ARTICLE — Yellow Memes, Learning III, and Explaining Explanation: How Modeling Can Save the World

In preparing this address, naturally the first thing I did was look again at the conference title: "Modeling Excellence in an Increasingly Complex World." And I thought back to when I was a kid, and recalled that it seemed pretty darned complex then, too. We were diving under chairs to protect ourselves from atomic bombs, and crowds of white adults were screaming at a little black girl trying to go to school, and we were fighting the communists everywhere, and flying people to the moon. All in all, seemed pretty busy to me then, too, As a senior in high school, I was a contestant in the Bank of America Science competition. I was one of five students from various schools. They gave us a topic - "What is the most important scientific advance in this century?" - and then we had 15 minutes to discuss it among ourselves before appearing before the judges to debate and respond to questions. In the first 10 seconds of that 15 minutes of preparation, my fellow nascent scientists agreed among themselves that atomic energy was obviously the most important discovery. Everybody knew that. I said nothing. I was too busy watching my brain connecting up my epiphany neurons. When we appeared before the judges, my fellow "debaters" launched into violent agreement with one another regarding the various uses and abuses and futures of atomic energy. Once they had exhausted themselves, I cleared my throat and begged to differ. Actually, I announced, the most important scientific discovery was genetics for, ultimately, It is genetics that will determine who is deciding how that atomic energy is used. And that, as they say, was that.

Well, 35 years later those synapses are still connected. But now they have some company, the connections are richer. I had the right idea way back then, but now I realize that I had the wrong content. Because there is a "who" that will determine how genetics is used as well. And it is that "who" that I want to talk with you about today.

Now, I'm not going to describe a methodology for doing modeling. There are many such methodologies. My colleague, Graham Dawes, and I have ours, codified in the Experiential Array, and there are many others, both within the field of NLP and outside of ft. They all have different things to offer us, and they all have something to offer us. And none of them is the right methodology, and in time, each in its turn will be plowed under to fertilize the growth of now methodologies, methodologies that we can not yet imagine. No matter how wonderful any of these methodologies may be, none of them works on its own. It takes people to bring them to life.

What I am going to suggest to you today is that modeling has a tremendous contribution to make to society, and even to our future as a species. That this contribution goes much deeper than the application of modeling to promote personal excellence. With modeling we can come to grips with the essences of human experience. And by applying modeling to understanding the structure of experience at that level, it can provide both conceptual and practical tools for addressing some of the larger problems within and between societies. And beyond even that, I want to float the

idea that if modeling as a conceptual and a practical tool were to spread, that it would bring about a fundamental change in being human. "Who" always matters.

I'm sure that every public address in the last six months has included some reference to the events of September 11th, and this one will be no exception. But I hope to depart from the stance that is usually taken in one, fundamental way. Almost all of them note that on September 11th the world changed. Well, I do not agree. After the attack, mystified Americans were asking a very good question: "Why do they hate us?" Four months later, I am watching a car commercial that ends with an SUV tearing across the landscape while a voice intones, "Remember, America is still the greatest country in the world." That is not a different world. That is more of the same old world. Yes, we are waiting in longer lines, strangers are x-raying our shoes, and businessmen are making plans for national Identity cards In the United States. But the world views that now conceive of such things were there conceiving of such things long before September 11th. The world has not changed. Instead, the world - as it has been for a long time - is becoming more apparent. I don't need to run through a list of seemingly Intractable and recurring ills. We all know that list.

There is an admonition in NLP that says, "if you keep doing what you have always done, you keep getting what you have always gotten." But perhaps we don't really have a choice about that. Perhaps the conflicts, the scrabbling for territory - whether it is the kind of territory that we can hold in our hands, or hold In our bodies, or hold In our brains - will continue to mark our time here. Perhaps, it is fundamental to our nature, and we cannot do otherwise. We can only learn better coping strategies. Perhaps we are sophisticated animals - no less and no more. We cloak our instinctual urges, but they are there nonetheless. and always will be.

