# From NEURONS TO NEIGHBORHOODS New Ways to Prevent and Heal Emotional-Trauma in Children and Adults

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## IMPLICATIONS OF A NEURODEVELOPMENT APPROACH TO EMOTIONAL TRAUMA

Bruce Perry, M.D., Ph.D.

I am going to assume that most everyone came to this morning's presentation and continue carrying forward some of the ideas and elaborating on some of the concepts that I threw out in that presentation. The reason I would like to do this is that I think that many of the things that are getting in the way of us being able to make effective systemic change and being able to get policymakers and people in positions of influence to understand why we think early childhood is important. Part of what we're fighting is a broad, pervasive, social cultural wall, created by a very subtle transgenerational process of becoming stupid about children. Part of it is related to what I've been in a rather provocative way calling social cultural neglect.

Now we talked about neglect that if there is the absence of appropriate organizing experiences at key times during development, there will be underdevelopment of these parts of the brain. We talked about these extreme cases where children are not held and they're not talked to or they're not given opportunities for motor activity. All kinds of things we know that in these extreme cases there are functional problems and that there are neurodevelopmental problems that underlie these functional consequences. What I want us to do for a moment is take the next logical step and say, "All right, if it is true that the brain changes with experience, and if it is true that the brain has certain neural systems that are responsible for mediating social affiliation and communication, then it means that the nature and the number of relationships that we have as we grow up will influence these neural parts of our brain that mediate social affiliation and attachment."

If you think about the way our world works currently, we're extremely compartmentalized. We are separate from each other. It's an interesting irony. I don't have the slide here, but you can track over time the average size of an urban dwelling, the community that a person lives in, and as you become increasingly urbanized, and that's been going up. What's been happening is the size of the household has been going down. Even though we are now living in these huge megalopolises that are over a million people sometimes, we are remarkably isolated. We can live in a high-rise that has 15,000 people in it, and not even know our neighbor. We may recognize the faces

of people in the lobby, but we don't know these people. We are building fences in our communities and not front porches.

I go to Arizona once in a while, because we do some consulting work there, and they have some neighborhoods there where they have 12-foot fences in between yards. They're not only fences in the backyard, they're fences that go in the front yard, which is bizarre, it's weird. It's like going into the "Outer Limits." Remember those movies in the "Outer Limits" where somebody would wake up and everybody would be gone from the earth? Go to some of these suburbs and there's not a human being there. All of a sudden you see a car, but it's all tinted windows, so it looks like it's driven by a robot. It's usually like if you go to one of these communities, and no offense to anybody who is elderly, but you guys sit really low when you drive, so you can't even see a head. You see like the top of somebody's head and you see this big car drive by. Then all of a sudden magically you see a garage door open up. They drive into it like it's the Bat Cave and the garage door goes down. You have no idea if there's a human being there or not.

We become remarkably compartmentalized. As a result of that, we have compromised the breadth and the depth of relationships for our children. Now this is important. You all know this is important, but I want to elaborate on this a little bit, because what we're running into are individuals who are not fully expressing their genetic potential to be invested in and concerned for other people. We're raising children who are more concerned about materialistic things and the acquisition of material wealth and less concerned about the acquisition of social capital. There's a term that we use when we're trying to describe some of this. We call it sphere of concern. That is basically this label to describe the number of people in your life who you are willing to sacrifice time, energy and effort for. Clearly if you think about this it sort of is this bull's-eye that the further out you get from you as an individual, the less the emotional attachment and concern become. But, there still is some there.

There are people that have really huge spheres of concern like Mother Theresa. She spent her entire life in self-sacrificing things for other people. Everybody knows individuals in their community who volunteer, who go out of their way to help other people. Everybody in this room has relatively healthy spheres of concern, because otherwise you wouldn't be in this field. If you recall the boy that I talked about earlier who arranged that rape, he doesn't have a very significant sphere of concern. I sort of joked about those Enron people, but the fact is they didn't have a very big sphere of concern. They were mostly concerned about the acquisition of material wealth and concerned about themselves. They didn't care if they screwed a million people as long as they got wealthier and wealthier and wealthier.

What kind of world is it or would it be if everybody had these collapsed spheres of concern? It would be terrible. We need people to volunteer, we need people to run the Little Leagues, we need people to run the Scouts, we need people to basically work at these incredibly low paying jobs because they know in their heart that it's the right thing to do. I know that I'm not valued by my culture, I know that I don't get appropriate

financial reimbursement for this, but I know that it's really good to teach. I know it's really good to be an early childhood teacher. I know that's an important, valuable thing in my culture, and even though the rest of my culture doesn't tell me that, I know it's the right thing to do. That person has a big sphere of concern. That's what makes families work. That's what makes communities work. That's what makes cultures work. And, sphere of concern is interrelated with this concept of social fabric.

If you are disconnected from other people, you don't care about them. If you're self absorbed, you're not going to go out of your way to talk to the bus driver. You rent a car, the guy drives you and drops you off. Say, "Thanks." Why not? When you go get coffee, talk about something when you see a co-worker standing, you know, "What's going on? How are you doing?" You take three minutes. Five minutes out of your day. You don't have to check your e-mail again. Isn't this a weird thing?

