

Shrink Rap Radio #330 – Unlocking The Emotional Brain with Bruce Ecker, M.A.

David Van Nuys, PhD, aka “Dr. Dave”, interviews Bruce Ecker

(Transcribed from www.shrinkrapradio.com by Gemma Sidney)

Introduction:

My guest today is psychotherapist and author Bruce Ecker, and we'll be discussing his work on eliminating symptoms at their roots using memory reconsolidation. Bruce Ecker, M.A. and licensed marriage family therapist is co-originator of coherence therapy and co-author of *Unlocking the Emotional Brain: Eliminating Symptoms at their Roots Using Memory Reconsolidation*. He has also written a depth oriented brief therapy *How To Be Brief When You Were Trained To Be Deep and Vice Versa*, as well as the book *The Coherence Therapy Practice Manual and Training Guide* and the forthcoming *Manual of Juxtaposition Experiences: How to Create Transformational Change Using Disconfirming Knowledge in Coherence Therapy*.

He is in private practice near San Francisco, California and has taught in clinical graduate programs for many years. His publications and conference presentations since 2006 describe how therapists can make use of the new neuroscience of memory reconsolidation to bring about deep transformational change regularly and consistently.

Now here's the interview.

Interview:

Dr Dave: Bruce Ecker welcome to Shrink Rap Radio.

Bruce Ecker: Thank you Dave. Glad to be with you again.

Dr Dave: Yeah, again is right. It's great to have you on Shrink Rap Radio because I've had two previous fascinating interviews with you on my other podcast Wise Council which unfortunately I'm no longer doing. So I'm really glad to have this opportunity to share you and your very exciting work with my Shrink Rap Radio audience.

Bruce Ecker: Thank you. Thank you.

Dr Dave: Yeah. Well congratulations on your new 2012 book *Unlocking The Emotional Brain* which you have co-authored with Robin Ticic. Am I saying her name right?

Bruce Ecker: Ticic.

Dr Dave: Ticic. Robin Ticic and Laurel Hulley. It's all about the use of memory reconsolidation in psychotherapy which we spoke about two years ago in our conversation on Wise Council, but now you've really moved ahead and created a written resource which will be of great value to therapists of all stripes I think. How challenging was it to get it all written down?

Bruce Ecker: Oh that's a whole story in itself. The book went through a series of evolutions until we finally came to the form it now has. So yes it was quite a project for all three of us. It was about three years of evolving the book and then about a full year of intensive writing so yes, and about twenty years of developing our clinical know how in using this process have poured into this book. So really we've tried to make it an embodiment of quite a comprehensive, new and very advanced body of knowledge.

Dr Dave: Yeah, and that really comes through. You, in the book you're dealing with some fairly complex information about the brain and also about how to do this particular approach to therapy and I can tell from reading some of the forward and the acknowledgements I guess that you really had to run it through a whole bunch of people to kind of get the explanation down in a really clear way and I can see just how challenging that would be.

Bruce Ecker: Yes. We had to develop as writers as well as thinkers to create this book and you're exactly right. We were working very deliberately to learn how to write in a very readable and engaging style in a way that explained very complex and sophisticated ideas and well I hope we succeeded.

Dr Dave: Well I think you did. The first time we spoke about memory reconsolidation in one of our earlier interviews it was a new concept to me. However, it seems to be an idea that is really catching on and that I'm now encountering in other interviews and books. For example the interview just prior to this one was with noted researcher Jaak Panksepp who used it as a possible theoretical underpinning for the effectiveness of EMDR to treat some traumatic surgical experiences that he had personally gone through. So before we go any further I think we should have you tell our listeners just what we mean by memory reconsolidation.

Bruce Ecker: Very good. Well reconsolidation means that the synapses of a target emotional learning are unlocked for a limited time of about five hours which allows new learning to directly rewrite and erase the target learning and then the target learning actually no longer exists. So that's what reconsolidation does. It allows new learning to directly erase existing learning and really that's the ideal form of therapeutic change. And according to current neuroscience, only the reconsolidation process allows new learning to eliminate an existing unwanted learning. If you don't first

launch this reconsolidation process and unlock those synapses that store the target learning then new learning just sets up separately and competes with the existing unwanted learning and the new learning seldom wins that competition for long because the unwanted learning is always emotionally very powerful or urgent. So relapses occur.

Dr Dave: A new learning for me as I hear you say this is that the window is open for as long as five hours. Somehow I previously was under the impression that it was a much narrower window of only minutes at the most.

Bruce Ecker: Well there's quite a few research studies published by neuroscientists demonstrating a window of about five hours. When they tried certain things at six hours no the memory is reconsolidated. It's, the window is closed. The synapses have relocked and the target learning is no longer susceptible to change. But up to something under six hours, that's why I say five hours, the target memory is changeable thanks to the reconsolidation process.

Dr Dave: Well this is a fairly remarkable discovery I think and the way that you've extended it to psychotherapy is equally remarkable. And also I would imagine you've had to get a whole bunch of neuroscience, a lot of this information under your belt which probably wasn't any part of your original training. Would I be right about that?

