbing even one reckless act.

Saying it differently,

**EVERY time we try to get away
with something, we:**

will either get nailed instantly, or

will get nailed later, or

*will cause someone else to get
nailed later.*

**Something BAD will ALWAYS
Happen sooner or later!**

A short review will be helpful to remind the reader of the consequences of the above statements.

Recall that human beings do not desire to be totally safe. We like pushing things to the limit. In essence, we enjoy the feeling of “getting away with it.”

Even more, when we do get away with it, we think we can get away with it again and again – the “slippery slope” phenomenon. Even more, when we get away with it often enough, we think we have progressed.

And yet, EVERY TIME we “get away with it,” we’ve unknowingly triggered an incident. Think of it – hundreds of millions of people, each of them trying to get away with several things a day – some going over the speed limit, others cheating on taxes, others not taking the time to explain things properly, others not picking up a piece of trash. EACH TIME one of us tries to get away with something, we TRIGGER AN INCIDENT – not necessarily instantaneously, not immediately catastrophic – but “eventually.”

The reader might not agree with the truth of the Conservation of Wretchedness. It’s something that must be contemplated. Most people eventually understand it, at least conceptually. When they do, they become horrified. After all, what can we do about these things?

Indeed what can we do? Having thought about this for a while, three thoughts will be shared:

First, each of us must combat our own human tendency to try to get away with things.

Remember, we are talking here about knowing the RIGHT thing, and yet doing something else. Being safe, and managing risk boils-down to individual decision-making. Whether it’s an executive considering whether or not to fudge the books in response to falling stock prices, or a manager who feels he must take a career-limiting position on a safety issue, or a technical person who is being pressured to yield, or an hourly person who is being encouraged to “just go with the flow” by his peers – EACH INDIVIDUAL person in an organization is the vital ingredient in risk management.

Secondly, we MUST acknowledge the possibility of a “Conservation of Wretchedness.”

If just one person does not do what they ought to do, an incident will occur. We all need to remind one another of this. We need to look out for one another – help each other. Doing the right thing is not easy when no-one seems to care. On the other hand, when everyone cares – when it becomes a cultural norm, higher and higher degrees of excellence are possible.

Thirdly, however, we must never forget that we’re fallible. We’ll always try to get away with things. We can highlight the habit, we might even make examples of people who don’t do the right thing. But when no-one’s looking, when we think it won’t matter, someone, somewhere will say “just this once.”

In any given system, the worst possible thing that can go wrong will go wrong. It’s just a matter of time.

Perhaps the most important risk-management consideration is that there are certain things that we ought not do – certain businesses, technologies, and approaches that are simply too hazardous. “NO” is an underutilized risk-management word.