Sphere of concern is a tremendously important thing. It's also within an individual, even if you have a significant sphere of concern, it's collapsible if you come under stress. Here's the individual. Let me give an example. I knew a gentleman who was always was going out of his way, he volunteered with the Little League, he was a coach, he was a really nice guy, he taught at his local church Sunday school, and he was always doing food drives. The guy just really made us all feel guilty because he was so good. Then one of his kids got cancer. Then he lost his job and all of a sudden he wasn't able to volunteer, and he didn't do all these other things. It didn't mean he was bad, it just meant that he was under duress and his sphere of concern collapsed. People who are under threat, the isolated mother on welfare who has got two kids, how easy is it for her to be able to volunteer? How easy will it be for her to reach out to other people? When you're under threat individually, or your family is, you're sphere of concern collapses.

The reason I'm bringing this up is that I want you to appreciate that it's easy for us in economic times of stability and steadiness to be good. It's a lot harder to be a Democrat under economic collapse. It's a lot harder to be willing to vote for somebody who is going to take a little bit more money out of your pocket when there's economic distress. It's a lot harder to do these things when we're individually under threat. We've been actually quite lucky up until the recent last two or three years. We've had this sort of period of fat, where our social policy was becoming to look liberal, even amongst people who are conventionally not liberal. People like Governor Bush, when he was governor they were talking about early childhood programs. Say what you will about the fact that it's kind of misguided; the fact that the president even talks about early childhood is a huge change from ten years ago. There's going to be a lot less talk of early childhood when the economy stays bad. There's going to be a lot more talk about other things. This is something that we have to recognize. We have to recognize the waxing and the waning of investment in social issues as function of economic stability in our community.

So be that as it may, let's look at what we're doing in our communities in providing daily experiences for children that are going to shape their brain. As I said before, if the brain changes as a function of activity, and if we want to understand what's going on with our children, we need to look at how they're spending their days. Don't pay attention to

these categories, but what I would like you to appreciate is that here's a 24 hour period, this is a typical child's time waking hours, divided into all these different ways that he spends his time. Here's a high-risk child. Remember this morning when I was talking about the development of your relational capabilities, this attachment bond that you form, essentially is the trunk and root system, and that the branches are all these other relationships you have. What I want you to visualize for a minute here is that this typical child has lots of branches on his relational tree. He has more people in his life and he interacts with more people. Whereas this high-risk child has fewer people interacting with him, has fewer people in his life, and has less diversity in the way he spends his hours. If you take all of that time and you divide it into four categories.

Electronic time that's passive. That would be watching television. That will stimulate certain parts of your brain, but it will not stimulate the parts of the brain that are involved in social affiliation and attachment.

Electronic time that's interactive, instant messaging, that's a whole different set of neural activities.

Human time is voyeuristic, like this. You're sitting and watching. Right now certain parts of your brain are active. It's not that these are bad parts of your brain, but they're not the parts of your brain that will ultimately be involved in forming and maintaining relationships.

Then the fourth time is what you guys were doing at lunch. You were having these interactive conversations. It was social affiliation time.

Here's a typical child's social affiliation time during a day. This is the high risk child. Look at that tiny little wedge. That's part of the reason he's high risk, is because he's got nobody in his life. Remember what I said about the stress response system? When you're connected to people, your stress response system calms down, quiets down. You're much more reactive and overwhelmed when you are alone or when you're with strangers or when you're marginalized or when you're in the presence of other people who ignore you. This child watches. That's voyeuristic time. That's this purple time. Look at how much time he watches. These children end up with street smarts, because they observe, they watch. They watch, they watch, they watch. They find out who's vulnerable and who isn't vulnerable. They find out who's talking to whom. They find out who's most powerful.

We run a clinic and before we set up this clinic we would have a child come in, the caseworker, and the foster parent. We would introduce them to all the people in our clinical team. We'd have this little meeting and there would be five or six people in my group, all who were dressed professionally, and then there was me. I was usually wearing a t-shirt and looking sleepy and sleep deprived and, I shaved today, but I usually don't shave very often. My hair is actually shorter than it's been in a long time. I come in ten minutes late and I sit down, and the case workers kind of look over at me like, "Why is the janitor here?" The foster parents sort of think I might be a patient. They

don't know what's going on. The child has been watching me and then the staff, me and the staff, me and the staff, and you see a light bulb go off in their head and they know, "Ah, he's the boss." They know immediately, and they know so much quicker.

It's a very interesting thing. These kids have this capacity to find these invisible power lines in a social context. Which is one of the reasons they get to the point where they'll settle into a new foster home for a little while and they'll figure out who's powerful and what's their button to push. Pretty soon they start to feel uncomfortable with this consistent, predictable environment. Why? Because people like the world to make sense based upon their first templates. Right? Their first templates are chaos. Their first templates are that people act unpredictable and people are sometimes mean and what's going on, you've been predictable and you've been not mean to me.