Bruce Ecker: You are right about that. In 2005 we began a systematic intensive study in reading of original neuroscience research articles in neuroscience journals searching for whether we could find some established neurological mechanism that might clearly correspond to this sequence of experiences that we had identified that was always associated with these powerful transformational change events that we would observe in our sessions. About ten years earlier, well more than ten years earlier, in the early nineties we had come to this sequence of experiences which became coherence therapy because we had identified that it's this sequence of experiences that appear to be always happening when our clients would have profound change events where they describe a deep and emotionally felt and bodily felt shift and long standing symptoms would cease to happen. So in, well it was 2005 when we decided, you know, we need to see if there's a neurological mechanism that could make sense of this sequence of experiences on that neurobiological level. And we found reconsolidation in the research literature as part of that search and so ever since late 2005 I have been intensively studying neuroscience reconsolidation research articles so I've studied, you know, many dozens, very closely. I'm a former research scientist myself. I was a physicist long long ago. For about fourteen years I was a research physicist so I'm right at home with, you know, digging in to the details.

- Dr Dave:** Ah that helps to explain it for sure.
- Bruce Ecker:** Yeah, yeah, it really does. I'm not sure I could have done this without that background.
- Dr Dave:** Yeah.
- Bruce Ecker:** So yeah. I've immersed myself in, and this, the reconsolidation research is very very complex. There's a lot of subtlety. It took me five, six years until, really until we began writing this book about a year and a half ago now, to finally iron out all the wrinkles and confusions that were so easy to have in understanding this material. And then we just poured again, poured this understanding we've come to through this intensive study, into the book. Chapter two of the book in particular, if you've noticed, is where we condense, again hopefully in a very readable form, an explanation of the research and what it means for psychotherapy.
- Dr Dave:** Yes, now you've written that psychotherapies in general have benefitted from recent brain research, both prior to the discovery of memory reconsolidation and sense. So it's sort of BC and AD you know. What were the primary neuroscience learnings from therapy prior to the discovery of memory reconsolidation? You say that psychotherapists were already drawing upon information, you know, what was at that time the latest information about the brain. So how was that prior to memory reconsolidation? What was being drawn upon and getting incorporated into therapy?
- Bruce Ecker:** Yeah, yeah, very important things were already being incorporated. Let's see. But perhaps, perhaps at the foundation is this recognition of implicit memory and how so much of what had been regarded in a somewhat mysterious manner as the unconscious starting with Freud has been translated into an understanding of implicit memory, which is what really what I'm talking about when I use the phrases emotional learning and emotional memory. Those are implicit forms of memory. It's a very curious type of memory. It's very different than what we usually mean by the word memory. Normally we would mean remembering the experiences in our lives, situations, circumstances or remembering facts such as, you know, eight times five is, what is it Dave? Forty? So...
- Dr Dave:** Don't put me on the spot like that.
- Bruce Ecker:** Well you're going to put me on the spot. I've got to find ways to do it back a little bit. Come on.
- Dr Dave:** Ok, fair enough.

Bruce Ecker: So that's explicit memory and that's usually what we mean by memory and that's how we think about the word memory. But an implicit memory is very very different and it's very important for therapists to understand implicit memory and that's a bit part of what we got from neuroscience before reconsolidation. Implicit memory is learnings and knowings that you have without being aware of them whatsoever. Whatsoever.

Dr Dave: Yeah. Great.

Bruce Ecker: Now we're all really familiar with it without realizing it because it's implicit memory that lets you form the words of your next sentence for example, knowing how to structure a sentence. That's very subtle sophisticated complex knowledge we each have that we're not aware of having. We just use it as needed in the moment. So that's a good way to think about implicit memory. You know the emotional brain learns by extracting patterns or templates. It doesn't remember necessarily the details of the situation in which the learning occurs but it remembers very very durably. In fact forever unless reconsolidation happens. The pattern is extracted from experience and applies those in the present. So that's one big, yeah, go ahead.

Dr Dave: Are there any others that come to mind? I know I didn't prime you for this ahead of time and I know there was a place in the book where you listed probably six or seven things prior to memory reconsolidation that were, that were starting to impact how therapists think and...

Bruce Ecker: Yeah, yeah there are several. There's the understanding that because the brain's responses, the emotional brain is based in certain brain regions, there's the recognition that we can use, therapists can guide responses and knowings and strengths that are based in other brain regions. So much of psychotherapy for example, I think much of cognitive behavioral therapy is based in the principle that we can use higher, what are usually called higher brain functions, the cortex and the neocortex and conscious thought and positive thinking is another system that uses the brain's other regions, other than the emotional brain to cultivate and strengthen preferred responses, preferred thinking, preferred behavior, preferred moods and to build those up to override and suppress. The word usually used is to regulate the unwanted responses coming from the emotional centers of the brain which are in the subcortical region, the amygdala and its associated regions and the limbic system and the right hemisphere too has important emotional brain regions. So that's another one of the major inputs from neuroscience, the neurological validity of using conscious cortical resources to override and suppress these emotional brain responses. Now that is, that last thing I just described is what is perhaps most impacted by the new knowledge of reconsolidation.

Dr Dave: How so?

