Transcript: EM 0103 Emotional System

The beginning of emotional master is understanding the emotional system. What are the pieces of the emotional system and how do they go together to make what we experience as emotions.

We have a brain which has developed evolved in three main sections. At the base level, which is red in this diagram, we have what is called 'the reptilian brain'. This part of our brain controls all of the functions that reptiles have. For example the heartbeat moving the big muscles and digestion are controlled by the reptile brain.

There is an emotional component in what a reptile experiences, because they do have the survival adrenaline for the fight-or-flight response. So some of our emotions are initiated very deep in this base of our brain, the reptilian brain.

At the next level, which is blue in this diagram, we have 'the mammal brain'. The mammalian brain controls all of the aspects of emotional relating beyond the simple fight-or-flight response that a reptile has like bonding, social relationships and love.

The limbic system is part of the mammal brain, which is the part of the mammal brain that also controls social relating and all of the nonverbal signals that we send to each other to coordinate that everybody is feeling safe and nobody is feeling like they need to challenge or defend themselves.

The whole social structure at the highest level, which is orange in this diagram, is 'the new brain'. It's 'the analytical brain' which is present in primates, in dolphins, and a few other animals. This is the place where language analysis concepts, abstract reasoning, and self-awareness. They are all produced in the new brain.

The three levels of the brain are interconnected and they work most of the time cooperatively and in a balanced way to keep us functioning well. However, there are some complications because we do have these three separate levels of the brain.

One of those complications is that the newer parts of the brain, the mammal brain and the analytical brain, take up a lot of resources. Particularly the analytical brain needs a lot of resources, so if you want to use your analytical brain, the body needs to increase the level of activity in your nervous system a bit.

You need to have more adrenaline in your system to use your analytical brain than to use the other levels of your brain. It's very consuming of blood sugar and all of the other mineral resources.

It has a huge value obviously, because it's given us the success that we've had as a species, but it comes with a price. That's why our system is designed that when we really need to put our resources to something else like running away from a tiger, the analytical brain gets shut down to save energy.

We have all had the experience of being in a situation of having a shock. Where something severe is happening and that part of our brain just shuts down and we're not thinking. We are not having logical thoughts. We are simply acting in from a pure emotional response level to get away or to protect ourselves. That is the experience of having this analytical brain shut down in a state of emergency if the emergency.

This threat can also be a social threat rather than a physical threat. Then we can have this little interaction between the parts of the brain, which is quite productive. The way it goes is that the

mammal brain detects an emotional threat. For example there's a person who looks angry. They look like they're they have a lot of adrenaline in their system and they potentially are threatening to us. Now our adrenaline fires, and when our adrenaline fires up, the emotional coordination of the social parts of our system become very muted and flat. You can think of this basically as the socializing brain switching off. At that moment there's no point being able to tell a great joke if somebody is about to attack you with a knife, so we have an adrenaline response to a potential danger which takes our social system offline.

I think you can see the problem inherent in this system. Just because somebody is angry and has a lot of adrenaline in their system, doesn't necessarily mean that they're actually going to physically attack us. It doesn't mean we're going to have to run or fight.

Actually having our social skills available might make the situation better. Part of learning to work with our system is learning how to make sure that our total system with the three brains is responding to threats at the right level. If we see an emotional threat to make sure that we keep our social brain on and we respond to the emotional threat in the emotional realm rather than going to the physical 'I'm going to need to run or fight realm'.

The process of emotions is as much about the body and the nervous system as it is about the brain. Our nervous system is more complex than most of us appreciate.

Here's a diagram. The pink part is the central nervous system in the brain and spinal column which and everything else is considered the peripheral nervous system. The peripheral nervous system is divided into three parts: the autonomic nervous system, the somatic nervous system, and the visceral nervous system.

The visceral nervous system is the one that processes all of our sensory information, ie. visual and a skin. The somatic nervous system is the one that moves our muscles. Our voluntary movements are all controlled by the somatic nervous system.

The one which is really involved with emotions is the autonomic nervous system. We can influence the autonomic nervous system by our voluntary movements, but the one that's actually in control here is the autonomic nervous system. It's the involuntary nervous system and one is again divided into three separate systems: the sympathetic, the parasympathetic, and the enteric.

The sympathetic nervous system is the one which manages our adrenaline response, our fight-or-flight response, and our level of activity in our nervous system. The parasympathetic nervous system is the one that manages our rest and repair response. It's the one that deals with the immune system being active, digestion taking place, tissue being rebuilt, and wounds being healed.

The enteric nervous system is the nervous system located in the torso, mainly the gut, but also around the heart. A whole bunch of neurons there form essentially something like a second brain. There are as many neurons in the enteric nervous system as there are in the brain of a cat. It has the same level of complexity that the central nervous system has.

So when people talk about having gut feelings and following their heart, there's actually a real truth to this idea that we have a different kind of knowing. It's like a brain happening in our body. It doesn't have the high level that the brain in the head has with the analysis, the language, and the problem-solving, but it does have as much ability to feel, to choose, and to prefer as any other mammal does.

The other difference in the way that we experience this is that what's happening in the enteric nervous system is subconscious for us. And in most cases what's happening in the mammal brain and the reptile brain is also subconscious.

What helps when you're thinking about your system is to think about the conscious mind as being mostly the new brain, the analytical mind, and the subconscious mind to contain all of the information which is being processed by the mammal brain, the reptile brain, and the enteric brain (the gut feelings).