The longer that goes on, the more uncomfortable they feel, the more out of their comfort zone they are. They start to provoke, to get predictable responses. Because they've been observing and finding out what the weak points of each person are, they can just go over to this kid and say something and the whole places goes chaotic. You feel them go, "Ah, the world is as I thought." They actually will punish them and it's like oh big deal. It's puzzling to foster parents. They go, "It's almost like he wanted me to punish him." Well, he did. Not necessarily consciously, but a big part of him wanted to recreate a situation that was familiar. See I'm off on a tangent. I'm sorry. Anyway, so these kids...Relational time? Not much relational time. How does that compare with the way we're designed?

Look at how much blue time is present in this aboriginal child's life. That's exactly the same amount of time you get if you look at a time analysis of how people spent their time if they were from an extended family model and they didn't watch television. Up until about two generations ago, we were providing healthier environments for social affiliation and attachment than we are today. The impact of television on our culture that bothers me the most is not the content. It is the time away from other opportunities for acquisition of strengths--physical exercise, social emotional interaction. Look at this child. Which one of these kids is going to be humane? Which one will share? Which one will be "civilized"? We have in the modern west created a situation that is so biologically disrespectful, that we literally not only allow, but we in fact push sometimes and have social policy that creates isolated single caregivers who are asked to be responsible for the material, emotional, social and cognitive needs of multiple children all at once. This is an impossible challenge. You cannot do this. You cannot provide what this baby needs at the same time that you've got a one-year-old and provide that one-year-old's needs and the three-year-old's needs.

We have created a biologically disrespectful way of living that has created tremendous poverty relationships for our children, and it has deprived them of the opportunity to fully express their genetic capacity to be humane. I think that this is happening in families that have material wealth, and families that are middle class, and families that are poor. In fact, I don't think that there's necessarily a relationship between the materials you have in your home and the wealth you have in your relationships. Some of the

healthiest children I've seen, in terms of social affiliation and attachment, have come from very, very poor homes. But they're stable homes. They live in a community where people are invested in each other. They go to a church or a synagogue, and they have neighborhood activities. What little material things they have, they share.

Look at the number of social emotional opportunities in the day of a dependent child under the age of six in a hunter gather clan, where I've already said the ratio of caregiver for dependent child is four to one. This is not an abusive situation. This is a single caregiver who has three children. In that household, the children watch television the average number of hours American kids do, and when they leave that household, they go to a childcare setting where there's one caregiver for every four children. You see that there's a 24-fold difference. One twenty-fourth the number of social emotional opportunities is the norm for this child, one child in this home. Think about acquisition of language. Now remember how we talked about this? Take a young child and you raise them in a typical household. By the time they're three, they'll have heard a certain number of words in a specific relational context, they learn language. Just imagine you put something on their ears so they only heard one twenty-fourth the words that were spoken to them. They wouldn't speak the language at all.

We are raising children that are socially and emotionally illiterate. This has been manifest in many, many ways—the number of children who need special education services, the number of children who are exhibiting aggressive, impulsive, immature, disconnected, selfish behaviors in schools, and lack of respect for each other and lack of respect for authority figures in schools. This has been skyrocketing. This is one of the most sobering things about loss in social capital and collapsing of spheres of concern is this: How can you have a representative democracy if only 22 percent of the people vote? You can't. In the last municipal election in Houston, fewer than 5 percent of the eligible voters between 18 and 21 voted. Think about that. That's not a democracy. I'm not trying to pass some broad indictment on youth today. This isn't their fault. This is our fault because we're in charge of the world right now. We can't pass this off on anybody else. We can't say it's anybody else's fault. We're the ones that allow our kids to watch TV seven hours a day. We're the ones that allow a school district to put 30 kids with one teacher. We're the ones that allow a state to establish a best practice ratio of caregiver to child at one to five. It's our fault.

The great thing about the human brain is that every generation we've got a chance to start all over again and do it right. There's no reason why we can't make changes. I mean are we paralyzed? Are you incapable of making changes? Are you incapable of mobilizing people and educating people about what's important? We can do it. It's easy to do. All right, erase that last sentence. It's not easy to do. It's really hard. Why is it hard? Let me talk about one of the reasons that it's hard. It has to do with the brain.

One of the reasons it's so hard to make systemic change is that we're not designed to live like this. We're not designed for these huge groups. We're designed for small groups. We are designed for living in tribes. For 99.9 percent of the time we've been on this planet, we've lived in groups of 40 to 50 to 60 people. In that group we end up

creating these internal catalogs of what is safe and familiar, certain language, certain style of dress, and a certain way of doing things. Our major predators throughout all time have been other human beings. Human history is characterized by this tribalism where we are the people. In fact, if you go around and look at some many native languages, the name they have for themselves are the people, the humans, and the ones. The names they have for others are not human, not us, not the same. It's because we have this biological tendency to view people who are different from us as potentially threatening, because they were.

For 99.9 percent of the time we're living in this environment you go out hunting. All of a sudden you see somebody who has different style of beads and a different language and dresses a little bit differently. They weren't there to form an alliance. They were competing for limited hunting grounds. They were competing for a really good place to pick berries. What would happen is, as many times as not, there would be competition, and there would be raiding. They're trying to take stuff from us, so in these worlds where there's limited resources, people would compete. They would exclude, dehumanize, and then raid and sometimes violently act on these other people. Then, of course, what does that do? That creates within that group a memory that's passed from generation to generation to generation.

