

Science you can use: Three scientific observations that explain and enhance NLP processes

Recent progress in psychology has provided new mechanisms for understanding phenomena that NLPers have been working with for many years. New research into the nature of memory and learning provides the concept of reconsolidation which explains how the Fast Phobia Cure works and provides scientific data on how to improve your technique.

- The Fast Phobia Cure.
- How it works-quick course in Neuro-biology
- Pattern interrupts and re-writing history
- Evoke, interrupt, overlay
- Keep it present but not overwhelming.
- 10 minutes to 24 hours
- Repeat until done.

The Kafka effect explains how provocative therapy, sudden disjunctures and pattern interruptions work with reconsolidative mechanisms to change the way we think and enhance our capacity to find new patterns in the world around us, including trance states.

- What we already know—looking for order.
- Bandler's trances
- What's new, reconsolidation and novelty.
- Overwriting the past.
- Baste until cooked.

Quantum Physics explains how chloroplasts find and channel light from the leaf surface to the chlorophyll molecule. The strange path that they take provides insight into pseudo-orientations in time and how to use this technique more efficiently. Clear explanations of the science and how it applies to NLP will be provided along with experiential exercises.

- Chloroplasts and lenses
- Slime mold and subways
- The Precambrian explosion and modern life
- Superposition and the human psyche
- Genius as changing the filters
- Tolerating ambiguity
- Affective direction and superposition
- The law of attraction without bologna
- How would it feel to be living at full potential

I'm Rick Gray and today we're going to look at three things and ultimately, those three things move in the same kinds of direction and we're going to be moving to and examining them from different levels of integration. The first level is a basic neurological level that relates to some brand-new research on memory and why it is that the NLP interventions work and tend to work permanently—when we do them right.

The second piece, that kind of continues that theme, deals with why paradoxical interventions work and humorous interventions--the kinds of things that Nick Kemp does so well—work. This second piece is also about the Kafka effect. This is the effect that comes into play with things like humorous pattern interrupts and confusion. You blow people away, but it changes them. You will notice Nick says that when he works with somebody with these absurd kinds of interactions, Bam, they're changed, and that change sticks.

The third thing that we're going to talk about is the quantum physics of chloroplasts and how they funnel light down into the chlorophyll molecule; slime mold, which is even more interesting; and the Precambrian explosion. Finally, we're going to somehow get all of that to talk about pseudo-orientations in time.

So, I'm not going to teach you how to do the fast phobia cure. It would take too long and most of you probably know how to do that so, I won't even bother. But one of the striking things that happened while Rich and I were researching why it is that the fast phobia cure works so well and so permanently, for PTSD is that it invokes a different neural mechanism than all of the standard treatments for PTSD. The standard treatments work on an extinction protocol. An extinction protocol, very simply, is this: If I have taught you that every time I see you I'm going to walk up to you and poke you in the eye; after a while, every time you see me, you start to blink. Okay? Well then, after a while, if you see me and I don't poke you in the eye for while, you'll continue to blink. But after a little more time, that'll slow down a little bit. And after a little bit longer your normal response will come back and you won't even twitch when I'm around. That's called spontaneous recovery, one of the classic features of conditioned responses and extinction phenomena. If I stop poking you in the eye, you will probably stop blinking.

The literature of psychology tells us that when you extinguish a phenomenon, you actually learn a new behavior in that context. The stimulus no longer leads directly to the old response; that doesn't go away, but you learn something new that blocks the old connection. This is new information that now drives your behavior in this environment.

So now, she doesn't believe that I'm going to poke her in the eye anymore. There is a new connection that has been made in her brain that connects my presence to her being safe again. And that might be a good thing and it might be a bad thing. If I'm very good and have refrained from poking her in the eye, the blink will go away. However, if I go away and wait long enough before I come back, that blink will probably return because it might be stronger and longer lasting, and have more survival function for her than the belief that I've grown up or changed. If the original eye blink response was strong enough, the safe memory of me—the extinction memory-- will fade and she will start blinking again..

When you look at the phenomena related to post traumatic stress disorder, especially the treatments, they do things like flooding. This entails something like a treatment for a fear of bears where they say: "Oh, are you afraid of bears? Look, here's a bear". And they put the bear in your face and they make you watch it eating babies and coming at you and everything else. And it retraumatizes you. But you don't get hurt because they might have you read a story or do it in your imagination or even show you a bear movie. And because you have this experience of bears and you don't get hurt, you can feel good for a while. The bear fear is extinguished. After a while, however, when you're no longer in that situation, something might scare you and suddenly the bear fear comes back. Something else might remind you of bears outside of that context and that whole fear comes back. These are the spontaneous recovery problems that happen with extinguished fears; they tend to return.

