

Evolutionize Your Life: Michael Dowd and Connie Barlow

Week 4

Connie Barlow: Welcome to Evolutionize Your Life, session four. This is Connie Barlow.

Michael Dowd: And Michael Dowd.

CB: This module is about our interpretive instincts. That is, our neocortex's drive for meaning, morality, and making sense.

MD: Our intention here is to focus on learning about and appreciating our new mammalian brain, our neocortex, and its urge to comprehend, predict, and to interpret. We also focus here on recognizing that our meaning-making instincts may be pushed by our deeper drives into deception or self-deception, but that our rational skills can also be harnessed for accurately assessing and honoring reality.

CB: So in our journey of exploring the understanding of our quadrune brain that is the four-parted brain and how it evolved, the functions that each part serves, this week we're focusing on what's called the new mammalian brain, which we playfully call the monkey mind.

MD: The monkey mind of course being a term that comes out of Buddhism. The monkey jumps from bran to branch and eats a lot of fruit along the way, and that's what our rational brain does, it typically goes from one thing to another to another, trying to assess and understand and predict and that sort of thing.

CB: In session two, as you remember, we focused on our physical instincts brought about by our reptilian brain heritage. Session three was our social instincts from our old mammalian brain -- that is, when mammals first began to evolve, nurturing their young through the provision of milk, and how the bonding and emotions all came into being that our reptilian ancestors didn't have a need for. So, moving into this week, we're going to make the fundamental discovery here that the rational capacities of our mind that we feel that we have a lot of access to -- when we're thinking, we know that we're thinking, we're aware of what our thoughts are. It's a little bit harder to be aware of what our emotions are, but we're aware of what our thoughts are, and the real challenge we're going to discover here -- this is the fundamental discovery that is so useful for leading our lives -- is that our rational brain is not always rational in a truthful way. That is, it's not objectively taking information in and figuring out the best response or how to view something. Rather...

MD: The rational brain evolved, the new mammalian brain evolved to help the more ancient reptilian and old mammalian parts of our brain get what they want more

effectively. So rationality didn't evolve to accurately perceive the world. It evolved to get our deeper needs met in a more skillful way, and that's why deception and self-deception are part of that process.

CB: And that's actually okay, because when you think about it, the rational brain is somewhat like a computer. That is, you have assignments for the computer, you decide where you want to go on the web, and the computer will do that for you, but you've got to have some motivation, you've got to have some desire for what you're looking for, or an outcome, and that's frankly the role that our reptilian and old mammalian brains play. They're the ones that give us motivation. Without them, the neocortex, the monkey mind, would have absolutely nothing to do, no direction. So, it's really walking a middle path between having our monkey minds, our rational brains just fully serving whatever the deep urges are that come to us and that we think we're doing something rationally versus over-rationalizing, not recognizing how important those deep emotional understandings can be in urging us in correct directions.

MD: And that's why we keep coming back to this theme of honoring, first understanding our instincts, but then once we understand our instincts, once we know what those instincts evolved for and why they're so powerful, we can begin to honor them in a way that was simply never possible before we knew what was going on. As long as we simply believed and had intuitions and mythic understandings of what was going on under the hood, we could not have the freedom that is now available through a

knowledge-based understanding of those instincts. So, that honorable stance, that honoring stance can lead to, as we've shared several times, gratitude, which then allows us to make wiser choices, because we're not beating ourselves, we're not feeling guilty, and that sort of thing. But this week, we're focusing again mostly on our rational brain, our neocortex, our monkey mind, and its drive to understand, predict, figure out, and to get the needs of the organism served in the most efficient and effective ways possible, including social needs. It's not just the individual's needs, but it's the social needs, the needs of the group as well, or the needs of the individual within the context of the group in which that individual is living.

CB: And one other point of biological understanding that sets our own monkey mind neocortex within a broader perspective of evolution is that we have of course inherited and evolved a substantial neocortex from our primate lineage. Overall, biologists estimate that primates as a group -- that is, monkeys and apes as a group -- have a neocortex that is twice the size per body weight as a typical mammal will have. That also applies to two other lineages -- the whale lineages particularly culminating in the dolphin has a much larger neocortex, as do elephants, and it's pointed out that these are all social species, and there's certain aspects of being a social species, that there's real functionality in being able to work through and think through social interactions and interpret rationally.

MD: In all social species, two of the main tasks that need to be done are memory and interpretation. All social species need to remember who's been good to you so you can reciprocate -- that happens among social species, and to interpret the nonverbal and whatever sounds are being uttered by that particular species. And so the larger the social group, the larger the neocortex, that's what we find.

CB: So starting off, we're going to deal with the absolute necessity once our ancestors began to develop a neocortex, the absolute necessity of interpretation. And of course we as humans, the point is that anything of interest that we see or take in through any of our other senses, we're going to interpret, we cannot not interpret. We are meaning-making animals.