Those people who talk that certain way, they're the ones that we have to be afraid of. They killed our ancestors, and then when we have an opportunity and we're stronger, we're going to go raid them. We went back and forth and back and forth. Think about the Balkans, the Middle East, the Hutus and the Tootsies. Think about what we're doing right now. We still do that. We do that in a lot of different ways. We do it in ways that are this sort of broad, explicit form of tribalism, and then we do it in these much more subtle, modern ways of tribalism. We don't organize ourselves anymore into groups based upon tribe. We organize ourselves based upon profession. We organize ourselves based upon a lot of different things. In each one of these organizational groups, we still have the tendency to exclude, to dehumanize, to belittle, to degrade, to think that they're not as good as we are. And you know what? That's killing our ability to make solutions to some of these complex problems.

Do you know where the major criticism, hostility and efforts to stop broad public educational efforts about the importance of early childhood came from? Other professionals in early childhood. It came from people in the mental health field. It came from psychiatrists who work with adolescents, who thought that their dollar was going to be challenged by taking some money away from substance abuse treatment programs for adolescents. We hear this stuff, they say, "Well we don't know if we have enough data on there. We don't know if there's enough evidence on that. We don't really know." They talk a good game, but there's just not enough data and blah, blah, blah.

How many times do you have to drop something to know that the principle of gravity is true? Do you think we have to have a whole new set of studies for rubber balls as compared to metal balls? Now we laugh about this, and it is kind of funny, because it

shows how stupid human beings are. The fact is the major people that are getting in the way of us making positive, effective change are people in our own field. People who are currently in positions of influence and power, who control the study sections, who control the journals, control the academic settings. They don't like new ideas. They are the new priesthood. I'm saying this because I've been one of them. They'll make professional attacks, and they'll do other things that they do on study sections or in review panels or in governmental organizations where they have opportunities to participate. They'll say, "You know that's a good idea, but you know our organization really is a little bit better at doing this. I'm really concerned about their assessment methods. What you need to do is go zero to three. Then the zero to three people will fight with the Child Welfare League of America people, and the (inaudible) Child people will fight with another group. It's unbelievable we still do this, and we are cutting our own throats because we can't work together.

It's a huge, huge problem. You know what you're going to find? Ironically enough, when you leave this little early childhood world that we're in, and you go talk to the corporate sector, they're unbored in a second. They're unbored in a heartbeat. I can't tell you how many people in the corporate sector have said, "This is really important. We need to get behind this." In Arizona, Boeing has been funding a huge early childhood initiative. The entire 'Success By Six' projects have been funded by Bank of America. Once the corporate world hears about this, they're not getting in the way. It's not the old, stodgy people that we think are getting in the way. Actually, it's not Republicans either. Some of the most powerful advocates for this event are politicians who are Republicans. Buenavitch(?),Tom Ridge, and Kristin Whitman, all incredible advocates for early childhood programs in their states.

So we have a problem. Despite the fact that all of these things we know are related to maltreatment of children: social ills, physical ills, substance abuse. When you say that early childhood experiences impact physical health, and then you go to a health system and say, "Gee you should spend some of your money on early childhood programs to divert children out of having asthma." They'll say, "Oh no. Are you kidding? That's not our mandate." Then you go to child protection and say, "Well, if you put money into early childhood programs to divert kids out of these abusive environments..." "Well that's not our mandate. Our mandate is to protect children." We don't really know whether it's that we're fully responsible for the full child. If we actually keep them safe, we've acted on our legal mandate. Now it's an interesting thing. Not all of these systems are sort of washing their hands of the problem. Some of them are stepping up. In California the most powerful and influential and important advocate for early childhood in this state has been the attorney general. I mean it's a very interesting thing. He's actually done more to provide focused funding and specific change on early childhood issues than any other political leader in this state. In some communities it's coming from the community of faith, in some communities leadership's coming from the attorney general's office, in some communities it's coming from law enforcement, in some communities from education, some communities it's coming from the mental health system.

Almost everywhere, as soon as you start to collect a group of people that are invested in this, we end up with a big, big, big mess of people who don't know how to work together. We're not good at respecting each other. We're not good at creating functional groups. So what happens? Let me tell you about a couple of interesting initiatives. In Houston, for example, they've created this early childhood collaborative, and they've got a couple different names for it. They've changed the name a couple different times, because every time they feel like they're stalled, they think if they change the name that somehow that's going to get better. Of course, then they go to a foundation that gives them another \$500,000 to change the letterhead and change the logos and to change everything else. Seriously, in Houston they've spent over \$3,000,000 in the last five years in the process of creating a public engagement campaign about early childhood that they literally could have gotten completely if they would have called any other community and said. "Hev. can we borrow your video?" "Can we re-label your materials?" Those communities would say, "Sure." But, they want their own. They will convene a local group of experts, who will then donate their time. Have meetings at night and they'll do all this stuff, and they'll do a literature search to find out what are the important things we need to get across. Which, by the way, has been done all the way from the Institute of Medicine all the way down. 35 other communities have gone through the same process, but let's spend our money, because we know Houstonians clearly develop differently than people anywhere else in the world.