Post treatment PTSD, after treatment with extinction based protocols, is characterized by significant levels of relapse. Why? Because the new learned response fades away in favor of the older response. When we do an NLP change, that doesn't happen, does it? Why, because of the permanent nature of the change that we create. Why? Because we have rewritten that memory.

There is a phenomenon that's been around for about thirty years and has only come into popular consciousness in, let's say the last five years. It is called reconsolidation. Here's the idea.

When a memory is created, there are fundamentally two levels on which it is created. There is the short term memory, which is all that stuff about serotonin and dopamine and the other neurotransmitters. These neurotransmitters flow across the synapse, and that constitutes the most basic level of experience. Over time, the probability that those neurons are going to fire and excite one another is enhanced in the short term. If it happens enough, the excitement perpetuates itself. If it keeps going, those firings at the synapses are increased and they become more likely to happen for that sequence of events. But if it increases over a long enough period of time, for non-emotional memories, typically thirty days, for emotional memories about 24 hours; if that connection is excited significantly, a different set of neurochemicals comes into play. And typically they are the glutamate class of neurotransmitters and they work, really, backwards. When the glutamate receptors start what's called long term potentiation (LTP), what they do is: 1. they chemically affect the sensitivity of the receptor synapse and 2. they literally change the shape of the dendritic spine that reaches out backwards to the other neuron so that there is a permanent change in conductivity across that gap. Because of those changes, that behavior becomes much more likely; this is where hebbian learning, connectionist associations, really happens. After you've stimulated this memory circuit enough, protein synthesis begins. Those proteins create a change in the receptor cell so that that width of the synaptic gap has changed, and now that connection is going to fire every time it is stimulated. That's where PTSD comes from, that's where long term memory, and that's where really remembering how to ride the bicycle after twenty years comes from; And that's why you can walk in the morning; no matter what you had to drink the night before.

Now. One of the striking things that the new research is showing is that in order for those dendritic spines to grow across the synaptic gap and make that connection more solid and more

probable, there has to be protein synthesis. They have to recreate the cytoarchitecture that supports the shape of the cell and moves it over further into the synaptic cleft. Interestingly, every time you evoke that same memory that same level of protein synthesis is evoked. What does that imply?

That implies that every time you remember a trauma, it becomes labile, it becomes subject to change and there's a window of change that's opened as you evoke that memory. This is because the same process of protein synthesis that caused the structural changes that are the memory, are reactivated and the memory becomes subject to change. This opens a window of lability, a time during which the memory itself can be affected.

But if you don't stop the expression of the trauma that the memory evokes, that window closes and you just reinforced the trauma. You've seen people do interventions badly, where they begin to evoke a trauma, and they don't stop it. They just retraumatize the person and they reinforce the memory link between the stimulus and the trauma. That same lability has reimprinted the trauma. It says yeah, that is still terrible, I should still hate it, look what it does to me now.

When we do the fast phobia cure, the striking thing that happens, is that we start up that whole process, we start those neurons pumping out the proteins, we start the flow of the neurochemicals, the amygdala starts to fire-up, but before negative emotional responses can take over the entire system, we say: "Stop, what d'ja have for breakfast today? Isn't it nice outside? Let me just anchor this dissociations for a minute; let's talk". We stop the expression of the trauma. The whole system shifts. We move them into a different submodality space and they're doing something completely different. At the same time, however, the neurons that coded the fear response, and link the stimulus to the traumatic response, they're still cooking, they're still pumping out the glutamate. They're still working on that cytoarchitectonic structure. They are still working on the structure of the dendritic spine and the synaptic terminals. And what happens? We slip something in there. After breaking the pattern of expression of the traumatic part of the experience, while the lability window is still open, we slip something in there. We say, "Float up out of your body and into this place. Float up and begin to watch that movie in black and white and far away... As a matter of fact, don't even watch the movie, watch yourself watching the movie". Suddenly, something that was out of their control is something in their control; they're doing it on purpose. Second of all, something that was impacting them personally, is now dissociated, they're watching themselves watching themselves watching the black and white movie. We've layered in new memory. We haven't just created a new extinction memory. Because we have time during the sensitive period when the proteins are actively restructuring the cytoarchitecture, the new content becomes a permanent part of the original experience. We have literally changed the memory.

Now, many NLPers would respond by saying something like, "Gee, I already knew that". Well yeah, you and I knew that, but scientists didn't know that that was really possible. And the whole weight of memory research is now moving towards recognizing the fact that this is a possibility for change work.