Perhaps. But before we capitulate to the (comfortably) familiar, we ought to first consider that what we have been talking about IS the water we swim in now. And, so, it seems it is as it must be, as It can only be. We are animals, but let's not take the conceptual leap then of assuming that is all we are. The fact that we can make such conceptual leaps is evidence that it Is NOT all we are. Language changes everything. The ability to conceptualize through language creates levels of abstraction and complexity that make us different than animals in some very fundamental ways. (Notice that I did not say better then; but different.) Now of course a lot of grief and misery has come with our leap of language, and some folks would just as soon we step back into an existence without it. Not me. Language is one of the grand portals Into worlds of experience. As Graham quipped, "Words are the forceps of experience." If you want to see a real miracle, watch someone reading a book. Just watch. As you do, consider what you are witnessing; a person is scanning marks on a page, and those marks are turning into a trip down river with Huck and Tom, or into matter condensing out of the void in the universe's first tenth of a second, or into the smiling thoughts of the Dali Lama. Perhaps we can use that same ability - in new and transformative ways - to conceive of what is possible for us as human beings, to dip ourselves Into some different waters. What could those waters be? And how might we begin to get nicely wet?

To paraphrase Shakespeare, experience is all. The scientist seeing tracks of particles in a cloud chamber is having an experience, and

his experience is no more or less real and full and meaningful than that of the touch of a loving hand upon your own or the wordless ecstasy of a mystic feeling the presence of god. There is, in a very real sense, nothing outside of experience. Certainty there may be worlds that exist outside of our experience, but the moment we know of them, they are an experience. Or perhaps another way to think of this is that we bring worlds into existence through experience. In fact, this is what I believe. This is real. You are real. This room is real. Our experiences are real. They are not, however, the only possible realities. Perhaps we are holding this room together with our shared realities. I don't know. I really don't know if we could join our perceptual hands In some new way right now and have this ceiling dissolve into a pinwheel of golden stars... Rats... Well, right now I do not know how to do that. In fact the only thing on that list that I do know can be changed is experience. We know that for us as Individuals. And certainly the work that you have been doing as researchers and practitioners of NLP has been - and continues to be - a source of experiential change and personal transformation for countless people.

When I was 10 years old, my parents took me to a movie called. "The Flower Drum Song." I saw this movie only once, and remember nothing about It, except for one song. As I recall the scene, someone was complaining about life, then someone else launched into a song whose refrain was, "A hundred million miracles... a hundred million miracles ... are happening every day!" That grabbed me at the time and, as you can see, stayed with me. Now with that little story (hopefully) greasing my way, I will now commit a bit of NLP heresy. Like the proverbial moth to the flame, I am naturally drawn to committing heresies. Despite the heat, I think this particular heresy is worth a closer look.

When we speak of experience, we are usually referring to the experience of the individual. And when we look around for what to model, we have naturally been attracted to those Individuals and those abilities that glitter. Like gold itself, their apparent scarcity gives them tremendous value. We mark them out and add them to the list of "human excellence." But that is a relatively short list, artificially truncated, I believe, by the notion of "excellence" itself.

Because we are looking for excellence, where do we tend to look? To the geniuses, the financial whizzes, the guys with big, perfect teeth. Meanwhile, there is a teacher In your child's school who is particularly good at encouraging children to try things they fear may be too difficult for them; meanwhile there is the guy who does your dry cleaning who makes everyone feet that their pant suits and shirts are precious and worthy of being cared for; meanwhile there is a friend of yours that can step out onto a dance floor and let herself go. Modeling is much more than a tool for excellence; modeling is a window on everything that is human.

Now, I have a rather wide Idea of what "everything human means." For Instance, tube worms have been living In the sulfurous heat spewing from vents at the bottom of the ocean for who knows how long. And meanwhile, back on dry land, human beings were evolving. But the moment we learn of those tube worms, they become part of the human world, of our world. And we become part of the tube worm's world, though I have no idea what that is as an experience for them. It is an experience for us, however. To look at, touch, think about,

perceive them is human experience, our experience and, so, open to modeling.