They'll get together 20 or 30 of these people and they will all initially be pretty motivated, very excited because they have a common vision that the world can be better if children are good. Then they'll meet once a month, then after four months somebody will say, "Well why are we meeting? What is the objective of this meeting?" Everybody in this room has been in a community collaborative which starts out with best intentions but don't know where the hell they're going. You know why? You know what happens in those groups then is that as soon as they get 20, 30 people together, sort of the stakeholders, human beings begin to create subgroups. We cannot work in groups that big. It's because of the way we're neurobiologically put together.

One of the most important things that you're going to learn about systemic change is that human beings cannot create a functional work group that's greater than about six people. You can create groups that are informational, where you're sharing information, but if you want work product to come out of a group, you need to limit the size of the group. Let me see if I can get to some of this stuff here. There's a lot of things that you're going to run into because of this tendency to compartmentalize, to protect your own turf and because of this tendency to sort of have essentially disdain for the way other people are trying to solve this problem when a program, a foundation, or the government comes along and throws money your way, let's say Prop 10 comes along, and all of a sudden there's a pool of money for early childhood. You know what happens? The early childhood community turns on itself and gets intensely competitive. The people that get the money are the people that know how to write grants, not the people that know about early childhood. People start to create pet programs, with the idea that if my program's funded, if "Early Headstart's" funded, then we're going to solve this problem. If "Success by Six" is funded, or if some other program is funded, and

people get pet programs, they fight tooth and nail to maintain the integrity of their program. In the process, all the people that are on the outside of the early childhood world think we're crazy. It allows us to diffuse the energy for change because they diffused all of this focused energy.

Instead of us working together, we end up turning on each other. Let me give you a classic example of how this works politically. Politicians and corporations are very, very good at this. Government is excellent at this. This happens at a lot of different levels, but let me tell you a level that I was involved in. After this first national public engagement campaign that was being pushed by "I Am Your Child," initially it gathered a tremendous amount of political steam, working through the governors, working through some state legislators, working through some congressmen. There was lots of political attention. Federal government at its base does not like to make changes, just doesn't like to do it. It's conservative even when there are liberals in charge. Bureaucracies like to maintain the status quo. That's the way these systems work. They've developed a strategy for diffusing political energy out in the public by having a White House conference. What they do is they take all the people who are the most vocal and the most visible and the most sort of energized, and they will have a White House conference, which flatters everybody. They go to the White House, they have lunch, and they give you a little engraved thing that says you ate in the West Wing, or whatever it is. They have a few people give a talk, and they have the president sit there and nod his head and go, "I'm really concerned about this, early childhood." What will happen is all of us get a pat on the back and we're told that the government's concerned about this. Then we go back to our communities and you know what we do? We diffuse the rage.

We diffuse the energy that's coming from the outrage about the fact that nothing's being done, by saying, "You know, these are complex issues. The federal government's got a lot of stuff to deal with." We become little lapdogs of government. There are thousands of them in our field. There are little lapdogs of governments, who basically participate in these meetings time after time. They will put their name on these light papers that get issued every five or six years that say the same damn thing. No action gets taken. That's because we don't know how to organize ourselves. We don't know how to deal with ambiguity and complexity. And we're very, very bad at respecting each other.

I've been rambling on about this. The solutions to some of these things I think are going to come from local initiatives. Every time something is excellent, it's been started by people locally. Excellence very rarely comes from the top down. It almost always comes from the bottom up. It emerges from the vision and the power of individuals who have decided that they want to make things better. When they work together and they work in a focused way, they end up making tremendous positive changes. Now the biggest problem that we face right now, I think, in trying to address some of these issues, is that when we have one of these local areas of excellence, we don't know how to export it. We don't know how to get the high quality work that's being done here even down the block. What we continue to forget, despite the fact that we teach it, is that the most

important thing in all of these programs is relationships; people. It's the people who are doing the work that make the difference. It's not the program.

I've been in communities where they had an early childhood program that was early Headstart, and it was unbelievable. Dynamic leadership, they had great training, they were doing unbelievable stuff. They made connections to their community, they were respectful with families that came in and worked with them, and the kids were doing well. Then I've done site visits on other early Headstart programs that were disastrous. Just infighting and competition, they were disrespectful of each other, there was backbiting, and there was no leadership. Relationships were not used in a positive way. It was bad. One of the things that we have to do, no matter what program you're in, no matter what agenda that you're trying to create, you need to think carefully about the selection, the training and the support of the people who are doing the work. If you don't pay attention to those things, no matter how wonderful your job descriptions are, no matter how well funded your program is, you're not going to make change.

It goes back to all the stuff we've been talking about all morning. It's relational. People change in context of relationships. This is so obvious, this one. Proactive is better than reactive. Now why does everybody in this room know this and none of our programs are like this? I've shown this slide to governors, I've shown this slide to legislators, I've shown this slide to heads of child protective services and they go, "Yeah, right, absolutely. Proactive is better than reactive." Well, why don't we do this? I mean do you understand why some of this stuff doesn't happen? I don't get it. I mean I really don't get some of these things. I was actually involved in the process of reviewing the Child Welfare Act in Alberta. There's one provision in the Child Welfare Act that basically says that if you have a child that has significant mental health problems, that require a certain level of care and the family can't afford it, the only way to get them care is to remove them from parental custody and put them in the custody of the state. Then the state will pay for it. You'd go, "What the hell, why would you have to do that?" If the state's going to pay for it, why can't you still be the legal parent and get the state to pay for it? It's crazy.