Think about collapsing anchors, collapsing anchors. When you do it right, what happens? The nature of the experience changes. The problem goes away and it's almost as if the person becomes

disconnected from the problem. They can say, "I seem to have had this problem, but I don't do it anymore." Drug addicts, when they really have the kinds of changes we're looking for, they don't say, "I'm in recovery. I'm an addict. I'll die someday if I don't white knuckle it for the rest of my life." They say, "Oh, yeah. I used to do drugs; I used to drink. But, who knows... It doesn't matter anymore." By the way this is what Bill Miller calls Quantum Change, and what the end state in the stages of change model should look like.

Why does that happen? Those memories have been rewritten. Okay? We haven't put something in place that can decay and go away. We've slipped something in during that labilization window. For humans, typically, this comes out of Schiller, she's in Joe LeDoux's lab at NYU and she says the affective window for human beings is anywhere from ten minutes to about 24 hours for a fear or an anxiety memory.

So, when you press the button and you begin to awaken that memory, and then you stop it, those proteins keep cooking. And this only works for long term memories; something that somebody's been doing for at least thirty days. So that the protein mechanism is the thing you're working with. It doesn't work with short term memory. If you learned a fear ten minutes ago, odds are good that this (the mechanism) won't work. A simple extinction probably would work. But this mechanism wouldn't. So, this is for long term memories.

That's striking but that's one of the things we want to think about. When you're doing an intervention and you awaken the problem behavior, especially if it's traumatic; if it is an affective, negative behavior or response, you need to stop it. And then remember that those proteins continue to go. And then you drop in the anchor or you drop in the procedure and in that case you will effectively be rewriting the memory. I think that that is a very important thing for us to remember, there is now science behind what we do. And Rich and I spent about a year trying to find a mechanism that explained why it is that the fast phobia cure works and works permanently. And all of the classical literature talked about extinction and it's not extinction, it's reconsolidation. So I want you to think about that.

Now you may use an extinction protocol. You evoke the behavior. You don't allow it to culminate and you repeat that until the response goes away that's an extinction protocol. If you watch the compulsion blow-Out, and Bob Nieve did a really nice job on that, when you think about the compulsion blow out, what's it do? It evokes the response, stops it. That's opened the labilization window. It's started those proteins cooking, and now what do you do? You shove in an extinction experience. Now try it, make it more, make it worse, make it worse, make it bigger, and make it brighter, Kepow. And when it blows out, you've layered that blowout into that same memory circuit so it just doesn't work anymore. Now, even though we all knew that before, I think it's important for us to back it up with science and that's why I'm part of the NLP R&R project.

If we stop for a minute we can now begin to think about the paradoxical and provocative interventions, the humor interventions, the kind of thing where somebody walks into your office and they say, "Man, well I just got this problem, I just can't bear to deal with my brother. He's just such an idiot. And

I know I should and I've got this guilt feeling..." And you reply, "Have you ever thought of standing on one foot in the middle of an intersection and reciting the Faerie Queen, backwards? Okay?" "What?" "Oh, well, you know, maybe, maybe what you should do is think about is walking semi-naked through Times Square, backwards". And he would say, "What?! What's happened here?" Nick Kemp will tell you, he gets these permanent changes from something as nuts as that. What's he done? He starts the process. He evokes the problem. Those proteins start cooking, but before the rest of the system fully engages, he stops it, and he does something else. But those proteins are still cooking in the background. They're still percolating. They're still doing their thing. They're still checking to see whether or not the information they've coded is still relevant. If it is, they reinforce the old behavior; if not, they rewrite it.

Pedreira is the citation that tells us that this is the brain's way of updating and making sure that our learnings are up to date, that they're relevant to where we're going and what we're doing today.

Question Number one is about generalization. In the case of PTSD, if you have used this paradigm to affect the root behavior, insofar as the original memory is still maintaining the subsidiary behaviors, the secondary behaviors, rewriting the original traumatic association would eliminate those behaviors as well. If those behaviors are no longer maintained by the main behavior, the traumatic association, then you have to deal with those individually. So, if someone is drinking or having family problems, if those problems are directly connected to the PTSD response, they should go away. If, however, those problems are more long-standing and are self maintaining, then they will not go away and must be dealt with individually. That's an important consideration.

Remember that most responses are not maintained by the same behavior for which they were awakened, like addictions. I may start taking drugs because I want to feel good, I want to fit in... But there comes a time when it's no longer about that, but it's because this has become the most important thing in my life and I've built my life around it. They are two different things. And so, with PTSD using Steve Andrea's protocol, what he warns, right up front, is this: if it isn't simple PTSD, characterized by the specific phobic response, characterized mostly by the intrusive and arousal symptoms, you're not going to treat anything else except those symptoms.

