

Welcome to Safety Culture Excellence. Today's topic: The Anatomy of Change. My name is Shawn Galloway, and I'm proud to be your host.

Hello, everyone, from Barnsley, a great little area located in South Yorkshire, England. At a recent event, a client and good friend of the firm located in beautiful central Washington, asked that we deliver a podcast on a particular topic that is often a part of our safety culture training materials.

The audio podcast this week is a recording of a conversation between Terry Mathis and me discussing the anatomy of change which, as you will hear, is essentially the way that our body and brain reacts to change. And, most importantly, what triggers minimizes resistance to change. Have a safe week, everyone. Here we go.

Shawn Galloway: So, Terry, there's a talk that you gave a couple of months back that I thought was pretty valuable for the listeners to hear, and it's something that you called the Anatomy of Change. If you will, do you mind explaining that?

Terry Mathis: When we talk about anatomy, we're talking about really the anatomy of the human brain. How do you use your brain? And, of course, in safety, there's always the rationale that some people don't, and that's why they get hurt. But, when we're trying to change something, when we're trying to get people to do something different in a different way that they're used to doing, how do we get them to change? And a lot of what we try to use is rationale. When we try to go to people and explain it to them, we try to talk them into changing. And one of the things that we find is that there are good ways to do that, and there are bad ways to do that. Change is a rational thing.

If we really look at our lives, they're full of change. The world is changed. Our maturity level changes. Our jobs change even if in very slight ways over a period of time. Equipment even changes as it wears in and wears out. So, change is a normal thing, but sometimes change becomes very frightening, and we don't rationally think about change. We actually irrationally think about change. And, if you think about it, resistance to change is, to a large degree, irrational. Now, it's a defensive mechanism, also, sometimes, because people are trying to maintain the status quo. But, there are two parts of the brain that are very often used in safety, and one of them is called the prefrontal lobe.

This is the part of the brain where we do our rational thinking. This is where we reason. This is where we problem solve, and we do a lot of other things. Anytime you do a task that you've never done before, you ought to use your prefrontal lobe. You ought to rationally think about it. You ought to ask yourself, "How could I get hurt? Where are the dangers in this, and what's it all about?" Tasks that become more routine, that we've already discovered where the dangers are, we can do these tasks in a different way with a different part of our brain. That part of the brain is called the basal ganglia. It's the very base part of the brain, and it's the part where we do things habitually.

Shawn Galloway: Our experiential patterns, if you will.

Terry Mathis: Exactly, yeah. The psychologists especially don't like the word 'habit'. They say it's a very unscientific word. But, when we talk about doing things without conscious thought, or with subconscious



Shawn Galloway
President & COO



Terry Mathis
Founder & CEO

or unconscious thoughts, that's what we have to do. We've built a template in our basal ganglia, and we can just simply use it over and over again. So we don't have to think about basic things like how to hit a hammer with a nail, how to open a door. We just use the little template in our brain, adjust it a little bit each time, and we do it. Now, there's been an argument, and it's coming back up again in safety, that we ought to keep people thinking logically.

We've got to keep people rationally thinking about safety all day long. The problem with that is it's a physical impossibility. The prefrontal lobe uses energy out of your bloodstream at the same rate that your major muscle groups do. So, why can't we run full speed all day? Because we don't have enough energy stored in our body to maintain that level of activity. The same thing is true of our brain. And we use the basal ganglia of our brain not because just we're lazy, we use it to conserve energy. We use it so we don't burn up all of our energy in too quick a manner, and we can save that energy for the times that we need that kind of thought.

Now, here's what happens when we come to someone and say we're going to change something. One of the two parts of the brain kicks in. Either we start rationally thinking, "Okay, well, let's think about this change. What's this change all about?" Or we automatically react to it, and we say it doesn't feel comfortable. It's not the way we have habitually done it. There's another little part of the brain that's an irrational part of the brain, and this little thing is called the amygdala, and it triggers a response that is a survival response.

Now, survival is a very, very basic human instinct. If you were attacked by a wild animal, and you felt that this animal could kill you, your amygdala would go crazy. It would send blood to the parts of your body where it thought you needed it the most. It would send adrenaline into your body to give you extra energy for a short period of time. And it triggers a response that's called 'fight or flight'. Now, the fight or flight instinct that kicks in, is synonymous with resistance to change. If the change to us is threatening, then the amygdala kicks in.

Shawn Galloway: What's interesting is that we found that the human brain responds to social fear, to your point, in the exact same manner as physical fear.