In order for these kids to get care, these parents had to relinquish custody of their kids. This happens in the U.S. too. I went to all the people who wrote the original Child Welfare Act, and I said, "Listen, do you know anything about where this came from?" They said, "No." "Do you think it's a good idea?" "No." I went all the way up to the minister, who is sort of like the head. He's an elected official who is the head of Children's Services. "Is this good?" I asked. He said, "This is horrible, we've got to get rid of this." Not a single person who was involved in creating that act had any idea where that came from. Once it got written into law, it wasn't changed for eight years. This is important. Once we create something that we think is good, we've got to figure out how to change it when it's not serving its purpose. We're very bad at this. Headstart is a perfect example of how we created an incredibly expensive program that didn't have the ability to self-correct. We spent billions and billions and billions of dollars. Whereas if we'd originally had some self-correcting component to Headstart, they would have immediately said, "Hey this is great, but let's start earlier." They would have ended

up with an early Headstart model that was very pervasive. But, they didn't do that. They took a program that they developed and then they generalized it everywhere.

#### (END OF SIDE ONE OF TAPE)

Government is stupid. Not by design, but it is. Government does not have the endogenous expertise to solve these problems. They don't presume to, either. Government, most of the time, when it comes to trying to recreate things, reaches out to expertise in the community. Unfortunately, that tends to be these very time-limited interactions with the community. We have to figure out better ways to work hand-in-hand with government. We have to help government do the right thing. We have to create public private partnerships where there are ongoing opportunities for government to be responsive to the expertise in the community.

The Stakeholders Redesign Process for the Child Welfare System, actually has many elements of being respectful of community and trying to take advantage of expertise in the community to reorganize. What I'm hopeful will happen over time is that as they come up with final product, that they will build into it this capacity to stay involved with and co-develop programs and interventions that involve the expertise in the community. It may happen, it may not.

Reinventing the wheel—stupid. Happens all the time. Houston spent multiple millions of dollars trying to essentially get an information management campaign of which "I Am Your Child" would have given to them for free. Happens all the time. Every community wants their own video. Every community wants their own materials. Every community wants their own whatever. It's a waste of money. This one is killing us. We don't know how to collaborate, and we don't know how to respect each other very well. We're not very good at this.

For those of you who I'm going to talk with in the second half, I want to give a tiny little introduction to this, because what I want people to recognize is that we end up making some of our most important decisions about how things should work under duress. But, if you think about how the brain works, that is the worst time in the world to come up with a solution. Let me just walk you through this for one second. Here is somebody who is calm, an individual who's calm or a system that's calm. When the system is calm, and there is no external threat to the system, economically stable or the individuals, there's no threat and no external stimuli overwhelming you, you're able to actually think about the future. You're able to use the smartest part of your brain. You're able to be abstract and creative. This is when your best thinking tastes place. Now unfortunately we've created a culture that is so stimulus-driven and overscheduled, that it's very hard for most people to get to this state very often. Most of us spend most of our time here, and this part of the brain is less smart than this part of the brain. Our solutions and our focus are what's going to happen in the next moment.

If you think about a system, a system that gets under threat, economically threatened, doesn't know when its funding's going to come, doesn't know if this program's going to continue beyond the next year, doesn't know who's going to get elected and what their perspective will be on funding this area. A system under threat basically, instead of creating thoughtful, future-oriented programs, ends up creating very immediate focused programs that are typically less smart than these programs. The more threatened you get, the more reactive and the dumber and dumber your problem solving capabilities become.

This is that very same chart when you think about systems. I wrote this when I was talking about broad cultures. You can generalize this and that previous slide to think about smaller organizations like institutions. Let's take an example here. If you have a community or society where there are significant resources and they're predictable, it creates an environmental tone that is broadly calm. It allows people in that environment to do their best thinking, which means that they will be future oriented and innovative and abstract and creative and they will end up developing laws about self regulating themselves that are abstract, conceptual. When they interact with children, they'll create child-rearing environments and practices that are more nurturing and flexible and rich because they are able to see the future and understand that if you do the right thing here, you're going to end up creating people who will feed this system in a perfect way.

On the other hand, this is where most of our systems are right here. We live in a resource limited and relatively unpredictable world, particularly, if we're in the not-forprofit world or in government. Our cycles are two or three years long for funding. So we don't really have any long-term predictability about building a program, about my own job, about blah, blah, blah. What happens is the prevailing tone: anxiety. All bureaucracies, their prevailing tone in a bureaucracy is anxiety. It is to protect your own ass. It's to cover your own ass. There are all kinds of ways that people retreat into creating essentially superstitious and intrusive rules and regulations to impede change. What happens is the solutions that emerge out of these environments are overly simplistic and they're focused on the immediate future. Think about, for example, and I don't mean to pick on anybody in particular, the complex problem of substance abuse in this culture. The solution that was chosen was, "Just saying no." Now it's a little unfair to say that that was the only component of that substance abuse initiative. The fact is, that's a little bit simplistic, right? What happens in these environments, because people in positions of power are concerned about themselves, they tend to be guite ambivalent about children. If they're involved with children, they tend to be over-controlling and obsessive and you end up creating little bureaucrats that fit perfectly into this society, into this system.