Bruce Ecker: Well, reconsolidation tells us that overriding unwanted responses from the emotional brain is not the best you can do. Before reconsolidation it did seem to be the best we could do. In fact right up until the, into the nineties, the nineteen nineties neuroscientists as well as psychologists based on almost a century of research had come to the conclusion that once an emotional learning and an emotional response is formed and put into long term memory in the emotional brain. It's permanent for life. It's indelible. It cannot be erased. So if that were true it would mean that indeed the best you can do in therapy is to form preferred responses and strengthen them enough to where they can override the unwanted responses based in emotional memory in the emotional brain. But with the discovery of reconsolidation, boy it turned the tables. It was really a revolutionary finding because it means that emotional learnings in the emotional brain can be erased after all. There is this built in neurological process in the brain that that can do that. And that means that that counteractive approaches, so the kind I've been describing where you override unwanted responses and suppress them and regulate them is not the best you can do to eliminate unwanted responses based in emotional memory. You can actually eliminate, delete, erase the very roots, emotional roots and neurological roots of unwanted emotional responses through the reconsolidation process. And that's why we see it has just having massive implications for psychotherapy.

Dr Dave: Yeah, but the trick, and it seems like in hit or miss sorts of ways that various therapies and therapists have maybe capitalized on that phenomenon unwittingly in the past and the trick seems to be to really get into that five hour window in a way that's effective and we'll be talking about that in more detail. You point out that emotional memories, the kinds that you've been talking about lead to implicit assumptions or schemas about reality that affect our current lives and I was surprised not to see a reference to Albert Ellis. Didn't he also talk about our unconscious beliefs as underlined neurotic symptoms?

Bruce Ecker: Oh certainly, certainly. Many, many important therapists and clinical thinkers and writers for a century have have developed that understanding and so our book is not at all an attempt to give an adequate acknowledgement or coverage of all the different sources of this recognition that...

Dr Dave: Yeah, you, you acknowledge so many other people, I mean it's extensively referenced and it stuck out to me because his rational emotive therapy or RET as he called it does point to the emotional component, but personally I think he relied maybe too much on this argumentative rational

approach rather than really evoking the underlying emotional memory. What's your take on that?

Bruce Ecker: You have put your finger exactly on it. In other words I agree completely that that's the big difference and that's why he's not part of our picture. Which is not to detract from his importance in the history of psychotherapy but that's exactly it. The method, the techniques, the style of doing therapy in RET, Rational Emotive Therapy, has that character. I think that's widely recognized. That's nothing new that I'm saying about it or you're saying about it. There's that argumentative, convincing, disproving on a kind of cognitive talk level against the existing beliefs which are called irrational, maladaptive, pathogenic beliefs right?

Dr Dave: Yeah, yeah.

Bruce Ecker: All those sorts of pathologizing terms are used, not only in RET, but very widely in the therapy field still and you may have noticed in our book in *Unlocking the Emotional Brain* we never use any of those words once.

Dr Dave: Yeah I definitely did notice that. You kind of underscore, you underscore that and I think it's also embodied and in the name of the approach. You've come to call your approach coherence therapy. I gather that's not what you originally called it. Why the change and what does it signify?

Bruce Ecker: Well the change signifies that...

Dr Dave: What was it initially?

Bruce Ecker: Initially it was depth oriented brief therapy, which is also a good description of the approach. But we changed it to coherence therapy mainly because we really wanted to put the emphasis on coherence. We think this approach contributes importantly in that well I think therapists of all stripes recognize at this point that we human beings have a very central need to create coherent narratives of our experience, conscious, coherent narratives. And there are therapies that are largely focused on exactly that. What we're contributing is the recognition that the unconscious emotional brain, the whole domain of implicit knowledge and implicit learning is also fully coherent. When you do the experiential work of bringing directly into a client's awareness the specific unconscious or implicit emotional learnings underlying and driving a specific symptom those learnings, that deeply emotional initially non-verbal material doesn't exist in words. Never the less turns out to be very cogent, very well met, fully coherent and capable of being put into words that give great satisfaction of capturing the felt meaning to the client.

Dr Dave: Ok, now I took a slightly different meaning from it, and check me out on this. I got, and maybe you're also saying this, that the things that in the past that have been labeled as neurotic or pathological represent choices that at the time made sense or were coherent with the patient's needs and situation at that time in their life.

Bruce Ecker: Yes, exactly. And the coherence is that these responses, behaviors, moods, thoughts which from the outside may look irrational, may look out of control and senseless and only negative, may look maladaptive. Yes exactly, they arise as adaptive coherent responses to original situations and original sufferings. And what has been shown by the neuroscience research is that the brain is functioning properly in maintaining these implicit emotional learnings from earlier in life and responding according to those learnings in the present. That's now very clear from the neuroscience of memory that the brain apparently that was survival positive in the course of the evolution of the brain. To, you know, when when any learning occurs in the presence as I mentioned earlier of strong emotion or urgency, the synapses that form to store that learning and memory are special synapses. They lock in a special way with, you know, the biological molecules and structures that form create lifelong durability. So apparently any learning formed in the presence of strong emotion or urgency was survival positive to maintain forever. And so the brain is functioning properly when decades after an original emotional learning due to some circumstance in childhood. That response based on that learning is still ready to cut loose in response to anything that looks similar.

Dr Dave: Right.

Bruce Ecker: To the original experience. That's not maladaptive. That's not a disorder. That's the brain functioning as designed by evolution. And so our approach is very aligned with that understanding and approaches such as the RET approach which attempt to invalidate the existing beliefs maintaining symptoms as if they are irrational and argue against them and guide the client to see how wrong they are just isn't in the spirit or understanding of our framework.