MD: Let me say a little bit more about this meaning-making aspect of our neocortex brain, because as Connie just said, it is vital to recognize that in all social species, interpretation is not an option. We will interpret. Animals that are in social units will interpret, and once we start having symbolic language -- that is, once we have utterances that we call words that are symbols, that these words point to something beyond them, we start seeing the necessity of interpretation ramping up considerably. And so in a very real way, it is true that we can't not interpret. We're always going to be interpreting. In fact, the only time that you're not interpreting is if you're asleep, but of course once you wake up, if you start thinking about what you were dreaming about, you're going to interpret it something, or if you're in the present moment, like if you're

listening to a symphony. So, you're noticing, you're not thinking. You're like paying attention to your senses completely, in a heightened way. In those moments, you're not thinking. The same thing with meditating. If you're meditating, you're just in the present moment, but let some noise happen and you're going to interpret it. So, interpretation is what our neocortex brains do, and we always do it. The question then becomes, how do we interpret reality in ways that either serve us or don't serve us, and that's where we begin to recognize in the neocortex, this new mammalian part of the brain, and especially with language, that our interpretations aren't reality itself, and being able to distinguish what's real, just the facts, what's actually so from how we interpret what's so makes an enormous difference in the quality of our lives.

If there were one skill I wish every young person would develop, if we paid attention in high school for example, or even earlier than that, in developing this skill, exercising this internal mental muscle so that young people develop the skill of interpreting life generously, it may be the single most important skill that anyone can ever develop, because difficulties happen, challenging events happen. There's so much that's a part of life, real life, that's unpredictable, chaotic, challenging, yet we always have ourselves, we always have our interpretation. And if we can take the challenges, the chaos, the difficulties, the pain, the struggle of whatever life throws at us and find ways of interpreting it in ways that serve us and serve others -- in other words, in generous ways -- we're going to have a much more joyous, happy, on-purpose, fulfilling life than if we interpret those things as a victim, or as something's wrong with us, or all the different disempowering and negative ways that we can interpret. That's why one of the most

important exercises in this entire course is learning to interpret in more than one way, learning to interpret generously, that you can take any memory in the past or any present moment experience and interpret it in more than one way. and when we start recognizing that, we realize, why would I interpret this in a disempowering or depressing way when I can interpret it in a more empowering way, or perhaps even in a completely inspiring way? That's the amazing thing.

CB: But to be able to do that, you first have to viscerally get how you are interpreting all the time, and how your interpretation's taking the exact same facts and sensory experience can be vastly different from other people who have the same experience. So, I'd like to give an example of something that happened just last week that I actually orchestrated in order to just test again how distinctly me my interpretations are, and how they're very different from other people. And I did this over something that really doesn't have any emotional content for me, so it was very safe. And that is, someone had sent me out of the blue a link to a YouTube video that was only 2.5 minutes long and had over 2 million views to it. She sent it to me just sort of, wonder what you think of this. And I watched it and found it very disturbing, and so I decided, okay, I'm going to ask her what does she think of it, and I'm going to ask another female friend of mine, what does she think of it.

Just a quick factual background of the context of this video, it was simply a video of a young woman, age 22, who was looking into a camera and ostensibly was recording a

video for an online dating service that she was going to use for the first time. And she got very emotional in it, and the only things that you learned about that she actually said was that she likes to run, and that she loves cats. She said, "I want to hug every cat. I love baskets of kittens," and then she started to cry, and she completely lost it, and that was about the end of the video. And I found that disturbing, so I asked the two others first what their stories were. And one of the women said that she viewed it as just an example, whether it was true or not -- she didn't know whether the person was asking -- but she said it's just an example of people who are making a parody of women becoming over-emotional. The other women wrote back, and she said that she had just come out of the garden where she was doing lethal battle with a couple ground squirrels for who was going to get her vegetables, and when she heard cats, she said, people just get overemotional about pets. We've got to get more back to a natural understanding of where we fit in nature.

And so then I wrote back to both of them and said, my interpretation, here's mine. I think that this girl, just gotten out of college, had been damaged by the hook-up culture, that she had never had a romantic, bonded, affectionate relationship with a man, and she was going infantile. She was remembering her love of cats, wanting to cuddle cats, a furry little mammal in her mind, was just wanting to have a real bonded relationship and have it not always devolve into sex. Now, I had just been writing the hook-up sessions for last session, session three's module, and so that was on my mind. And so, there you have it, an instance of how depending on our internal and external states, we're going to interpret the same sensory experience in very different ways.

MD: This is one of the things that's so vital to remember around religious language and experience. Human beings have always had experiences of awe, of mystery, of strong emotions. That experience then gets language in different cultures using different metaphors, analogies, symbols, interpretations, and then gets codified in some cultures in written form, and becomes sacred text and sacred stories and develops rituals and everything else. And it's vital to remember that all concepts, all thoughts of God and the Goddess or any divine language, and most sacred or spiritual language, are necessarily interpretive. That is, whenever any culture speaks about, God said this or did that, or the Goddess said this, or anything else, what you're always reading about 100 percent of the time, no exceptions, what you're reading about is an interpretation. It's what some person or group of people thought or felt or wished or sensed or interpreted reality to be saying or doing, and almost always is justification after the fact or to make a theological point. In other words, when you read in some scripture that thus sayeth the Lord, and then there's a quote, if CNN or ABC News was there to record this for the nightly news, you wouldn't be getting a disembodied voice coming down from the sky. What you're getting is somebody's interpretation of what reality is saying right now, what the circumstances are saying. And they often may even hear it as a voice in their head. And so interpretation is at the heart of religious discourse, religious conversation in the world.