Just to clarify, once the proteins get in motion, you don't stop them; you stop the rest of the response. Remember, there's the neural response that codes the actual connection between my seeing a picture of Viet Nam and my flipping out. My flipping out is triggered by the learned connection that we're talking about. However, that emotional response takes some time to build to peak, it is another part that is just triggered by the association. The association starts to produce the proteins that structure the association and that continues in the background. At the same time, in the foreground we have to stop the emotional response before it retraumatizes the client.

Think about the little rope traps that little boys used to make where there's one little rope wrapped around a little twig and you step on that twig and this whole big branch goes up and it sucks you up in a net? This process is much like that, what we're doing is that we're getting to that trigger part, that part continues to cook but you have to stop the larger emotional system response before it takes over the

organism. Otherwise it's going to get in your way you're going to retraumatize the client and it's just going to reinforce the link between the stimulus and that problem.

When you've put in a new behavior, the proteins that are still working in the background—the ones that code the connection and are now labilized, they now synthesize that new behavior; it becomes part of the memory instead of the old response. In rats, where they started doing these studies, the rats would completely forget the old response. In people, you get one of two kinds of responses: either they totally forget, or they are able to talk about it with no emotion. It wipes out that fear connection, which tells us that this learning is happening in the Amygdala, and you're dealing specifically with the emotional connection. Extinction memories typically happen in the Ventro-medial Prefrontal cortex, right up here... just above your third eye. Those are the ones that are subject to various kinds of decay and deactivation after a period of time.

So, we have those two pieces. Now I want to talk about something interesting. So, I want to talk about slime mold. What in the world does slime mold have to do with this? In the Kafka response, Heine and Proulx took some people and they ran an experiment. One group they had read a story and one group, they had read a story by Franz Kafka. Now, if you've ever read anything by Franz Kafka, by the time you're done reading it, you're kind of turned inside out. It's a little disorienting. This story was actually a rework of Kafka story and they called it, The Country Dentist, The dentist is called out to visit a farm and he's going to take care of a young boy. He gets there and there's no tooth-ache, and there's no boy, and there's no farm and, it's just weird. Where in the world am I? The researchers wanted to see what effect this had in people's ability to learn and to find order in their lives; Proulx and Heine come out of something called the Meaning Maintenance Model. Their basic position is that we all like to hang on to our meanings; we all like our world to be relatively well structured. We are in love with our deficits and our problems. You know, I love my problem I wouldn't know what to do without it. You have all had the experience of meeting two old people that have battled for years. One dies and the other pines away for loss of his beloved wife with whom he battled every day. They don't know what else to do.

Well, what theses researchers found was that if you try to teach people a nonsense grammar, a totally fabricated grammar, and you gave one group a regular story beforehand and the other group a story by Kafka... Afterwards, the group that got the Kafka story, not only had learned the false grammar more efficiently, but they found more patterns than were actually there. They were actively seeking patterns. They said, 'Oh my God, let me find some stability in my life, I can't live like this', and unconsciously reached out to find order in the surrounding contexts.

Well if you think about the handshake interrupt, that's what Richard Bandler has always said. He says, you interrupt this pattern and people are looking for something to hang on to and bang, they start to listen to things, and they go right into trance. That works really well. Again, here's some science that backs up something that we NLPers have always known.

But apparently, what happens with the Kafka effect, is that when you break apart, or interrupt those old associations, with something totally outlandish, your system begins to look to reestablish order and will establish order with the most available thing out there. Proulx and Heine also did some research where they looked at how likely it was that someone would take hold of some fundamentalist or conservative views after going through a procedure like the one presented to the people who read the Kafka story. And sure enough, you throw confusion at somebody, and they tend to go for the most conservative thing they can find. Whatever it is, they run for it and they take hold of it.

One of the things that we know is that disorganization, on a neural level, moves to the remodeling of the relevant structures. When we interrupt a response, whether it is an expectation about trauma, or the way we think narrative should be structured, the brain, restructures the original response chain. And those new versions of the structures can be relatively permanent.

This suggests that if you have someone who can tolerate ambiguity appropriately, you have a formula for creativity. And creative people are often very intelligent people who have the capacity to hold contradictory ideas in mind and uncorrelated ideas in mind to the extent that if they weren't so smart they would probably be schizophrenic. Thankfully, they're smart enough that they can balance out all of the contradictories. And what happens is that when they've held them long enough, patterns begin to emerge that you or I might not see. In the midst of the place where there's confusion in the background, they are able to formulate relatively permanent perceptions of new ways of seeing and being in the world that probably involves that same kind of protein synthesis that we're talking about that NLP does so well. This is an interesting set of patterns.