Then there are environments like Mogadishu where everything is unpredictable and it's pervasively threatening. The prevailing tone is terror. What happens is people who are in positions of power, i.e., you're bigger and you have a gun, end up getting what they want. People who don't have that, are at the bottom of a power differential that's astounding. Children at the end of that power differential are treated in an apathetic way, because nobody cares about them. If they get in your way, they're dealt with in a

harsh and oppressive way. You end up with these child rearing practices and environments that create little kids that have essentially PTSD. Kids who grow up with PTSD, essentially pervasive threat, are going to fit perfectly into a reactive, regressive environment and they're going to perpetrate generation after generation after generation this style of the world.

Have any of you read anything about Stalin, Edi Amin, Saddam Hussein, or Adolf Hitler? All of these kids had profoundly harsh, oppressive and apathetic caregiving. If we don't understand how systems work, if we don't understand the biological reality of our existence, we are going to continually be battering our heads against the wall. When human beings create policy and practice that are biologically respectful, we do very, very well. Communism is a form of governance that wasn't very biologically respectful. It didn't recognize the huge parts of the human brain that are involved in reward and pleasure. People like to get rewarded for what they do. Right now we are living in an environment that is being very, very disrespectful of one of the most powerful biological realities, and that is what we were talking about this morning, and that has to do with when the brain is most capable of being changed.

Right now as a culture we're spending all of our money on changing the brain at a time when the brain is less malleable, less capable of change. These systems are trying to change the brain. They're not trying to change the pancreas, and they're not trying to make the heart stronger. They're trying to change the brain. But, we're doing it at a time when the brain is relatively less capable of change. Look at when the brain is most malleable and how little of our public dollars we spend trying to facilitate and create environments that would provide optimal nurturing and optimal protection and optimal opportunity for expressing the child's strength. When we can capitalize on this mismatch and remedy this, I think that we will be well on our way towards solving many of the problems in our culture. If we don't do that, we are going to continually be spending dollars and dollars and dollars and dollars hand over fist on children who have their potential unexpressed.

We have far too many children who are being harmed. We have far too many children who are growing up in chaos. We have far too many children that are growing up in these emotionally and socially impoverished environments for us to be able to tolerate this inefficiency any longer. In order for us to be able to care for our children and the children who have problems, we've got to decrease the number of them who are being created and who are growing up in these bad environments. You cannot focus any more completely on individual service delivery. Now that may be your strength, that may be your choice, that may be what you're good at, and God bless you if you do that. I think that we all have a responsibility, even if we are giving 99.9 percent of our time doing clinical work individually with families and children, we have an obligation to try and start making changes in our culture that will end up with fewer children needing our services. I know that that can happen. I know that that's a tremendous challenge. I know that there are lots of different impediments to that. I have to tell you, that the public is much more responsive than my may think.

Your politicians are willing to listen to you. The corporate sector is willing to hear what you have to say. The PTA wants to hear from you. The Rotary Club wants to hear from you. All of these groups want to know what you know. You need to figure out how to arm yourselves with the specific ways to educate and inform law enforcement or the judiciary or your colleagues in mental health. People who are in any walk of life can be exposed to the importance of this if we can figure out how to reach them. Nobody's going to reach them if you can't. You guys have the information, you have the knowledge, and you have the experience. You have the motivation and you also now, I think, have the moral obligation. I don't think you can know about these things and not act. I know this is early, what I would like to do is I'm going to stop and maybe we can have some questions and conversation about this. I would be happy to hear input and thoughts and comments about people, about some of these things. Thank you for your attention. You can get this on our Web site.

### (INAUDIBLE QUESTION FROM AUDIENCE.)

Do I ever think there will be a time when the American government recognizes its need to educate parents about these issues?

ABOUT CHILD (INAUDIBLE).

I do actually. I do.

(INAUDIBLE).

No, no. I have to say it's a remarkable thing. I've been asked to speak and communicate these things to people in lots of governments, lots of state governments, and the federal government. I've been really heartened by the response. There is, when people hear this, some recognition that this resonates with people's own observations and concerns. What most of us still don't know how to do yet is act on this? We sort of see this would be great, but we realize we're over here, and we don't quite know how to get there. I do think that we have some challenges in how we actually create programs and implement some of these concepts.

Let me just back up for one second. This early childhood and brain development content I think is very, very important, and it's important in the way it's presented. To help people connect with it and make sense of it. We've participated in the development of curriculum about early childhood and brain development for the Texas Supreme Court, the Colorado Supreme Court, the American Academy of Pediatrics, and a number of other professional organizations—law enforcement, different sectors of the population. The interesting thing is every single one of these curricular efforts is teaching content that is easily digestible by a seventh grade student.