Said another way, god is not a noun. The word God doesn't point to a being up there, out there somewhere, who speaks in human words. The word God is pointing to a

profound sacred interpretation, an experience interpreted in the human mind. And just that understanding itself can go a long way toward bridging our religious differences and helping us value religious experience and not make an idol of the interpretive language that carries that experience.

CB: When people reify -- that is, they make true in their own minds what their personal interpretations are, it can have devastating results. In 2004, religious leaders were asked to interpret why was there this big tsunami that killed all these people -- you remember the Indonesian tsunami that happened in 2004 -- and Michael and I both found appalling that it didn't matter what religion you went to, even the Buddhists in Sri Lanka, some of the religious leaders were finding some way to interpret it as an act of retribution by whatever particular God they happened to hold as being the power of the universe.

MD: And on a more practical note, there's nothing that fuels interpersonal conflict among parents, spouses, partners, at any level in the workplace than something happening, some experience, and then it's interpreted in different ways, and then the people themselves can't distinguish the difference between their interpretation and the reality itself, and then they fight over the interpretation as though they were fighting over the truth. And personally, I've found nothing more helpful for giving people the tools to think about that distinction than Landmark education's courses, so I recommend the Landmark Forum and other courses with Landmark in terms of gaining skill and

distinguishing fact, story, and interpretation. And that distinction, those three things, that events happen in the world, we tend to then tell a story about it -- we can't not do that, that's what our brains do -- and then we interpret that in a variety of ways. What's that mean, what's that story mean? And so please do read carefully the exercises, the PDF that goes along with the exercises this week. You'll see a little chart there in terms of fact, story, meaning, and read carefully. Don't just skim that, because it's going to be important, and if you take that in, it's going to positively impact your relationships, because you'll begin to see that this is what our brains do, what my brain does, what all of our brains do, and when we recognize that, we can start being a little more generous with each other.

CB: The way that I've found that distinction between fact, story, meaning to be absolutely vital is that it's very easy for me to go into disagreement mode with those I'm intimate with, primarily Michael, and move into an assertion of who's right.

MD: Said another way, you can either be right, or you can be in bonded relationship, but if you're being right, you're sacrificing bonded relationship. And to be in bonded relationship is to recognize, there may be more than one legitimate way to interpret this.

CB: And I've found that a tool that Michael and I both use, not to perfection but we've come around to it eventually, is that if it seems that there's a disagreement about what

actually happened in an interaction between us, or some sort of action that has caused a disagreement between us, the important thing is that we will always say, my story is. We won't just state it as a fact, when you did, then I did, no. My story is that you, and then this happened, and when we put it into the my story terms, the other person can hear it, because they may have a very different story, and when given the opportunity through the heart-to-heart process that we use, then they'll go and clarify that story, but they're not triggered and feeling that they immediately need to correct me on a factual thing that I apparently have wrong.

MD: And this will be the last time that I mention it, because I've already mentioned it a couple times, and that is please, if you have not taken advantage of Paul and Layne Cutright's offer for their heart-to-heart material, it is the single most effective tool that Connie and I have used to help us recognize that we have different interpretations and get back to passionate love, deep, heartfelt connectedness, and we really want to make sure that you have that opportunity to have that experience as well on a regular basis.

So, we always interpret, and given the fact that we can't not interpret, how can we interpret in ways that serve us and serve others? That's going to be the focus now.

CB: Basically the point is, if we're going to be interpreting anyway, particularly if something's already happened and you can't change the past, you might as well

interpret it in ways that's going to facilitate a better future. We'd like to give you a couple examples of that, and you're going to find them on the resources webpage for this session four module. One is a short video of the astrophysicist Neil deGrasse Tyson, who was talking about his childhood experience and how it was that he came to have not only a fascination with the stars and the universe, but to actually make that his career. And when I watched this, I was absolutely astonished with how this man took an experience that most of us would regard as being a deprivation of childhood, that would lead one to not even know stars existed, and he turned it into being an empowering interpretation of being grateful for it, thinking that he might not even be an astrophysicist were it not for that challenging situation he had.

A second thing you're going to find on the resources page regarding the importance of how we choose to interpret is an evolutionary parable that I wrote 10 years ago for Earth day, and it's called "Earth Had a Challenging Childhood."

MD: It's a fun parable, you'll enjoy it. Just this past week, a commenter, Julia, commented on one of the forum threads, and she said, I realize how many times chaos led to growth and new opportunities. The universe always seemed to provide me with the right people and situations for growth. Granted, there were times that I was rebellious and didn't pay attention, but sooner or later, having suffered enough, I was brought to my knees, and I now view all my problems as blessings in disguise." And she also comments that she's now in the autumn of her life. I think that's important to

recognize, the earlier we can get that lesson, the bigger difference it's going to make in the quality of our lives.

CB: Here's another example that I'm going to offer of, why not make an empowering interpretation, and that's that I have to say that during the last three weeks, when I've been working on session two, physical instincts with the supernormal stimuli, session three, our social instincts with the big component on infidelity and the problems that causes, and now session four on the problems with our interpretive brains and how we interpret differently and the underlying motives for those interpretations, I've actually gotten a little bit distraught on occasion. I've been thinking, it's all coming at me all at once. No wonder individually, no wonder collectively we have all these problems. Look at the challenges that our brain causes just because of the way they are. And so I decided, how can I look at this in an empowering way, and that is, I know what's going to happen in the fifth and final session -- that is, we're going to move to the prefrontal cortex. It's about our cocreative instincts, about our ability to have impulse control. There's a lot of good things that go on with that fourth and final part of our quadrune brain. And so I took a step back and said, all right, Connie, I can view this as the hero's journey, and maybe you'll want to do that, too. We're right now in the final stage, this session four, of real challenge, opening our eyes to seeing there's some real horror out there in the world, and just recognize that next week, we have an opportunity to bring our wisdom home for ourselves and others and celebrate.