Slime mold. If you consider the brain of a slime mold, you're in deep trouble because they have none. If you consider the neurology of the slime mold, you're in just as bad a shape, because they don't have nerves either. Recently, in the past year, some scientists were thinking about how to map subways (I don't know how they put slime molds together with subways). And they said, well, I wonder what would happen, if we wanted to map the Tokyo subways or remap them to find the most efficient route, and we put slime mold on the map. Well, they took the map of Tokyo and they put a piece of oatmeal chip on every place where they thought a station should be. They got this piece of slime mold, and they dropped it on the center of Tokyo, and they sat there and they watched it for a couple of days. It's kind of like watching paint dry... And slime mold loves oat chips. I don't know how they know that except that it seeks it out and it eats it up. Well, the slime mold expands across the entire map, covers the entire thing in gooey slime, and then over the next few hours and days it contracts, back to the center of the system where it started. And as it contracts, the strands of slime that organism left behind remained connected to the oat chips. Those stands of slime either mapped out the subway system as it existed, or found even more efficient pathways between the stations than the engineers had been able to do thinking with their brains and their neural systems and their non-slime mold-ish capacities. What in the world is this?

On some level, here's a pattern that appears in nature so frequently that it is utterly amazing to me. Where ever you go, there are these patterns of expansion and contraction; people letting go and

coming back together. Jung talked about it in terms of the descent of the ego into the unconscious for creative purposes. This is where somebody has what somebody else might think is a nervous breakdown. They just go away, and they let go of everything, and they stop being who they are, and it's just terrible. They face the abyss, and in facing the abyss the ego falls apart and they let go—it sounds like transcendental meditation—they let go, and when it comes back, there is something more whole, more well structured, more efficient, healthier about who they are and who they've become.

Think of the classic example of Kekule. Kekule discovered the structure of the benzene ring. He's worked for years and years on the structure of the benzene molecule. And he's just exhausted. He's thought about everything he possibly could. He's worked day and night, and eaten chickens and whatever he could do. Finally, he falls asleep in front of a fire and he has this dream. He falls into a reverie. And what does he see? He sees these little guys, these six little guys holding hands, dancing in a ring. He awakens from this reverie and he says "Eureka..." no, that was another guy. He says "Holy moley Jack! I've got it." And he spends the next six years figuring out how to describe that in terms of the chemistry of the day.

Like the slime mold, his intentionality, well, probably a lot better than the slime mold...his intentionality was spread out towards solving this problem. As long as he focused on the individual bits, he had no capacity to go up to the next logical level to bring it together. But when he let go, and allowed his unconscious—he didn't know he was doing this, but we know he was doing this—and allowed his unconscious to use those affective, inchoate directions, to deal with the data he had collected; they found the most efficient path to bring those ideas together and to explain the data that he had been working with.

Chloroplasts. They don't even have brains. They don't even have cells. They're just parts of cells. My goodness, they're pretty mechanistic kinds of things. This one blew me away. These are two studies that I resisted reading. This one's about quantum physics and I don't know anything about physics. But here's the deal. If you take a green plant or a photosynthetic bacterium, they all have chloroplasts. They contain the chlorophyll that turns light and carbon dioxide and water into oxygen and cheese whiz and sugar. And one of the curious things that they were doing was that they were trying to design more efficient solar cells. And they said, 'Ya know, photosynthetic bacteria do a wonderful job of channeling the light very, very efficiently, and they seem to be able to capture much more of the light than we're able to do with all our science. Let's figure out how they do it'.

And what they figured was that there's a lensing system inside the chloroplast that directs the light from whatever light source, down into the center of the molecule so these complex chemical reactions can happen. And they began to look seriously at what was going on. And everybody assumed that each of the centers, I don't know much about that detail, would send electrons out to the surface of the chloroplast, they said, like a drunken stagger. They thought that the electrons kind of wandered around until they found just the right spot; like a drunken guy, just bouncing from pillar to post. They took a close look at it and this is what they found. They had found one of the first examples of macro-quantum

superposition that had ever been observed in nature. Apparently, what happens in this system is that the photons and electrons move simultaneously to every possible position at the surface of the chloroplast. Simultaneously. Bam! Simultaneously they are everywhere at the surface of the organelle at the same time. And you know, the photons and electrons are simultaneously waves and particles. In the wave form, they go into superposition, where they are theoretically intertwined, connected radically and occupying every possible position at the surface of the membrane. What happens? The wave form collapses and it only collapses around the most efficient pathways for channeling the light. As they collapse, from being everywhere-as waves, to being in discrete places as packets of energy-not waves, they define the most efficient pathways for channeling the light into the center of the chlorophyll molecules.