Terry Mathis: Oh, it does. And if we're verbally attacked, or our ideas are attacked, the amygdala knows that it's not this life-threatening event, but it's an idea-threatening event, or it's a status quo threatening event, or it's threatening our next raise. And that's just as real, although not quite as big an emergency in a physical sense; but the same reaction takes place. So, what happens? When we approach someone with a needed change, which response do we trigger? Do we trigger an emotional response? Do we trigger a response that says, "This doesn't match with my original patterns." Or, do we get people thinking?

When people think, they change automatically all the time. Change is logical, it's rational, so we need to keep it in the rational part of the brain.

Shawn Galloway: So, what are the things in your perspective that tend to trigger resistance to change?

Terry Mathis: Well, we've already talked about fear. What if you're afraid of the change? What if this change challenges the status quo? What if it challenges your job? A lot of jobs with various changes that

are made, a lot of jobs disappear, or the number of people doing that job disappears. But there's some others, also. Overload is a huge one. What if this change is going to make more work for you, and what if you already feel overworked and overstressed and unable to handle everything that you're already doing? Confusion is another huge one that gets into this. What if this change doesn't make logical sense, and you're afraid that doing it this way is going to be tremendously more difficult than the other way?

Also, the last one, the last major area down here, is conflict. What if this change conflicts with the way we've always done it, or conflicts with other priorities in the organization? Any of these four – fear, overload, confusion, or conflict – are going to trigger the amygdala.

Shawn Galloway: Okay, so from a best practices standpoint: you have 25 years experience doing this, then. So, what are the elements you find tend to trigger acceptance of change?

Terry Mathis: Well, first of all, when we initially approach the change, we are going to trigger one of these three parts of the brain. We're either gonna get the habit say, "Oh, that doesn't fit." Or, we're going to get the amygdala saying, "Oh, my god. Run or fight", you know. Or, we're gonna get the rational brain saying, "Oh, does this make sense? How can we do this?" So, that's what you want to do. So, how do you do that? By involving people in the change. Instead of going up and saying, "We're gonna make this change. We used to do it this way. Now we're going to do it this way." You go to people and say, "We need to do this better. What are your suggestions? How could we do this better?"

People who are involved in change feel a sense of ownership of the change, and they get their rational minds about it, which keeps you from triggering the other parts of the brain. Their input is one of the things that gets them involved. Having creative input into the change, they feel like, instead of being forced to change, they're being challenged to come up with better ways of doing things. And all of these can help to minimize this perception of fear and lack of fit as the change happens.

Now, this is what you ought to do, but there's some importance in the way you should do it, also. If you walk up to someone and say, "Hey, dummy, we're gonna do it a different way. The way you did it didn't work very well." You know, not only are you challenging, not only are you firing these other parts of the brain, but you're not involving the people because you were disrespecting them. If people are treated with respect, they expect to be continued to be treated with respect. So, this change won't cause any of the angst that comes from being treated disrespectfully.

Shawn Galloway: So, perhaps the scientists understood this back in the industrial revolution when the term came about, "Just hang your brain at the door and do as you're told."

Terry Mathis: There was a lot of that there, and we have gone through times in history where the workers truly didn't know how to do their job, where they had to be directed. Instead of training them to do their jobs, we supervised them. And, in retrospect, that's turned out to be one of the worst things that we've done. Interestingly, we carry that industrial revolution mentality even into computer jobs. You say, "We have to get data into the computer. Well, input's one job, so we'll get somebody for data input. Well, then we have to calculate. Then data calculation's another job." It's not different jobs. It's the flow of the same information, and, a lot of times, one very well trained person can do it all.

But, we don't think that way. We think we've got to chop the job up into little bitty pieces and then supervise the people into doing it. Very nonproductive thoughts for the information age. One of the other ways that you can minimize change is to show people the efficacy of the change. Will it produce the desired results? Now, a lot of times the results are the way to start talking about this. We need better results, so how can we accomplish them? You go to someone, instead of saying 'change', you say 'need'. "We need something. We value your opinion. Help us figure out how to solve this problem.

This is the way to minimize the perception of change. This is the way to minimize the magnitude of change, and to get people actively involved in helping you make it happen, rather than resisting it because they think they're being forced."

Until next time, remember: "In safety, prevention trumps reaction." For more information on Safety Culture Excellence, or if you have a topic to suggest, please email us at podcast@proactsafety.com.