Dr Dave: Yeah, it also makes me think of I think in at least some forms of psychoanalysis there is a dictum to not attack the resistance but to kind of see it as necessary. So in a way that's kind of related to what you're saying. You say that coherence therapy in fact retains the best elements of previous talk therapies while adding greater precision and reliability so maybe you can talk about the two sides of that. The best elements of previous talk therapies and then the greater precision and reliability.

Bruce Ecker: Well the therapy done in coherence therapy is very and in the spirit and really all the therapies that are in our book which, you know, as you noticed in the book we've included case examples of AEDP, Diana Fosha's approach, EFT emotion focus therapy, EMDR and IPN, the interpersonal neurobiology, Daniel Siegel's approach. We've included detailed previously published case examples of those four therapies to show that this same core process that creates memory reconsolidation and erasure of a target learning is present in each of those therapies even though each of those therapies does not describe itself in terms of the sequence of experiences that create reconsolidation, but nevertheless there it is. And in all of those therapies and in coherence therapy which we give examples of throughout the rest of the book the work is very very emotionally deep. It goes into very vulnerable areas. The, what we call the retrieval of the emotional learning underlying a symptom, that's very vulnerably territory. And so the therapists empathy and emotional attunement sensitivity is fully as important in this way of working as in well any other form of in depth therapy. So that's what we mean that the therapeutic relationship and the emotional quality of the work is not at all diminished in following the brains requirements for creating reconsolidation.

Dr Dave: So even though you've got specific steps which we'll get into, it's not a mechanical non-empathic approach?

Bruce Ecker: Exactly. That's exactly right. The, those qualities of empathy and emotional attunement are very very needed for effectively following the steps needed for reconsolidation and in fact when I say the steps I don't want to give the impression that there's anything rigid or formulaic about it. In fact as I'm sure you noticed Dave the steps are defined as steps of process without specifying techniques. The therapist is completely free to use any experiential techniques that he or she is familiar with to carry out the steps. It's a metaphor I like to use is that when you are following a map to get somewhere the map doesn't specify the means of transportation. You know?

Dr Dave: Yeah.

Bruce Ecker: You could take a plane or a bus or a train or crawl on your belly and you follow a map. Yeah very similar here. Once a therapist understands these steps of process, this sequence of experiences that the brain requires to unlock and erase a target emotional learning the therapist is free to arrange or free to create those experiences for the client in any way that the therapist knows to do that.

Dr Dave: Yeah that sounds great. There's a lot of talk these days about what the APA has called manualized therapies and I don't know if that's what you

had in mind as you developed your approach but it does seem to have gotten it down to some very specific steps as we're saying here which in the book you've labeled ABC 123 and the letter V. Perhaps you can take us through those steps of coherence therapy.

Bruce Ecker: Sure, sure, well those are actually the steps well that's an interesting comment you just made that I should probably touch on first. Those are the steps, that sequence of seven steps which we've labeled ABC 123 V. That sequence we call the therapeutic reconsolidation process.

Dr Dave: Ok.

Bruce Ecker: That's the sequence that we've shown in the book is present in those four therapies I named and coherence therapy.

Dr Dave: Aha.

Bruce Ecker: So that's not unique to coherence therapy. As you touched on earlier, this sequence that creates reconsolidation has been happening here and there in therapist sessions all over the place, but it has been happening by luck, by intuition, accidentally, you know. What we're trying to do is bring such awareness of these necessary steps to the therapy world that therapists are in a position to knowingly arrange for these steps to happen within whatever type of therapy they are practicing so that real clinical breakthroughs, deep breakthroughs can happen much more regularly in day to day practice with this awareness of this map.

Dr Dave: Yeah thanks for that clarification and before you get into the steps. What about that manualization, that some portions of APA have really pressed for and I think there have been mixed reactions in the therapeutic community and so I'm curious about your take on that and the extent to which that influenced the way you've laid this out, or did not.

Bruce Ecker: Yeah there are intense controversies raging, well if that's not too strong a word, about manualization, about evidence based therapies. Well all this structuring that's going on. No we didn't write this book or create this framework with manualization in mind. We're trying to make this new body of knowledge as clear and practical and operationalizable as we possibly can. We've also written a manual of coherence therapy separately and there are two we're trying to just put into therapists hands this knowhow. Now you know the very word manual or manualization I think, tell me if you have the same impression, I think it has strong connotations of formulaic, rigid, the therapist loses choicefulness. You just kind of follow rules and be adherent to some prescribed procedure.

Dr Dave: That's definitely the connotation that I get.

Bruce Ecker: Yeah, yeah so, so what we're creating, if that's what manualization means we are not trying for manualization. We are trying to chalk out the knowhow so clearly that therapists of all stripes can use it immediately. As I said what I think what makes this framework. We've been using the word framework instead of manualization, you know, talking about the emotional coherence framework as the overarching name of this whole thing. Because the process, the therapeutic reconsolidation process this ABC 123 V does not boil down to specific concrete techniques that the therapist must use. The therapist has such a free hand in how to bring about each of those steps. See that's I think that's what makes this diverge from what is usually meant by manualization. This tremendous creative freedom. Therapists use their own style or just a couple of weeks ago I did a two day intensive training with my co-director Sarah Bridges and after about, by the end of the first day of this two day workshop we sort of paused and said you know. We bet you've noticed that the two of us do coherence therapy with very different styles and the group really appreciated that acknowledgement. That gave everybody tremendous sense of freedom to make it their own, you know. Therapists have to make it their own and then do it from their own authentic self and there's full latitude for that in this framework.