Like the slime mold, and like the people who have been confused by Nick Kemp, the pathways are blown out into all kinds of possibilities. In humans, this is affectively determined by the intention of their feeling; Kekule, affectively determined, in chloroplasts by their simple purpose, and they contract about the most efficient pathway. Isn't that striking?

And if we go to an even more macro level, I guess that this is macro-er than that is macro, but this is more obviously quantum theoretical than that is; that's just crazy slime mold. But the same pattern appears in the Precambrian explosion which was described by Stephen Jay Gould in *Wonderful Life* and other biologists. In the Burgess Shales, in the Laurentian Mountain shield, in British Columbia, Canada, they found fossil evidence of life from 530 Million years ago that all of a sudden seemed to explode into every possible combination of sensors and appendages and body style. They had things with plaids and tank treads and three eyes and photoreceptors and tentacles and arms and buttons and everything that you can imagine. It was right out of Monty Python's genetic counseling sketch. It's called the Precambrian Explosion because every possible combination of wheels and tire treads and whatever else an animal could have was there. Over the next hundred million years, it contracted about the basic forms that were most likely to survive on planet Earth.

Once again we have a pattern of expansion and contraction; of exploding into inchoate possibilities and contracting about the most efficient pathways. And what you find, when you look at the fossil evidence in the Burgess Shales, is that some of the same basic patterns that characterize life today, had their origins in that explosion and for the most part they are the only ones that survived down to this day. Whether they are carbon and oxygen based, or sulphur-based, whether they are extremophiles or organisms that live in more normal temperature ranges like us, all of those patterns were found there. Are we starting to get a pattern here?

Milton Erickson is talking about self-hypnosis. People asked him, "Milton, teach us how to do self-hypnosis". And he says, "Ok, let me tell you what I do. What I do is I usually go inside and I tell my unconscious that I'd like to do something. And I let it do it. I ask my unconscious to do something for me and I kind of relax and I let it do it". Wasn't there more? And he says I would never presume to tell the unconscious how to do it. It's got much better ways to do these things than I do. (Of course, his wife came

up with some nice self-hypnosis things.) So he describes an experience, this amazing perception he had sitting in his garden one day and suddenly the world opens up and it's filled with love and light and truth and beauty. And they ask, how did you get there? Well, I just asked my unconscious to show me something that it thought that I needed to know. And I let it.

Now, how is this like slime mold? I think a lot of people would be insulted if I said that Milton Erickson was like slime mold. However, like slime mold, like chloroplasts, like all living systems, one of the things that he was aware of was that if you let go, with an affective intent, your unconscious takes that affect, takes that felt sense, and can use it to drive behavior.

We are often very much focused on 'I have this thing that I want, I want it this way. I've modeled the pathway that must get me there, and if it doesn't get me there I'm going to be pissed off. And inevitably, we run up against the flow of our own nature, our unconscious, our context, and everything else and we wonder, "What's this part that's standing in my way?"

Well. I think it's an interesting thing. Slime mold knows what it likes but it has no idea how to get there. So it goes everywhere that that thing might be. Chloroplasts, don't know nothin'. They just kind of sit there and vibrate. But it's part of their nature—I can't say that they know that they're already everywhere, or that they come back to being somewhere. Or sometimes they're somewhere and sometimes they're nowhere and all of the time they're a little bit of both? I guess that's right. The way that they get where they are going is not like a drunken man or not like we would, they don't make a strategy. The kind of tell their unconscious that they need to find the best way to get to the light, and the unconscious of the chloroplast, if there is such a thing, says, 'OK I know how to do that.' And it fills up all of the possibilities and pulls it down into the most efficient pathway. The Precambrian explosion, they make everything they can think of and BAM, all of the possibilities exist and they die back into the forms most appropriate for survival on Planet Earth. The Human brain is born with virtually everything interconnected. Over the next six years, there is a massive die-back of those connections—Apoptosis is your friend. And what happens? The things that are what you wanted or are shaped emotionally like the things you've used tend to continue and the other connections tend to die back. Even today as we're generating new neurons in the hippocampus and other parts of the brain, they tend to create the pathways that seed the directions in which we're already going. Not the things we've planned, but the things that we've felt as directions and used as functional pathways.