MD: We want to pause here for a moment and offer two quotes from our great mentor Thomas Berry, who died a couple years ago, from his book *The Dream of the Earth*. He writes, "For peoples generally, their story of the universe and the human role within the universe is their primary source of intelligibility and value. Only through this story of how the universe came to be in the beginning ,and how it came to be as it is, does a person come to appreciate the meaning of life, or to derive the psychic energy needed to deal effectively with those crisis moments that occur in the life of the individual and in the life of the society. Such a story communicates the most sacred of mysteries. It not only interprets the past, it also guides and inspires our shaping of the future."

And here's another quote along similar lines, also by Thomas Berry. "It's all a question of story. We're in trouble just now because we're in between stories. The old story, the account of how the world came to be and how we fit into it, sustained us for a long time. It shaped our emotional attitudes, provided us with life purpose, energized action, consecrated suffering, integrated knowledge, and guided education. We awoke in the morning and knew where we were. We could answer the questions of our children. But now, that story is no longer functioning properly, and we have not yet learned the new story."

CB: So, there's a powerful example of the importance of interpretation, and that brings us back to reflection on our first session, your larger self, big history, and about how so many people in western culture learn the science of how the universe came into

being and that evolution happened and that we're related to apes, but either it doesn't mean anything to them, or it has a negative sense. That is, it can call up a sense of existential angst. And what Thomas Berry was such a leader in, and so many of us following in his footsteps is that existential angst, a sense of a meaningless universe, is no less an interpretation than an empowering and intimately relational sense that we can develop with the universe.

So, let's move deeper into the challenges caused by the fact that our rational brain, our monkey mind, is in service to deeper urges that we're not often aware of ourselves, and that is the problem of rationalization, post-hoc justification, and self-deception.

MD: It's basically recognizing that we've all inherited exquisite skill for self-deception. The human brain not only distorts perception and memory, it then uses its extraordinary powers to rationalize or justify the distortion. As my son Shane has said, it's as though our brain regularly tricks us and then masterfully hides the evidence.

CB: One of the great primatologists of our time, who works both with bonobos and chimpanzees, France Duvall [*phonetic*], has stated that reason is generally brought to bear only after a moral decision has been reached. He says, "Reasoning is post-hoc justification." So, let's take a look at the challenges of rationalization, post-hoc

justification, and overall self-deception, that is, where we don't even know that we're justifying, we think that we're explaining the truth of our choice.

Let's start with a quotation from one of the 20th century's most famous physicists, Richard Feynman.

MD: "Science is what we do to keep from lying to ourselves," and where he's going there is that why science can be understood as humanity's collective intelligence is that because we as human beings individually and we as human groups collectively have a propensity to deceive ourselves, it's taken a global community from people of lots of different traditions and cultural backgrounds and philosophies and religions and whatever working together in the same enterprise to try to prove each other wrong, to try to test each other's ideas, the skeptical mindset, the mindset that says that may be true but maybe not, and attempts to show it wrong, is absolutely vital for self-correcting so that we don't deceive ourselves in our understanding of what's true, for all of us, whether we're religious or not religious or whether we're Hindu, Buddhist, atheist, or whatever. And so that's why it is true that science is what we do to try to keep from lying to ourselves.

CB: Occasionally, we'll read something in the news about one scientist or another being caught in actively manipulating the data in an intentional way in order to get the

outcome they were looking for, but more important than that is a facet of the way the human brain works, in which we're not intentionally doing anything wrong, immoral, or evil, but we're just seeing and interpreting things in different ways. Just two days ago, the *New York Times* had both an article on the science pages and an editorial that questioned the legacy of Stephen Jay Gould, not only one of the great paleontologists of the 20th century, but someone that a lot of us look to for translating the importance of what science was discovering into what it meant for human society. And what was disturbing about that was that the conclusion was drawn that in an essay he wrote in his 1981 book *The Mis-Measure of Man*, where Doctor Gould was contending with a previous researcher who had collected skulls from different ethnic groups and different continents and concluded that Caucasians were at the top of the heap, Gould concluded in his essay that the racist bias that this scientist had was influencing how he made his measurements and how he interpreted the data. Gould has been dead for about eight years now, but another group went back to those same skulls, did the measurements, and discovered that Gould himself may have been subject to what's called confirmation bias. That is, he assumed that because the initial researcher had made racist proclamations, that he must have been measuring wrong, and what the new scientist found is, he hadn't. And so, what we were led to was whether Steven J. Gould himself was unaware of self-deception, given his own biases. I'll link to that from the webpage, you can learn more about that if you're interested, but it's just a sterling example of, no matter how wonderful the intent of someone, and how objective they feel that they are, it does require a community of peers, accountability, other perspectives to

make sure that the data gathering we're doing and then the interpretation of that data really are as free from subjective bias as possible.