Dr Dave: Yeah that really makes sense to me. I mean that really makes it very appealing. Well take us in some sort of a way through those seven steps.

Bruce Ecker: Alright, alright. How much time do we have?

Dr Dave: We have, we have, we're, now let's see. I have to do my math here. I think we might have about twenty more minutes.

Bruce Ecker: Alright that might be just right. I'll try and do it as succinctly as I can.

Dr Dave: I have some other questions though as well.

Bruce Ecker: Well let's see, alright. I'll do the briefest version I possibly can do and I really should say that this will be a very light gloss. Really it takes close study of a number of case examples to, really to begin to arrive at a real nuanced appreciation of what each of these steps really means. But just for an initial impression I'll be glad to you know talk it out.

Dr Dave: Yes, yes and this is no substitute for reading the book.

Bruce Ecker: Yeah, right. Alright step A is learn from the client what to regard as the problem or symptom. Now that may sound trivial but it turns out not to be at all. A client comes in and says "well I'm depressed" we have a communication problem. Well you don't know what those words really

mean to that person. There's a lot of specificity that is right behind those words and specificity of what behaviors, what thoughts, what feelings, what emotions, what bodily sensations are happening that the person regards as the problem happening. So we initially really focus on learning the experiential particulars that constitute the problem or symptom happening and we don't go any further until we feel clear enough that we know what we're, you know, what's my job? What's the job I'm being given? I'm being asked to help make something change. I need to know exactly what it is that the person wants changed.

Dr Dave: Yeah concretely what's bothering them?

Bruce Ecker: Concretely yes. Like how do you know when the problem is happening? I might ask that initially. I ask whatever I need to ask to elicit or to guide the client's attention to noticing and verbalizing what are the specific thoughts, feelings, bodily sensations and behaviors etc that he or she means. Ok once I have a sufficient initial understanding of that then I can move to step B. Step B is this process I mentioned earlier. The retrieval, the experiential retrieval of the underlying emotional learning. That's actually necessitating those very symptoms that consciously are so unwanted, so negative. It's gonna turn out that they are part of how the person is striving for safety or accountability or justice or wellbeing in some coherent way, but it's completely unconscious. It's coming from some implicit learning.

Dr Dave: So these are deep emotional reactions that are part of their initial survival strategy?

Bruce Ecker: Yes, exactly. So step B is this process of the retrieval work and this is this deepening emotionally based work, bodily based, emotionally based work of bringing the client into being lucidly in touch with the specific existing emotional learnings, emotional knowledge. Urgent tactics. This material always consists of some urgent problem and some urgent solution for solving or avoiding that problem. Whatever the details turn out to be that's the overall structure of any given emotional learning that's retrieved from its implicit form, which is not in awareness, into explicit awareness as a result of this retrieval work in step B and this is where the therapists empathy and emotional attunement and sensitivity is so important because this goes into very vulnerable, tender territory.

Dr Dave: From my reading of the case examples that you give, this emotional learning survival strategy could originate in childhood as, you know, as Freud and his followers, so [unclear 40:10] underlined. But it could also happen later in life such as with traumatic experiences.

Bruce Ecker: That's right. Yeah traumatic experiences or any other emotionally intense experiences. At any age the emotional brain forms these powerful schemas or emotional learnings in response to any powerful emotional or urgent experience so yes at any age, but you know, so often it is from childhood. So once we have learned the details, the detailed specific makeup of the emotional learning that's underlying and driving or necessitating the presenting symptoms, now we can go to step C. And step C is finding within the clients range of life experience, past or present, some vivid direct experience, or vivid personal knowledge that is sharply contradictory of key elements of the underlying emotional learning that was brought to light in step B. And there are many ways to do this. In fact right now we're working on a manual, here comes another manual, of methods for finding this contradictory living knowledge once the symptom requiring emotional learning has been brought to light and made explicit. You can't do this step obviously until you learn what the detailed specific makeup of the emotional learning, the target emotional learning is.

Dr Dave: Is there a quick example that you could give of a B and a C?

Bruce Ecker: Sure, sure and these, this ABC first three steps is the, we regard that as the preparation phase.

Dr Dave: Ok.

Bruce Ecker: Because the next steps 123 will be the erasure sequence and that often just takes a few minutes, but you need these ingredients, the details of the emotional learning, the target learning and the details of some vivid contradictory knowledge. Once you've got that you can go right ahead into 123 and do the reconsolidation process. This preparation work is the bulk of the work however. You know. It's like a well done paint job. All the prep work can take a week or two and then they start painting and it's done in a few hours.

Dr Dave: Ok.

Bruce Ecker: But, so we're talking about the preparation phase here [unclear 43:00].

Dr Dave: Yes.

Bruce Ecker: Alright for an example, let's see. I knew you'd put me on the spot. You always do. Alright, let's take as an example somebody, a man who comes in and says that among other people in social situations or at work he always feels really tense. You know, really tense, anxious, like tight, held back and, and so you know often initially the clients presentation is sort of

blurry and not very distinct so again for the sake of moving on quickly here I'm just gonna skip through this with a light gloss.