One of the things that comes out of all of this is the idea that our unconscious is not programmed by words or ideas but by feelings. Your unconscious deals—you know, your body is your unconscious, Candace Pert—your unconscious deals with the foundations of behavior. As good NLPers we know that words are only valuable insofar as they allow us to awaken feelings. Those feelings drive systems that change the meaning of words, actions, behaviors and contexts. They change the meaning of the world. If we don't get to the feelings, we miss the meaning, we miss the reality, and we miss the Oomph. If we do it all on a conscious level we end up as crippled as anybody else out there in the psychophysical world who is trying to do things. There is a level to which, affect, the feeling of what I want—how would you like to

feel—is the beginning of every effective intervention.

I love the intervention from John Overdurf. How would you feel if you had the answer to this? Step into that, and what's the smallest next step; the smallest next step you can take that will get you there? The affect is the driver. The behavior that you choose is relatively unimportant because it comes connected to that driving system.

Affect, in the human brain, is on some level, as far as I understand the, the equivalent of quantum physical superposition. If we can be with positive feeling and positive intentions; if we know the feeling of where we want to be; resting into that and allowing that to become the dominant tone of our system increases the probability that the unconscious will generate the behaviors and help us to sort for the behaviors and perceptions that will get us from here to there. We need the unconscious because, for the most part, we don't know how to get from here to there. It's our unconscious that takes note of our affective direction and helps us to bring together the conscious choices that we make to get us there.

Does anyone know what the tabula Smagdarina is? Isn't that wonderful? It sounds like, mmm I'd like one of those right now. It's the Emerald Tablet of Hermes. Any of you who've been caught up in weirdness like I have—I know that you're not thinking occult weirdness right now but that's what I'm talking about—knows this and the famous saying that comes out of it "As above, so below; That which is above is like that which is below and that which is below is like unto the sea." What the hell does that mean and what's that got to do with NLP? I was thinking about that. I didn't have a clue.

But if you look up at night, you see the stars and they're all points of light. If you start trying to count them, you go to sleep real fast. If you try to organize them into groups, the groups overlap and you go cross-eyed... And there are so many stars, especially under the influence of certain substances, that it becomes absolutely dizzying.

As above, so below. We have individual behaviors and individual choices. We have a zillion words and word combinations. Chomsky tells us that the genius of human language is that we can take a relatively small number of phonemes and morphemes and put them together into an infinite variety of words. When we try to get what we want based on words and language, very often, we get caught in that complexity. And that which is below, is like unto the sea. It moves. It isn't a discrete phenomenon; it is an interrelated whole. It is one thing. It is as if the sky were in superposition to itself and everything is joined to everything else in a way that any human being can see, if they're looking. And somehow, I believe that whoever wrote the Tabula Smagdarina, I don't think it was Thoth or Hermes, but somebody maybe about 2,000 years ago, was looking at the stars and looking at their reflection in the ocean, and he sees it floating on the waves, and somehow intuited something about the possibility of trying to organize things individually, and the possibility of having an organizing structure like the unconscious mind--and he probably called it something completely different--that could make sense out of the world.

One of the ways that people make sense out of the sky is they project the things they see in the world up into the sky: cows and horsies and duckies and fishies and monsters and dragons. Here's some of that same stuff: it's slime mold, and it's quantum physical photosynthetic systems, and it's Milton's self-

hypnosis.

How, then, do we let go in a direction that produces creativity and guides us intuitively into the place where we need to be. Now, this is a truism in hypnosis and NLP, your unconscious already knows what you need. And that's true, isn't it? If you set up an intent, a positive affective intent; what would it feel like to be there? What would it feel like to be part of this community? If I want to be a better NLP'er, I am certainly not saying that I shouldn't study NLP or take a lot of classes. I ain't goin there, because it's important to have that information. But in terms of learning how to make it work and increasing the probability that I'm going to make use of those things, it might be useful to have a sense of what it might feel like to part of that community. What would it be like to be part of that community that every day meditates for hours with good intentions for all sentient beings in the world? What would happen if I were to let go into that kind of affect? Oooh, what's it feel like to do that?

I don't have to know. All I have to do is point my unconscious in that affective direction, and what's it going to do? Because I don't know, it expands all across the map of my consciousness. It expands into every possibility and it begins to retract the threads of behavior and probabilities around those behaviors that will tend to increase the likelihood that I'll begin to manifest those things.