MD: It also points to the necessity of course of having multiple perspectives on any important issue, and multiple interpretations, because it's the diversity of perspectives and interpretations where some more accurate understanding can emerge.

CB: This whole effort on my part of moving deeper into the online available resources and literature on the pervasiveness of self-deception and rationalization has led me to have a new appreciation of one of the major tenets of Buddhism, which previously I hadn't appreciated at all, and that is the sense that the world is illusion. Working in the sciences, I know the world is not illusion, but I do see that our ability to perceive the world as it is does require humility that our own subjectivity may come to bear, and thank goodness the scientific community is open to change as cultural subjectivities change and as data is retested and reinterpreted.

Again, remember we're on the hero's journey here, and so we've got a lot of dangerous and unpleasant situations to go through before we finally come out with the prize. So, moving deeper beyond self-deception, there's the whole disjunct between the conscious parts of our brain and the unconscious parts of our brain, and that is, it's well-known that it's very difficult to know what your emotions are except through your sense of bodily

experiences. That is, when hormones are released, you can feel it bodily as to what kind of emotion you're experiencing. So, it's difficult to know -- that is, for your conscious mind to grasp and understand and explain to yourself what this emotion is and why you're feeling this way. It's another step altogether to try to put that into language and explain that to somebody else. That's where so many of our relationship conflicts come in, is the inability to be able to explain what that emotion is about, and what brought it up.

Now, an immensely practical understanding of what's going on with the neocortex was only discovered in 2001, and this is what's come to be called the default mode network. And this has huge implications for anyone involved in spirituality in any form, especially anyone involved in meditation or those who were viewing the importance of being in the present moment as much as possible, and that's that the default mode network, what we commonly refer to as daydreaming or mind-wandering or the sort of thing that goes on when you're driving a car on a route that you've driven many times before, and suddenly you realize that you haven't been conscious for the last five minutes, you've been on autopilot, doing just fine as a driver, but it's a lower part of your brain, because instead you've been ruminating, thinking about a problem, or you've just been daydreaming. That's your default mode network, and here's the really important thing to understand -- not only is there nothing wrong with that, but what scientists discovered in 2001 is that that's where our greatest creative associations come from. That's where we suddenly get an idea or we suddenly have a decision made for us where we finally know what to do with a problem, where it just feels right. There has to be an amount of

time for the brain as a whole, coordinated through the neocortex, of mining the old memories, checking it out with how it feels emotionally, bringing it back in, creating scenarios. That's where it happens, and quite frankly, we don't want to be in the present moment all the time.

MD: Along these lines, one of the most important blog posts that I've actually written in the last couple years was titled *Evolutionary Spirituality: Coming Home to Reality*, and I wrote it in preparation for my interview with Craig Hamilton on a free teleseminar that he was offering a couple years ago, and I started this way. The first paragraph was a little provocative. "The present moment is highly overrated. From an evolutionary perspective, the past and the future are where it's at. Any aardvark, antelope, cat, or cockroach can effortlessly reside in the present moment. Only human beings can engage deeply with the past and consciously cocreate the future. By doing so, by looking outward with aims of bettering our world, big or small, we also walk a path that leads to inner fulfillment." And then I go on. We'll link to that on the resource page.

CB: What you may see in my selection of this understanding of default mode network may have an element of confirmation bias to it. Throughout my career as a science writer, I have always valued the importance of putting myself in situations where my mind can wander. I know when I was working on my last book, I would often take bike rides not just for getting the physical activity in the evening, but I'd encountered some sort of a problem in the writing or research that I didn't have a solution for, and yet I

knew if I just would ride 10, 20 miles and let my mind wander as I went through the beautiful scenery, something would often emerge.

MD: I've come to call such unexpected insights that just pop up when my mind is wandering or daydreaming or ruminating, I call them revies, like revelations. Sometimes I'll say to Connie excitedly, "Let me share this revie with you."

CB: The default mode network is so important that it's been discovered by scientists very recently that it's seriously disrupted in people who have autism or Alzheimer's. Jessica Andrews-Hanna is a science writer, and she writes, "The term mind wandering has been given a bad rap. Mind wandering can be very adaptive and functional. When we daydream about the past, our brains may be consolidating these memories so that we remember them better later. When we daydream about the future, we may actually become better prepared to confront the event we're daydreaming about."

So, that brings us up to a really important point given what we're trying to do in this online course, and that is to take our best understanding of evolutionary brain sciences and take a new look at meditation. I'll give you a story. A couple years ago, Oprah Winfrey had an audio series with Eckhart Tolle, going chapter by chapter, week by week through his book *The Power of Now*. And I remember at one point Oprah confessing that so often, she finds herself just walking up the stairs and not being in the present

moment. Her mind's wandering. And she says, "I try to stop myself and say, I'm walking up the stairs now." And even before I knew about the default mode network, that bothered me. That kind of intrusion into trying to be in the present moment all the time and having that be a spiritual aspiration felt wrong to me. It felt like it was making too much effort, and now with the default mode network, we know that there is a role for meditation, but you don't want to take the implications of being in the present moment and thinking there's something wrong if you're not in the present moment while you're washing dishes.

MD: That's all we're going to say right now. We're not beating up on meditation. It's got a tremendous value for many people, but do take a look at the 2009 *Vancouver Sun* article that we have on the website called "Meditation: The Dark Side." It's important to recognize that as well.