Dr Dave: Sure.

Bruce Ecker: So I do this step A, clarifying, focusing in on specific examples, asking questions. "What happened in that moment?" "What happened in this?" "What are you feeling when you hear this person say that?" And we arrive at this clarity that this man is actually expecting to be harshly judged and rejected if he does anything wrong.

Dr Dave: Ok.

Bruce Ecker: And he himself didn't quite really recognize that that's what it's about. Alright so now I start to have the kind of specific clarity I need about what's the problem or symptom that we're dealing with here that I'm supposed to help him get rid of. Get free of. Alright, so then I launch into step B, the retrieval work. In coherent therapy we think of it as the discovery work and the integration work. In other words we're going to first discover what's the underlying emotional learning generating this anxious expectation of rejection if I do anything wrong visibly. And then we're going to integrate that, make that routinely conscious, because it's very unconscious to begin with. Then without getting into the details of how we do this focused, efficient, very experiential, fully emotional retrieval work, I'll just give you a, the fruits of that step, having taken this example. The man winds up getting in touch with directly and then finding words for this and the words we come to, and the therapist helps with the verbalization a great deal as with every other step. The words we come to are, and this, these words get written on an index card that's handed to him for him to be able to stay in touch with it between sessions, as that's a piece of integration work. The words are "If I do anything wrong it shows dad or anyone that I'm too stupid to accept or love."

Dr Dave: Ok.

Bruce Ecker: So this is based on him having gotten in touch with in the discovery work many many experiences in childhood with dad, where dad's trying to teach him something or show him something like tying his shoelaces and as soon as he gets it wrong, does it wrong dad goes into anger, loud voice, "what are you stupid?", you know really scary painful stuff.

Dr Dave: Yes.

Bruce Ecker: Rejection stuff. So the words he comes to for this emotional truth of the, of the, of his anxiety with people. "If I do anything wrong it shows dad or anyone that I'm too stupid to accept or love. It's so painful. It's so scary

when I lose dad's love and instead he hates and rejects me for making a mistake. I've got to keep doing everything right or it will happen again with anyone at any time." Ok.

Dr Dave: Yes.

Bruce Ecker: So those words absolutely ring true. They are this man's emotional truth. They are, so that's the verbalization of the underlying learning. You can see it's a schema. It's a whole packet of meanings and knowings. A problem and a solution. A specific vulnerability that's it's urgent to avoid and here's how to avoid it. Keep doing everything right or it will happen again with anyone at any time. So that's the successful or the completed retrieval step B. With that clarity now it's time to do step C. Find some contradictory vivid knowledge that can be used in the next steps that we'll get to.

Dr Dave: Aha.

Bruce Ecker: And there are many ways to do that. In a situation like this where the underlying learning centrally involves a huge generalization from the original experiences it's particularly easy to find contradictory knowledge. This man generalized from dad being quickly angry and rejecting for any mistake to all other people. He expects everyone to be like dad. That's very very common. I think most therapists have encountered that. The generalization of original emotional learnings with family members to all other people. It seems that human beings almost automatically do that kind of generalizing. And neuroscientists are also very familiar with generalization of learnings. So when you have that kind of generalization it's usually easy to find exceptions because even though the person expects everyone to be the same as dad. In fact most people are not the same as dad and so fortunately and so it will be easy to find exceptions. And those exceptions are very vivid personal experiences that are very real to him and we'll stack up several of those and use them. So here's what I did. And by the way it's crucially important in this step C of finding contradictory knowledge that this has to be very vivid real stuff for the client. This isn't just positive thinking or good ideas or the client's you know, sophisticated rational understanding of how the world really is. This has to be living experience. Living knowledge. Stuff that the client has felt in his body is real and true ok.

Dr Dave: Yeah.

Bruce Ecker: So I would engage this fellow on looking for the exceptions. I might say for example "I wonder if we could find some experiences you've had where you made a mistake that was visible to the other person, but he or she didn't respond in an angry rejecting way like dad did."

Dr Dave: Aha.

Bruce Ecker: And you know the exceptions tend to stand out in memory. You know, even though the person wasn't conscious of the, of the emotional learning before now, nevertheless the exceptions to an emotional learning do tend to really pop out in memory. So he would say for example that a few months ago he bought the wrong item from a store and he needed to return it and he expected with anxiety that the store clerk at the returns desk would be really annoyed and disapproving of him for this error, right.

Dr Dave: Yes.

Bruce Ecker: And then he was really surprised when the male clerk was perfectly relaxed and friendly about it.

Dr Dave: Aha.

Bruce Ecker: And then he would also remember say that, let's say a co-worker came over to him recently and said in a relaxed and friendly way "Hey you know that document you e-mailed me? Well it had the April numbers in it but you know it's the May numbers I need. Could you re-send it?". And again friendly relaxed attitude. Surprising even though, you know, he made an error. And so there would be some other incidents too. So now we have.

Dr Dave: Ok.