For a while I was really interested in Kaballah, and the idea that there were thirty-six tzaddikim, righteous men, who maintained the earth and this was a healing community. The idea of thirty-six righteous men comes from a passage in Isaiah that says that there is '...none righteous, no not one...' and so the Rabbis said this can't possibly mean that there is none righteous, and they looked at the Hebrew word 'lo', which means no or none. They decided that that couldn't mean none, but that it must mean (by gematria) thirty-six (the word's numerical equivalent). So they decided that there must be thirty-six righteous people by whom the world is maintained...

How about the idea that there are communities of people who are dedicated people, and they have a way of holding their intention, their caring, their love, their generosity that you may just have the tiniest hint of. What would it feel like to participate in that way of perceiving the world? In our false humility, we are tempted to say, Oh, I could never be one of them.... What if you were? How would that feel? In NLP, we are called to act as if.

When I begin to move my felt sense into that direction, my unconscious begins to direct my behaviors, the probabilities of my behaviors, my consciousness, my thinking into those kinds of directions and so those behaviors become more probable. I find them more delightful. I'm more likely to spend more time doing them. Not because I've structured those motivations, but because I've taken advantage of slime mold and chloroplasts and Nick Kemp's provocative therapy.

Rupert Sheldrake, whether you believe him literally or metaphorically, suggests that in some sense we are all connected. Using David Bohm's idea of the implicate order, he suggests that we are just the holographic expression of a greater unity that's projected onto the infinite edges of an infinite universe that somehow has the illusion of solidity. Because we are all connected, the same rules and the same laws and the same probabilities that have driven our fathers and our communities have tended to drive

us. If you think in terms of Rupert Sheldrake's morphic resonance, one of ways you plug into a specific community would be by feeling towards that community. There is a good deal of very solid research that says when people meditate together they tend to get in sync. When people have been hypnotized together, there is something that binds them together on a more significant level than simply having had that experience together. There is something that ties them synchronistically, to use Jung's phrase—and an overused new age idea.

Karl Pribram talks about the holonomic brain. I almost met him but I realized that I had nothing to ask him, and I would be too embarrassed, so I didn't. Karl Pribram, one of the great lights in neuroscience, suggested that all we know about neurology is absolutely true on one level but there's another level in which the chemical energy and electrical energy of the brain generates holographic realities which is actually where consciousness, choice and experience are generated. We tap into that on an inchoate level and it drives the probabilities in the system—beyond the simple level of neural connections—in such a way that people are capable of much more than just the nearly infinite variety of neural connections would predict. I'm not sure how you get beyond that level of complexity (200 billion cells interconnecting with each other in ten-thousand or more different ways) but isn't that interesting?

So, here's another idea about expansion and contraction. The brain generates neural patterns, the patterns give rise to holographic fields and those fields stimulate the collapse of probabilities around neural configurations that drive perception and behavior.

We have these little patterns of the things that we know and things that we think we want, but we don't know how to get there. All of this suggests to me that if we aim our affect in that direction, it doesn't give us the skills—that's a very different thing—but it provides the organization. It increases the probability that we'll begin to move in that direction. It makes our choices in that direction juicier, like oat chips to a slime mold. It makes the probability that we'll associate with people who are going in that same direction, higher. And it makes us less likely to say, "Well I could never do that". And more likely to say, "That's what I want to be." ...when we make those connections to those directions.

I would like you to think of something that you would like to realize in yourself...some part of your structure that you would like to become more central, some identity that you've always admired and you've always recognized as part of your life's path; part of your personal calling. For one reason or another, you may have put it aside or haven't given it the energy or the emphasis that you wanted to.

I said that this is about pseudo orientation in time. Typically, you project someone into the future, but when we work with this structure, one of the things that is implicit in this structure, is that that future is present in the unstructured felt state. In this case, you use the felt state as a compass to direct your conscious mind and your unconscious mind towards the kinds of things that you must be doing. Even if you don't know what they are, then one of the possibilities that flows out of that is this: Simply by enjoying that state, entertaining that state, spending time holding that state and being held in it, the connections and directions that will increase the probability that you can spend more of your life in that direction and in that state are increased.

So, what I'd like you to do is find a direction. You might have a very specific direction, and when you think about it, it makes you feel wonderful. For others of you, it may not be so well defined, but it's the hope of a direction. The hope of knowing that you know that you know that you're doing what you were made to do; what biology and environment have conspired to lead you to; finding the niche that identifies who you really are and that allows you to live life out as part of a song. For some of you it is a spiritual aspiration, for some of you it is a relational aspiration, for some of you it is an occupational aspiration. But aspiration is something that is breathed out and you can't quite speak it.

What I'd like you to do is, whether you have a word for it or not, get with the feeling of it.

Trance follows.

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