CB: So, there's one more aspect of the challenges that our neocortex, our monkey mind, can bring to us as individuals and our society. It harks back to a concept we learned in session two, supernormal stimuli, and that is two forms of addiction. One is gambling addiction, and the other is online or video gaming addiction. Any of you who are parents of teenagers, particularly teenage boys, whether it's your own son who's experiencing the draw of video gaming, or whether it's the son of someone you know, this is something that previous generations we just didn't have available to us as a possibility for going down the wrong path.

Now, both gambling and gaming addiction involve the neocortex because they involve success in figuring out puzzles and problems and moving ahead. The problem there, it's the same thing you get from cocaine. It's a tremendous dopamine hit that comes not from the actual winning but from the anticipation of winning. I was amazed to discover that just with respect to the annual Super Bowl in the United States, it's estimated that \$7 billion is gambled.

MD: That's \$7 billion. That's an extraordinary amount of money.

CB: And while we're on the topic of gambling, scientists have recently discovered that one of the main drugs used to treat Parkinson's patients is making them far more susceptible to gambling addiction than people who aren't on any drugs at all.

MD: So, if you or anyone you know of is dealing with Parkinson's, don't go anywhere near a casino or gambling in any form, seriously.

CB: So, gambling addiction has been around for quite a while, but something that wasn't available at all for my generation when we were adolescents and young people was gaming addiction. I did a little online search, and there's now new recovery groups

called OLGA and OLGANON. That stands for Online Gamers Anonymous, and of course the Anon version is for those affected. There's also a webpage I found that was called Gaming Widows, and it's for those spouses who have either divorced or feel like they might as well be divorced, because their husbands and wives spend so much time gaming online.

MD: In preparation for our discussion of gaming, we interviewed my son Shane, who's now 26, and in his late teens and early 20s, he struggled pretty mightily with gaming addiction. And so he'll share his perspective, especially now that he has an evolutionary understanding of our brains, our instincts, and the challenges of living with mismatched instincts in a world of supernormal stimuli.

CB: So, here's a clip from our conversation with Shane Dowd.

[Begin clip of Shane Dowd interview]

Shane Dowd: A lot of my real-life friends actually did play the game with me. It was an online game. Sometimes you'll have a game that's you against a computer program. This particular game was you against other real-life people online, and everyone has their own character and is part of a team. And I got into that sometime during high school, I don't remember exactly when. I think one of my friends got me into

an earlier version of the game, and then I started playing the updated version and played it all throughout high school and halfway through college before I kind of realized the impact that it was having on my life and that I needed to stop playing it, basically.

MD: If you could say a little bit more in terms of, what did it do for you while you were playing it, typically how many hours a day or a week did you -- did that ramp up over time? Sort of, what the benefits were and the impact, both positively and negatively, were.

SD: When I started in high school, I probably, when I wasn't in school I was either playing the game or interacting with the other people who played the game online and online forums and chat rooms and things like that. And I was also an athlete in high school, so it's not like I went home and just played the game until school the next day, or something. I was on the soccer team, and I would go hang out with my friends and stuff like that. So you know, just a couple hours after school, but often, you know, late into the night sometimes after soccer practice or whatever. And the impact of that, it had a big impact in high school, because since I was devoting so much time to this online world and those people, I wasn't doing schoolwork, and so much so that my grades suffered significantly, and I think my sophomore or maybe junior year of high school, my grades suffered to the point where I was not eligible to play on the varsity soccer team, which was really embarrassing for me because all my friends were, and I was one of the better players on the team, and yet I couldn't play because I had a 1.9 GPA or something like

that. And so that, it was a little bit of a wake-up call, but even still it wasn't enough to make me quit the game or anything like that. I just did a little bit better in school, got my grades up a little bit, and kept playing, which I think speaks to the power and pull of this particular version of supernormal stimuli.

CB: And clarify something here, and that's that when you didn't make the varsity team junior year because of your grades, how did you keep playing soccer?

SD: I could play on a club team, because that didn't depend on my grades, and then the next year, my grades had bumped up enough where I could then play my senior year.

CB: Okay, so that was a wake-up call there, and you did then buckle down so that you could be on the varsity soccer team.

SD: Yeah.

CB: From what you know now, you've been learning a lot about evolutionary brain science and psychology, when you look back on your gaming days, what were you getting out of it that despite the consequences kept you gaming?

SD: There was a lot. It was fun. A game is basically like being placed down in the middle of the best action flick that you've ever seen, and being able to interact in that world and do all the things that you can't do in real-life. And so, it's just plain fun. It's just like a great movie, it's supernormal stimuli compared to the real world. But what kept me playing for so long with such a high level of engagement was also the social aspect of it. When you weren't playing the game, you were talking with either your online friends or maybe your real-life friends that also played the game, but you were chatting with them online and you were talking about the game, talking about how to get better at the game. In a way, it's kind of like Facebook. You're relating with your friends, but it's a couple steps removed from actually relating in the real world, because there's not all the subtlety and nuance that goes along with interacting face-to-face with another human being. There's no body language, there's no intonation of your voice. Still, you feel like you're bonding with those people, your teammates and your friends, but there's also no risk of social rejection, which for a high schooler is a major concern. I'm getting all the benefits of bonding with these people and engaging in a team sport with them -- it's an online team sport -- so we're bonding over that, but if I do something that's a social faux pas or piss someone off or someone doesn't like the way I am or something, they can't really cast you out of the in-group.