Bruce Ecker: Now we have both the target learning and vivid contradictory knowledge. So ABC is done and I can go straight now into the three steps of the erasure sequence 123 and this is, these are the steps that the neuroscientists have found and demonstrated in our book in *Unlocking the Emotional Brain*. In Chapter 2 where we cover the research we have a table there that lists ten different replications of identifying these steps in controlled studies by neuroscientists. So step 1 is to reactivate the target learning. You've got to have the target learning emotionally retriggered, reactivated. That's step 1. So I might say to him "Well ok let's take a look at the whole range of your experiences with making mistakes. Let's go over this for a few minutes and you know it would be good if you could allow the feelings of what we revisit along with the ideas of them ok." And then I would start step 1 by saying "On one side is all those many times when dad became so angry and rejecting over some mistake you made and that was so painful, so scary for you and you really really expected ever after that most everyone is the same as dad and that anyone will reject you harshly for a mistake. Can you feel that expectation in

your body?” And so he nods and so that achieves step 1, the target learning is reactivated.

Dr Dave: Ok.

Bruce Ecker: Now as an aside I’m going to mention to you Dave that in the early, in the early few years 2000 to 2004 of reconsolidation research by neuroscientists they, they formed the conclusion based on the initial studies that this reactivation of the target learning by itself launches reconsolidation and unlocks the synapses storing the target learning. That turns out not to be true. And research that started to be published in 2004 showed that a second step, the step I’m about to describe is what unlocks the learning. If the first step of reactivation is done by itself without this second step, synapses don’t unlock and reconsolidation is not launched. But you know how it is. And this is a very fast newly developing field. The idea that reactivation alone launches reconsolidation spread and to this day all the science journalism articles still say that you know every memory goes into reconsolidation once, every time it’s reactivated. Not true.

Dr Dave: Not true.

Bruce Ecker: So I’m just alerting you and your listeners to this misconception that is still widespread about reconsolidation. What is required, the brains own intrinsic rules for reconsolidation requires this first step of reactivation and this second step in which while the target learning is emotionally reactivated, so this first experience of reactivation is still happening, concurrent with it a second experience of the vivid contradictory knowledge. So that a mismatch. The neuroscientists who have focused on this often call it a mismatch experience in which the expectations in the target learning and the knowings in the target learning are sharply contradicted by this other equally vivid, equally real feeling personal knowledge and personal perceptions and experience. So for step 2 with this hypothetical client I’m describing I would roll right from the completion of step 1 that I described a few minutes ago into saying “Ok and then on the other side what you actually have encountered in your own life is, in so many situations, is all sorts of people who remain friendly and relaxed when they see that you’ve made a mistake. The store clerk was friendly and relaxed about your mistake. Your co-worker was friendly and relaxed about your mistake. Your twelfth grade teacher was friendly and relaxed about the mistake you made. Your college advisor was friendly and relaxed about your mistake and others too. All these people are so different from dad. Can you feel the surprise and maybe even the relief in your body in seeing that?” And again he nods so that completes step 2, the mismatch, or what we call in coherence therapy, the juxtaposition experience.

Dr Dave: Yep that makes sense.

Bruce Ecker: Yeah the side by side experience of the expectation of rejection and his clear experience of non rejection. He had never put those experiences right next to each other in the same field of awareness before ever. And that's what it takes. That's the mismatch that does this neurological marvel of unlocking the synapses of the target learning. As soon as I've completed that, guiding that juxtaposition experience and as soon as he is allowing this side by side strange experience of these two things that both feel real and yet both cannot possibly be true together, that everyone will be like dad and yet so many people are not like dad in this way. As soon as he's having that mismatch experience we can assume that the synapses are now unlocking. And now it's time to roll forward into step 3 which is new learning that will rewrite and erase and replace the target emotional learning. And in the therapy context all we need to do is keep repeating the juxtaposition experience from step 2 for that. Keep guiding this felt recognition of wait a minute, not everybody is like dad. You know like maybe two or three more times.

Dr Dave: Ok.

Bruce Ecker: The way I like to, you can do that in many different ways. You can do it as almost like a clear structured technique of reguiding it but I like to do it in a very naturalistic way. Really by just empathically expressing interest in the juxtaposition experience itself. For example I might say to him now for step 3. Let's start step 3 something like "You know I'm wondering how is it for you to be in touch with both sides like this? Your expectation that most everyone will react like dad to any mistake and your own observation again and again that most people don't react like dad to a mistake you've made and they stay friendly and relaxed. How is it for you to be in touch with both?" So you see in a very natural manner I've again guided him to bring attention to both, feel both, hold both at once. So there's the first repetition for step 3. And again, you know in the course of continuing to debrief the experience I'll find you know one or more opportunities to again guide his attention to resample the juxtaposition.

Dr Dave: Ok.

Bruce Ecker: At that point the three step erasure sequence is complete. That's it. You can see that it takes several minutes to do it once I have the necessary ingredients from step ABC.

Dr Dave: And ABC might have taken several sessions or more.

Bruce Ecker: Yes, yes it usually takes you know, I never know how many sessions it will take. What I've learned from learning to work in this focused way I sort of look forward to the surprise of how few sessions it can take although you know it could take two sessions. With some clients who have very complex material or very raw traumatic material it could take twenty sessions, you know. So I don't really care how many sessions it takes as long as I feel I'm making effective use of every session to do this retrieval work and to find the contradictory knowledge. That there is progress in every session and you know I feel like I'm doing a good job as a therapist and then we arrive at this 123 erasure sequence at the earliest possible moment given the nature of the material and the clients capacities.