If we think about this as two intelligences, one which is analytical and one which is for the sake of a better word 'emotional', then it we can develop a set of practices which enable us to operate at the highest level of effectiveness. To get both of these brains, both of these intelligences, working together.

Our emotional system, although it's very complex (there's a lot of moving parts that connect to each other), we can basically think of it as having three distinct states. These are background states which will influence how the system behaves when it's given any particular stimulus in the foreground.

To begin with there's the green state. When we feel safe, when our nervous system activation is in the Green Zone, we are functional. We can use our analytical mind, our higher brain functions, and be mindful. We're also relaxed enough to use all of the nonverbal social cues. We can project and communicate to other people that we're feeling safe, so that they start to feel relaxed and safe around us as well.

When in a group of people everybody is in this safe and relaxed social state, everybody just relaxes further and further and further and it becomes a more and more enjoyable experience for everybody to be in each other's company.

The second state, the yellow state, is a state of alert. This is where something has happened to put the whole system into a state of caution. There might be danger. I.e. we're not a hundred percent safe, we need to be alert, we need to be watching carefully, we need to be looking for problems, and looking for dangers.

If you have had problems in your early childhood development with emotional support you may live in this alert state. You may have this as your standard default state rather than the relaxed safe and social state. In fact a lot of people live their whole life not knowing what it feels like to truly feel relaxed and safe. Even at their most relaxed they're still in the yellow alert weary state.

When you're in this alert state, you're primed to look for problems and dangers. Because you're primed to look for them, you're also more likely to see them. Because you might feel less safe, your perception will give you information that makes it seem objectively true that you are less safe. It will see more threats. It's a self-sustaining system, it's like a self-fulfilling prophecy.

When you start to be in this alert state and look for danger, the third state, 'the red state', is when you're very clear that there is a clear and present danger. You've gone into dealing with danger state. In this state various parts of your brain will be shut off. You may not have your analytical higher functions in place.

Or you may have those, but you may not have your social system in place. Your ability to interact with other people and make other people feel calm when you go to interact with somebody. You may make them feel suddenly alert and have them experiencing danger, like you could potentially be a threat.

Or you could be completely overwhelmed by fear, by memories, or by past traumas, and not actually dealing with any of the present moment stimulus at all. You're not dealing with current reality at all, because you're lost in a memory.

Any one of these can put you into this 'danger state'. It's really important that we use our emotional regulation skills to come out of the danger state as quickly as possible, because it's very rare that we actually need to run from a tiger. And that's what we're preparing to do in this danger state. We're preparing to run or fight, and in our world it's very rare that we actually need to do that in a physical sense. Therefore it's very important that we learn how to bring our background state back at least 'alert' and ideally all the way to safe, relaxed, and social.

We call the higher brain, the new brain our 'analytical intelligence' and we call the other intelligence 'the experiencing intelligence'. There are a number of differences in how these intelligences operate. One is that the analytical intelligence is the prefrontal cortex, where we develop our understanding of time and space and concepts like money, airline schedules, and nutrients in food. The experiencing intelligence doesn't actually have the capacity to understand time and space. That will become very important later on when we start looking at processing emotions and things that have got stuck from earlier in our life. The experiencing intelligence is vastly more capable than the analytical intelligence, because it processes things in parallel.

One way to think about this experiencing intelligence is like a vast supercomputer which is currently in this moment experiencing everything that has ever happened to you. We don't actually forget anything, it's just that we can't consciously access that information. Everything that ever happened to you in your life, every micro expression on every face, every bit of body language... everything is in your experiencing intelligence and accessible to it to help it to make decisions.

The breadth of information that your experiencing intelligence can access is far greater than what your analytical intelligence can access. However your experiencing intelligence is not analysing. It's not using logic, so some of the conclusions that it reaches may be based on faulty logic. This is why we need to ultimately get these two intelligences cooperating, so that we can bring everything into line.

Given that a lot of this stuff is happening below the level of our conscious awareness, how can we have any control over it?

Well as it turns out there are a number of things that we can do. There are a number of practices and a number of opportunities to get the two intelligences, the one were conscious of most of the time and the experiencing intelligence, to come together to communicate with one another. We can expand the realm that we are consciously aware of into this experiencing realm so that we can at least be consciously aware of some of what's happening.

At that level one of the best bridges between the conscious mind and the subconscious mind is our breath, because breathing is done subconsciously by default most of the time, but it is able to be consciously controlled. It means that the breathing is happening at the level where the conscious mind can access it. The subconscious mind can access it to a point where the two minds can both come together.

You'll see as we get into some of the exercises in the program that we use breathing as a way to make that connection and bring the conscious awareness down to this level where more of this nonlinear, non-rational experiencing wisdom is happening.

That's the overview of our emotional system.

We have the three brains: the reptile, the mammal, and the new brain.

We have six nervous systems but the ones that are really important when it comes to emotions, the ones you really need to understand are the sympathetic and the parasympathetic nervous systems. The fight-or-flight and the rest and repair.

And we have two intelligences: one which is very smart, very analytical, very conceptual, and one which is very wise, very vast, and very experiential.

When we bring all of this together, that is all of the parts of our emotional system for emotional mastery, what we need to do is have all of these parts working together in the most effective way.

We're going to find the places where they're pulling against each other and we'll figure out how to bring them into alignment, so that everything is working in one direction.