Whether any of our tube worm experiences is worth modeling depends upon who you ask. And I think we need to ask around more than we are currently. For instance, there Is the ability of the tube worm biologist to want to know how a living system works. Just that wanting to know is itself an ability. Or the ability to devote oneself to a project that will take years, or the ability to find something wriggling and pale in the dim light beautiful, the ability to conquer fear and climb into a minisub to descend to crushing depths, the ability to assemble facts and derive an hypothesis. The notion of excellence can act as an experiential and perceptual filter that obscures the hundreds of plain old competencies and experiences that actually make up our daily lives. Well, competence is how we get things done in life, and experience is where we live. I am not by any means against excellence. But I do think it has skewed our attention, veiling our eyes to the infinite wonders that we could be noticing, appreciating and bringing into our own lives that are happening right around us, all the time. I think we would be much better off seeking human competence rather than excellence. And where should we look for these abilities? That world of possibilities Is sitting right beside you, right In front of and behind you, right inside you ... A hundred million miracles... are happening every day.

NLP produces its share of those miracles, and I have no doubt that the work we have been doing in NLP will continue to make the lives of many individuals much, much better. I do have doubts, however, about whether that work will address the bigger problems of societies and clashing cultures, problems that seem Intractable, that keep chugging along despite so marry great efforts and sacrifices over so many years. I think that NLP as a discipline and, in particular, modeling do have real contributions to make toward addressing these larger problems. To do this we will need to stop outside of the territory we are accustomed to. And I think that Gregory Bateson's concept of Levels of Learning can help us do this. (My sketch will be unjustly brief, but I hope offers enough to give us a basis to move forward.)

Learning Level I is most easily understood as what Is going on in stimulus-response learning. Mom calls out, "Dinners ready!" and you start salivating. A hand Is extended and you shake it

More Interesting - and particularly significant for us human beings - is Learning II. Learning II is the process of deriving the premises (or, If you prefer, rules) that operate within a particular context. For instance, suppose you are a child and your schoolteacher Is In the middle of a stirring lecture on the Plains Indians. You are bursting with questions and blurt out, "But who was their president? Who told them what to do? Did the kids have to go to school? Your teacher scowls and inform you that it is not polite to Interrupt and to keep your questions until the end. Now that teacher just taught you something, but not about he Plains Indians. You learn from that experience (or a string of such experiences) When someone Is giving a lecture, do not interrupt with questions. And now, thirty years later, you are listening to a lecture and, even though you may be bursting with questions, you hold them until the end. This is Learning II - the establishing of premises or rules operating in a context - and ft is absolutely pervasive for us. A

doctor has her premises about how disease works, a politician has his premises about how government works, each of us has premises about how we work (that Is, who we are). Now here Is the thing to notice: when the physician's patient dies when he should not have, or recovers from a terminal illness when he should not have, the doctor does not respond with. "Well heck, maybe I should take another look at this medical model I've been using." Instead, the patient died - or lived - because of unknown complications, genetic predisposition, an act of god, and so on. The politician whose efforts to crush the opposition has generated even more opposition does not smack himself in the forehead and moan, "What have I been doing?" I need to reevaluate my Ideas about how the world works!" No, obviously he has not applied enough force, or not applied ft in the right places, or it is not the right time. This ought to sound familiar. The important lesson here is that the premises we hold about a context are not easily challenged by intermittent failures of those premises. In fact, our ability to explain failures of the premises reinforces their validity. This clears the way for applying the same old solutions and, consequently, generating again and again the same old problems. Is there a way out of that rut? There is, but it requires jumping to a level of understanding that encompasses more than the stream we are currently in; we have to jump to a level that allows us to perceive how streams form. And this brings us to Learning III.

If Learning II Is discovering the premises that are operating within a particular context, then Learning III is discovering how we form premises, regardless of the context. Learning Ill asks the question, "What are the patterns that determine how we human beings construct our worlds?" Learning III is what propels us out of the grinder of a particular world view so we can see who is turning the crank. I do not want to pretend to you for a minute that this Is an easy jump. Even so, it occurs to me that if we were to bring a modeling approach to bear on questions of that type, not only might they be answered with some revelatory and useful models, but in the tumultuous process of trying to come to grips with such experiences we would be at the same time acquiring for ourselves the conceptual and experiential thinking patterns, of Learning III itself! And let me propose a likely candidate to begin this venture Into multi-type learning: and that is, the uniquely human pursuit of explanation.