So, I think that was a big reason why it was so compelling, because there was no social risk. And for a high schooler, your life is about which clique are you in, who's your friend,

are you a popular kid or a jock or nerd or this or that. When you're part of an online community, you can create yourself to be whoever you want people to think you are. And it's like a running joke that some of the most socially awkward kids that you'll ever meet in real-life, that don't have the social abilities, they can tell everyone online that they're the captain of the football team and dating all the cheerleaders and rich and cool. So, you can create yourself to be whoever you wish you could be in real-life, because no one can see you in an online game.

MD: I'm curious, how did you allow this to not have negative influence in college, or did it?

SD: It really did for the first two years. I got my grades under control. I got that handled to where I could get better grades in college than I did in high school, but the biggest impact was on my relationships, especially with -- I had a girlfriend I'd been dating in high school and I was dating in college too, and whenever I was in the middle of playing a game and she would call or come over or something, it was like I didn't want to be pulled away from my game. If she was calling, I'd be very short with her on the phone, just one-word answers, uh-huh, yeah, okay, uh-uh-huh, and so I wasn't investing into our relationship, which ultimately was one of the major reasons we broke up, which broke my heart. But, that was the wake-up call I needed to see, holy crap, all the time that I'm investing in this is impacting my life so much that the girl that I love doesn't want to be with me because I'm not giving her enough time and attention.

CB: I've seen websites that are gamer widows, and that's where the spouses or partners of -- it's generally men who are in the category of addiction for games -- will go online and support each other, and also the divorces that come as a result of it.

SD: Yeah, it's a huge time-sucker, and because it is supernormal stimuli, it's better than a lot of things that you can do in the real world, and so the pull of it is immense. There's even games now that are potentially more addictive than what I was playing, and I think you can make money a little bit with some of the games, so that's just one more reason why people justify playing it more and more. And so, it's a time-sucker, but it also impacts your mood. I noticed I was more irritable when someone wanted to have me focus on them rather than what I was doing.

MD: It's interesting, I was just having a conversation with somebody the other day -- or actually, it was an interview -- and I was reflecting on this whole notion of having mismatched instincts in the world of supernormal stimuli, which is at the heart of this Evolutionize Your Life course.

SD: Yeah, I think that it's especially difficult if you don't have an understanding about the way our brains evolved and supernormal stimuli, because it's kind of the social norm that young boys play video games, and that's just totally fine. It's a fun thing for them to

do in their free time, and as long as it doesn't get too time-consuming and crazy then it's a perfectly fine, healthy, normal thing. But, just reflecting on my own life and seeing the impact on my grades, seeing the impact -- it didn't really have an impact on my physical fitness because I was involved in athletics, but I know for a lot of people, it has a big impact on their fitness, and it has a big impact on their relationships. And actually, now that I'm thinking about it, I think the biggest long-term impact on me was, because I was spending so much time interacting with online people and not real-life people, some of the social skills that a normal teenager would've picked up I think got delayed in me. And I was never one of those awkward kids that had no friends and couldn't get along, because I was social before I got into video games, and I was still involved in sports and had my friends and things like that, but I do have a general sense that being able to pick up on subtle social cues and have social intelligence was blunted, and I had to consciously develop that in myself later in life by having more face-to-face interactions and taking transformational education and doing personal growth work and soliciting feedback from other people to see how I occurred to them, and proactively developing social skills. And I fear that people that aren't as motivated to do something about the social awkwardness that they feel might have that impact of not having those skills developed last maybe their whole life.

CB: Wow, that's something I hadn't thought of, because frankly, looking back at the email that you initially sent, and also at the Ted talk by Jane McGonagall, who is a creator of video games and a supporter of them, I got the sense that a lot of what's going on in the video games, it's like you wish that you could get real-life to be able to

provide teenagers and young people with those same things -- pride of accomplishment, the ability to feel that you're ramping up your skills, to care about how you're viewed by team members, and to have a real forge of teamwork there. And one thing you wrote, you said one of the main things about it is that when you do fail in a video game, you get killed or fail to accomplish something, you can immediately get back up, and like you just mentioned, if you tarnish your reputation you can reenter the game under a new avatar name, and nobody knows it's the same person, and you can recover from social faux pas. Whereas, in the real world, you said when something happens where you make a mistake, you can come out of it saying, I'm a failure, why try again? And that's what I think Jane McGonagall was emphasizing. She says, let's take a look at the gaming, and rather than fretting and tutting about this is taking away from their schoolwork, why don't we look at it instead and say, what's attracting these boys to lose sleep and to be on these games, and can we restructure the way school happens such that we're having this same kind of draw and stimulating the character for teen comradeship?

SD: Yeah, it's a really interesting perspective, because you can't deny that gaming and all supernormal stimuli have an extremely strong pull, so it's kind of like okay, instead of condemning that and making it wrong, how do we use that to our advantage? How do we take all the best parts about gaming, like being able to incrementally get better and develop skills, being able to have a sense of accomplishment and victory, and to collaborate with other people and be part of something, be part of a team, which

taps into our social instincts, how do we use that without the detrimental effects that supernormal stimuli often has?