Dr Dave: We are running short on time so let's get the V in there.

Bruce Ecker: Oh the V. Yes.

Dr Dave: The V. The final V.

Bruce Ecker: The V is for verification and that verification step really is essentially the same as what the neuroscientists do at the end of a reconsolidation experiment. They want to see if the original learning is still there and really the only decisive way to do that is once again present cues and triggers that previously were very effective at retriggering and evoking the target learning. So for example in therapy V could be done through an imaginal guided experience in which the client imagines the situations and circumstances that have always triggered this. In our example here his anxiety among people that if he says something wrong he'll be rejected and hated for it. Or I could simply wait till the next session and ask the client "So how was it in the 10am team meeting you have every morning at work where you always feel this anxiety, you know as discussion is going on?" And if he says "You know I just didn't feel it any more you know." I had one client once who told me, he said "You know I always expected that if I was free of this I would just be like always ecstatic or always brilliant or always you know powerful feeling and he said you know it's not like that. I'm free of it and it's just like life is ordinary now. I'm just not anxious all the time."

Dr Dave: Isn't that how we are as human beings? When we've got a symptom it's really in our face and when it goes away sometimes we don't even notice it or remember.

Bruce Ecker: Yes Dave I've seen that, just as you've said. I've had clients for whom massive afflicting symptoms fall away and within a couple of weeks when I remind them of how a certain situation used to feel they sort of stare at me with wide eyes "Oh yeah. Yeah it was like that."

Dr Dave: Yeah, yeah I've noticed that in myself, physically going to the doctor you know. Sometimes they you know he may make reference to and "How's that such and such that pain that you were complaining about last time?" "Oh really? What pain was that?"

Bruce Ecker: We take for granted our wellbeing so easily it's really something. And so we deliberately work to have the client encounter the trigger. We actually will try to re-evoke the symptom or the troubling reaction in every way that used to re-evoke it and we know that the job is done only when it just doesn't re-evoke and we often hear clients in the process of trying to retrigger it and revisiting the moments that would retrigger it and say things like "Gee you know it seems kind of silly to respond that way now". We've had clients actually break out into a delighted laughter, not nervous laughter, real free energy glee. Glee at how great it feels to no longer have that response and it just seems absurd to respond that way now, once the erasure is successful. Now it's not always immediately successful. We don't have time for that I realize because the erasure is allowed by the clients mind and brain only if the emotional consequences of the big shift in personal reality that is involved in the erasure is emotionally workable in every way. If there is any aspect of this shift that's emotionally too daunting then the erasure is blocked and we have to then do the process of finding and facing in a gentle gradual manner what are the consequences of this shift that don't feel workable yet and really go into that and at the point where the consequences, the emotional consequences of the shift do feel workable, whether that's one or two sessions later or six or eight sessions later, we then repeat the 123 sequence and then the erasure works.

Dr Dave: Yeah that makes sense. Well I'm sorry that we are running short on time. I think the one thing that we would definitely want to touch on before we close off is I can imagine that there might be people out there who are listening to what we've been talking about and would want to be clients of a therapist who is trained in this and there would be therapists and potential therapists listening who would want to get that training for themselves. So what are your recommendations on those two scores? How can people both find therapists who would know, who would be skilled in this and how can therapists find training?

Bruce Ecker: Ok yes, we're actually working right now on putting together a referral directory. So in the meantime people should e-mail us at info@coherencetherapy.org and of course a lot of other information is available on our website which is coherencetherapy.org.

Dr Dave: Ok. And so that would be true for both potential clients and therapists. I imagine you have a workshop schedule on your website.

Bruce Ecker: Right.

Dr Dave: Ok well that's great. Bruce Ecker it's so great to speak with you again and I want to thank you for being my guest on Shrink Rap Radio.

Bruce Ecker: My pleasure Dave. Thank you.

Well once again I hope you are as stimulated by this conversation with Bruce Ecker as I was. It's a perfect follow on I think to last week's interview with Dr Jaak Panksepp on the neuroevolutionary origins of human emotions. I praised the Panksepp book as a potential classic and I hope I won't seem overly effusive but I have to say that I think that Ecker's book on *Unlocking the Emotional Brain* is destined to be a landmark publication as well. One of the questions that I didn't have time to cover with Bruce was whether he would agree with my perception that the different schools or brands of therapy may be in the process of going away. I think I have observed here previously that I'm sensing an emerging consensus in the field of psychotherapy. I did put this question to Bruce after the recorder was turned off and he strongly agrees. I told him that I think memory reconsolidation and his book could be the hub around which the various approaches unite. He affirmed that that is his hope and vision. I hope this book gets very wide circulation. I think it's essential reading for therapists of all stripes and at the same time will be of considerable interest to many in the general reading public, especially for my audience. For all you therapists and therapists in training I'd suggest that this book is an excellent starting place but personally I'd want to get some direct training and supervision from his group before I'd embark on this course. The book lays it all out very clearly on the one hand and on the other I think there are enough subtleties and nuances that getting some training and supervised experience would be highly desirable. His book *Unlocking the Emotional Brain* is remarkably just over 200 pages and is available in an affordable soft cover format as well as a Kindle edition. You can order either using our Amazon affiliate tool in the right hand side bar on our site.