When my daughter, Kyra, was 10 years old, she decided (on humanitarian and political grounds) to become a vegetarian. So for three years she avoided meat of any kind. As she headed into puberty, however, her body started giving her the ol' elbow: "Hey, take a look at that hamburger! Doesn't that look great? Hey, is that fried chicken I smell? Lady, I could use some of that!" Kyra was in a turmoil for some months. One day, exasperated with the whole conflict, she declared she just had to have some meat and dove into a hamburger. Now she enjoyed that burger on one level, but on another she was still very troubled. It seemed a betrayal. She resumed eating meat, but she continued to be bothered about her fall. Now, Kyra had some allergies and, so, often had a stuffed-up nose. After three days of eating meat again, she was walking through the house when she suddenly came to a halt. She had just realized that her nose was clear! And she instantly knew why: Obviously her nose clearing was due to the fact that she was eating meet. Exaltation immediately followed. This was apparently all she needed to realize In order to feel okay about being an omnivore, and she relaxed. As a father, I was grateful. But as a thinking person, I was wondering, "What the heck just happened here?

What happened was an explanation. Once the language thing gets going, so does the explanation thing, and very powerful it is, too. The human phenomenon of "explaining" is not an adjunct to our experience, nor is It the yoke we must bear for having strayed far from our natural gate. It is quintessentially human. Of course, it can be the source of misery, both for us as individuals, for us as societies and cultures, and for the planet of which we are a part, It can also be the source of wonder and greatness and new understanding. Our explanations can take us deeper Into the mysteries of the world, and those explanations con be scientific, mystical, mechanistic, relational, philosophical, psychological, practical… anything. And our explanations also help keep us the same. Kyra explains her nose, the doctor explains the remission, the politician explains the uprising, and we explain ourselves. Anything so central, not only to our daily, individual lives, but to us as groups, organizations, communities, countries and a species ought to be something we understand.

And, of course, In doing that – modeling how explanation really works – we would be opening ourselves to Level Ill. We would be moving Into a position of exploring how we create a human world. And one can hope that as our facility and ease with Learning Ill grows, so will our desire and ability to move ourselves toward what we want to become.

As you can see, I am proposing a bigger frame within which to think of experience, namely, the frame of society, culture and (we're dreaming here, so let's fly) humanity. Actually, "within the frame" is Incorrect. It seems to me that the structures of our experiences are the frames of a society. A society or culture does not exist apart from the people who live it. Our shared experiences of who we are as Americans or Canadians or Samoans or Chinese or Brazilians or Italians; our shared experiences of who we are as Christians or Moslems or Jews or Buddhists or atheists; our shared experiences of who we are as mothers or fathers or husbands or wives or lovers; our shared experiences of who we are as doctors or artists or therapists or teachers; all of these shared experiences weave us together into societies and cultures. And when any of the experiences of who we are changes, so too does society. "We" become different.

We need a big picture, a picture that we can dream and think our way into, that can serve as the organizing principle for our ideas and efforts. So. what DO we want to become?

A big picture that I have been finding useful and Interesting was originally sketched for us by Clare Graves, then expanded and deepened by Beck and Cowan under the name of Spiral Dynamics. I'm sure many of you are already familiar with this model of societal and cultural development, and I won't turn this into a seminar on their very important model. But I do want to point out a few of its elements, since I think they establish a direction that is worthy of our efforts and to which modeling can make a significant contribution.

The basic idea here is that cultures go through stages of development driven by a characteristic set of values. This set of values operates much like genetic code. The genetic code provides fundamental Information about how to generate the complexity of a living organism. Similarly, these value sets provide fundamental Information about how to organize the great complexities of society

and culture. To capture this analogy, Spiral Dynamics uses Richard Dawkins' notion of "memes," which he defines as "a unit of cultural transmission." For example, the value memes of the first stage are concerned with basic survival of the Individual - food, water, shelter, procreation. As a way to keep these stages straight, Beck and Cowan have also assigned them colors, and this first stage is called the Beige Meme. The second is the Purple Meme, and is concerned with protection through kinship groups. The third - the Red Meme - Is about wielding individual power. The fourth meme, Blue, is about conformance to accepted truth. The Orange Meme Is fifth and Is characterized by the individual search for truth. And the sixth meme - Green - Is concerned with group acceptance of differences. And that is about where most of us in this room are now.