I think the first step after just educating yourself about what is really running the show inside your brain, which is most of the time your inner lizard and chimp, is to find a way of coming to a place of compassion for how powerful those draws and urges are, and realizing that you couldn't be any other boy, and your son or daughter or spouse or whoever's addicted can't be any other way, because those urges have evolved for millions of years and are that powerful. And then after you can come to a place of compassion for yourself or them and a reverence for your instincts, the next question is, then what? What do you need to put in place, or what do you need to remove or take away so it's not a draw, or where do you need to put yourself where you're not tempted because you know how powerful it is and you have a respect for that? I think those are the first three things, the knowledge, compassion, and honoring, and then it's the structures you need to put in place to make healthier, wiser choices for your life.

[End clip of interview]

CB: That was Shane Dowd. If you'd like to hear our entire conversation, it's linked from the resources page for this session. I might mention that one of the things I gained from that recent conversation with Shane was just a reinforcement of the importance of

not just assuming that an addiction is something that you work on taking away, but the importance of finding healthy substitutes for that addiction, a thing that can bring about the same sort of missing needs, but without using supernormal stimuli that can be dangerously habit-forming.

MD: So, in light of the challenges that come with our monkey mind, what can we do about it? How can we turn these challenges into opportunities, into a blessing? Well, even that question, how can we take a negative thing and make a positive thing out of it, is an interpretive process, and that's one of our exercises. So, here are the five experiential exercises for this week, and as I've said before, if you want to experience the transformational power available through this understanding, you have to do the exercises. So please, take time to read the document, because there's a lot more than just the exercises. There's a lot of important content in those pages, and then these exercises.

The first is the exercise of noticing, not thinking, that those are two different brain functions. The brain function of noticing reality, noticing what we can sense, and thinking is a different thing. So, it's the exercise of paying attention to two or more sensory stimuli at the same time, and that's what quiets our mind, quiets that thinking, interpreting part of our brain. So, that's the first part of our exercise. Exercise 4B is exercising that muscle of interpreting. It's re-storying your past, and please take the time to do that with at least one or two of your memories. Exercise 4C has to do with saying

okay, here's what's real, now what's possible? And again, that may be one of the most important tools that you'll have in your toolbox for having a great life, is to recognize okay, here's what's real, now what's possible? Exercise 4D, anybody who's ever been in any kind of self-improvement or recovery process will recognize these last two exercises. The first is getting real with yourself and another without shame, because again, when we understand our instincts, we can have appreciation that we wouldn't even be alive if our ancestors didn't have these very same instincts that didn't give them a problem, maybe, but they can give us some serious problems. So, having gratitude allows the shame to evaporate. And then we recognize that simply telling the truth to ourselves and at least one other trusted person, the freedom that comes from that release of guilt and shame and of holding the secrets, we don't have to hold those secrets anymore. It's the spiritual discipline of confession, or in a 12-step recovery, it's step four and five.

And then finally, and again in the 12-steps, it would be steps eight and nine, but freedom is responsibly and generously owning your wake. There's nothing more freeing in a person's life than beginning to take responsibility for their wake, because we've all left a wake. We've all harmed people in the past, we've disappointed people in the past, we've betrayed or let down people, we've broken agreements, we haven't cleaned it up. And when we can begin doing that, there's something absolutely freeing about simply going to someone and saying, I want you to know that I know what a negative impact that I had on you, and if I could go back and do it again, I'd do it differently. So powerful. So please take the time to do these exercises. If you can find somebody else to do them

with, all the better, because that's where the power comes. That's where we experience the freedom, the peace that passes understanding.

CB: So, what can go right when we learn about and get real about the gifts and challenges of our neocortex, our monkey mind?

MD: Here's our intended outcome, assent. I accept that the new mammalian rational part of my brain evolved in my primate ancestors to help the old mammalian and reptilian brains to more effectively get what they want. I recognize that I and others may unknowingly slip into rationalizing a choice or action that is driven by powerful unconscious urges.

CB: Appreciation. I'm grateful for my interpretive instincts. I'm immensely grateful for the opportunity to recall almost any event in my life and reinterpret it in generous and empowering ways.

MD: Honor. I honor my interpretive instincts by remaining open to new evidence and by truly listening to others. I'm humbled by the possibility that self-deception and confirmation bias may infringe on my better judgment. I honor my default mode network just by letting it run on its own when engaged in "mindless" or routine tasks.

CB: Witness. I'm alert for signs that an interpretation or judgment I make may be an error or self-deceived. I notice when I keep reciting inwardly or outwardly the same complaint or make less than generous interpretations of myself and others. I do not make those tendencies wrong, yet I know I am responsible for how I interpret.

MD: Compassion within safe boundaries. I have compassion for myself and others, and I know the importance of safe boundaries.

CB: Joy. I joyfully exercise my primate instinct to figure things out, and my human instinct to weave stories and meaning from the facts that my senses perceive. I can enjoy my reasoning abilities in my work and in the puzzles and gains that I pursue in my leisure without having my life consumed by these activities.

MD: And societal benefit. In my societal interactions, I'm aware of the tendency to collapse fact, story, and meaning, and to rationalize a judgment already made. I look for opportunities to gently point out these distinctions in situations in which my voice can make a difference.

CB: So, that's it for our introduction to session four on the interpretive instincts.

MD: Signing off, Michael Dowd.

CB: And Connie Barlow.

[End of recorded material]