Other individuals and each culture is somewhere along this continuum of development. Each stage has its upsides and Its downsides. And, naturally, whichever stage you are in seems to be "right," and folks in other stages are mystifying, misguided, malicious or just plan wrong. As the next stage of values becomes widespread within an individual or within the culture, that stage emerges, becoming more and more characteristic of that whole person or group. Notice that I said "more and more characteristic," and not "supplants" or "replaces." All of the previous stages are still operating within the culture and, indeed, within every individual in the culture. And any of these earlier value sets are ready to reemerge as the situation calls for them. That car commercial I told you about was red red red. But the Jerry Seinfeld show that followed it was about not judging people by their appearance, and was green green green. Nevertheless, a particular meme can be on the ascendancy, proving its developmental worth, spreading throughout the population, and becoming reified in language, logic, art, literature, philosophy, architecture, car design and sitcoms. In this way it becomes the water we swim in and no longer notice.

I said there were eight steps. The last two - Yellow and Turquoise - are waiting for us. The Yellow meme Is concerned with the perception and integration of structures and systems, and the Turquoise with the synergistic unification of all forms, forces, and beings. Now these memes sound like where I want to go. I particularly want to draw your attention to the Yellow Meme now, because it is, I believe, within reach. As I said. the Yellow Meme is concerned with the perception and integration of structures and systems. Philosopher Ken Wilbur describes the world of the Yellow meme like this: "Life is a kaleidoscope of natural hierarchies ... systems, and forms. Flexibility, spontaneity, and functionality have the highest priority. Differences and pluralities can be integrated into interdependent, natural flows. Egalitarianism is complemented with natural degrees of excellence where appropriate. Knowledge and competency should supersede rank, power, status or group. The prevailing world order is the result of the existence of different levels of reality (memes) and the inevitable patterns of movement up and down the dynamic spiral… " Okay, sign me up!" If only it were that easy. Nevertheless, the Yellow meme paints a big picture we ought to consider making a reality. If we can't turn the ceiling into a pinwheel of stars, perhaps we can at least turn life into a "kaleidoscope of natural hierarchies." And, the Yellow Meme IS just around the comer for us. There are people for whom it is already a reality. I myself have had precious glimpses of It while engaged in modeling, moments when the content of what I am modeling vanishes like the blur around a subject as the Iens snaps into focus. And

suddenly I see the dynamic web of structures that make up this person in this world, this ecology of experience.

If something is itching In your brain, It may be that you are noticing a kinship, a synergy between the Yellow meme and modeling.

Modeling has the potential to be an epistemological snowball rolling down the current hillside of human snow. The future that could avalanche from that snowball is one in which people are thinking more and more In terms of structure and systems. The kind of thinking I am talking about when I speak of "systemic thinking" is not that of seeing a string of cause-effects. No matter how for into the future you are seeing the string of cause-effects, roll out, that is not systemic thinking. Systemic thinking is perceiving the web of relationships - both causal and associative - that are operating simultaneously to produce this moment. this experience, this event, this social situation, this cultural bias, this love of a sunset or of a neighbor. Now that type of thinking Is a tall order, I know. At least it is for me.

But we do not have to make everyone modelers, capable of such an enormous grasp of this staggering web, in order to have a deep Impact on society and culture. The example I am thinking of is that of '"relativity." Here is an idea that few of us understand in its theoretical, technical or applicative aspects. Nevertheless, the idea of relativity - and the implications that swirl around it - have permeated our society, and even our culture, at every level. People who know nothing about riding light beams past gravity wells nevertheless take It for granted that different people can have different ideas about the some incident depending upon, say, where they "are" in their lives. Relativistic thinking has become part of the water in which we swim, so we do not notice it. Nevertheless (as we talked about earlier). the nature of that water - its viscosity, clarity, currents - affects greatly how we swim.

I want to suggest to you that the widespread application of modeling could bring about a similar liquid change In out world, a change In which systemic thinking would become a part of the water in which we swim. We cannot at this moment, from this side of the mirror, know just what those changes really would be, or where they would lead. We can speculate that complexity will come to be appreciated, rather than feared. We can imagine that the first response to difficulty will not be to get to the bottom line; there would probably BE no bottom line. Instead there would be iIntersecting lines of possibility, each of which carries its load of opportunity and difficulties. And systems would be cherished, cherished because all systems reveal the interconnectedness of everything. They are, In a very real sense, us. And the question, "Is it possible?" will fade, to be replaced by the question, "How can it be done?" Such a transition - if pervasive - will be profound in its impact on the world. Indeed (and I blush at my audacity), it would bring about a next step in the evolution of human consciousness, akin to that advanced by language itself.

There. I've said it.

So, I have recommended that we broaden our modeling vision to look beyond excellence to embrace the vital mundane. I also recommended that we deepen our modeling vision by applying it to fundamental

human experiential processes, such as the process of explanation. And I suggested that, by doing that, we will move ourselves into Learning III, a level at which there are suddenly available to us choices about how to get out of Level II self-perpetuating problems. And finally, I suggested that the Yellow meme of Spiral Dynamics - the "life is a kaleidoscope of natural hierarchies" meme - describes a future worth pursuing, and that the spread of modeling - even as an idea - will help bring that about.

Well isn't this going to make everything more complex and difficult to understand and make choices about and deal with? This is, of course, how we see it from THIS side of the mirror. When Alice knelt on the mantelpiece and gazed into the mirror, she did not see the different world that was waiting inside it; she saw only herself. It was not until she pressed her hand against what had always been solid before, that she slipped through into the other world. Trying to unravel and follow the threads of complexity of another world with our current ways of perceiving Is, of course, formidable, staggering even. But for those of us who cross over, it may not be - in fact, I am confident will not be - overwhelming, once we are "there." Then it will just be "here".

These things do not happen on their own, however.

Beck and Cowan's Spiral road makes the journey to Yellow and beyond seem Inevitable. But I think this is not so. All of the previous levels are operating simultaneously in the world, with one or another of them holding sway among different groups of people. And all of the previous levels are alive in each of us as well. And again, one or another currently holds sway over each of us. It Is not written how for each of us will go. Nor is it written how far a society will go. But perhaps the path itself is written. Remember the people we were watching read earlier? What was written on the pops of their books did not live until those people read it. Similarly, the path of the future does not exist until it is walked. Francisco Varela captured this notion beautifully in the title to one of his papers: "Laying down a path In walking." Exactly so. Like any path, the Yellow Meme path must be walked in order to come into existence. The Learning III path must be walked to come Into existence. And the modeling path must be walked to come into existence. And it is folks who do the walking. Remarkably, collective change Is brought about by individuals.

Are our societies, cultures, histories rivers in which each of us is but a drop? Yes.

Does that mean we are at their mercy? No, I don't think so. All of us have ample evidence that experience does change as underlying structures change, and that these changes In the structure of experience do occur, even In the face of societal and cultural torrents. This is not speculation. All of us know -or at least know of - folks whose experiential world is Yellow (or chartreuse or mauve). And probably most of us have dipped a toe or two into the next color. There is plenty of evidence that the possibility space is much larger than the experiential space most of us currently hang out In. Can we make a difference In the river? Well... ... Several years ago I clipped a wonderful - If a bit macabre - little article out of the newspaper. It told of a Slovenian fisherman who had hooked a huge fish at his favorite lake. He was a passionate fisherman. He couldn't seem to land that fish, and he wouldn't let

go. Eventually, it pulled him under and he still wouldn't let go, and he drowned. His last words were, "Now I've got him!" I sometimes feel like that Slovenian, angling for understanding with my little modeling pole It may pull me under, too, That would NOT be a tragedy! I don't consider that fisherman's death a tragedy, at least not for him. He went down doing what he loved - at least that's the story I will make up for him. He'd hooked the fish of his dreams, and I imagine a very lusty, "Now I've got him!" - Not pathetic, not fearful... but joyful.

The snowball of modeling may have a snowball's chance in hell of getting rolling, let alone starting an avalanche. The obstacles are great. It will take time. It will be a lot of work. But for me, for what I know, to not pursue that would be, in a real