We're doing a collaboration with Barian(?) County Independent School District in Michigan. After I gave a very brief presentation to the school administrators in Michigan,

several of these school districts decided that in order for children to graduate from high school, they have to have 30 hours of instruction about early childhood and brain development. We're working with Barian(?) to develop an online course that has interactive capabilities and that would provide this curricular content that will initially be used in that independent school district for their students. Once we define it, it will be available for other school districts to subscribe. Children will actually, when they graduate, have some introduction to these concepts and content.

If someone said, "Sure, a school district is going to come up and say we want to do this, we're going to actually mandate this," five years ago I would have never thought that would happen. I have to say that, as I mentioned earlier, and I think as many of you can appreciate, that these concepts resonate with a lot of people's observations and experiences. The real challenge is what do we do with this information. The analogy I use is boiling water, for those of you who get discouraged. I know some of you have been talking about this for years and years. It's like boiling water. If you sit and you have a pan of water and you turn on the heat, and you're putting all this energy and effort and energy and effort and energy and effort, and you don't see anything happening, then all of a sudden it just pops into a boil, that's what I think is happening. I'm seeing these little bubbles here and there.

I'm seeing things happen in communities that are just amazing. In Mesa, Arizona, for example, wonderful stuff. There are great things that are happening in certain states. Lots of communities in California are doing incredible things. I think that you see these little signs of hope all over. I really do think that ultimately, within our lifetime, that this content will be considered as essential and common knowledge as things like regular reading and writing. I really do think that there is going to be an ability to recapture healthy information and experiences with young children.

I WAS WONDERING, DO YOU THINK WE HAVE ENOUGH TIME FOR ALL OF THIS TO TAKE PLACE, TO FILTER DOWN, FOR THESE ORGANIZATIONS TO GET GOING, FOR GOVERNMENT TO START LISTENING TO US AND EVERYTHING FOR US TO... DO WE HAVE ENOUGH TIME TO DO ALL OF THIS BEFORE WE BLOW OURSELVES UP?

That's actually a very good question. Let me just tell you a little story about that. Anybody take population biology in college or know about population biology? Well there are certain equations that you use when there's a closed ecosystem. It has to do with kind of what the balance of healthy versus unhealthy animals or organisms in that closed system. You can basically look at the rate of the creation of consumers versus the rate of production of producers and get an idea of how many generations it will take before that biological system unravels. I, just as a lark about ten years ago, did an analysis of a community in Chicago about the rate of birth of children in high risk environments who were ending up in public systems consuming dollars relative to the rate of kids in those same families that were ending up as tax producers. I figured out this unwinding point when it would completely unravel and the system would dissolve. I figured it was about three generations.

I had dinner with a gentleman named Tom Klutznick, who essentially is this very, very, very famous economist, who was very interested in urban studies and had, from a completely separate perspective, done an economic analysis of communities in Chicago that were similarly challenged by loss of jobs, etc. He had come to the exact same conclusion that we have three generations to reverse some of these trends before we economically unravel. The things he was looking at were, for example, the social security system when it was started there were 18 workers working for every person who retired and now it's 2.3 people working for every person who retires. When I retire, it will be 1.8 people. That's economic insanity. I think we have about three generations to figure out how to do this right before we unravel. There are lots of other factors that could play out. It could be more optimistic. It could be more pessimistic.

#### (INAUDIBLE QUESTION FROM AUDIENCE)

Well, I think that at this point nuclear weapons will be used by individuals who are in that far right deteriorated, dissolved, and short-sighted reactionary model. Hopefully it will take some time for people in that position to actually acquire the materials and things required to be able to use nuclear weapons. They'll definitely have the ability to do one. The question is will they have enough to destroy the entire planet. I don't think they will. But, they'll have enough to kill a lot of people. That's my opinion, and I'm just one man.

I WANTED TO FOLLOW UP A LITTLE BIT ON WHAT YOU WERE JUST TALKING ABOUT. IT SEEMS TO ME THAT THIS COMFORT ZONE THAT YOU'RE TALKING ABOUT THAT THE KID COMES INTO THE NEW SETTING AND EVERYTHING IS PEACE AND NURTURING AND WHATEVER AND HE WHISPERS TO CREATE CHAOS. IT SEEMS ON A SOCIETAL LEVEL IN SOME WAYS WE'RE LIKE THAT KID, WHERE LIKE WHAT'S TO SAY THAT LEVEL OF CALM AND NURTURING SOCIETY WHERE PEOPLE HELP EACH OTHER AND YOU HAVE MOVIES LIKE "PLEASANTVILLE," AND, YOU KNOW, THERE'S SOMETHING WRONG WITH THAT KIND OF WORLD. AS A SOCIETY I THINK IN SOME WAYS WE LOOK AT A WORLD LIKE THAT AS LA LA LAND OR IDEAL. ARE THERE DIRECT INITIATIVES TO KIND OF GUIDE PEOPLE INTO A SAFE PLACE TO BE ABLE TO SAY OKAY THIS IS OUR NEW REALITY AND REPROGRAM THE WAY WE THINK AS A SOCIETY?

Well, I know that there are a number of efforts underway to try and recapture community. Some of those things that we sort of joke about, the Cleavers and all that kind of stuff, but even though we kind of joke about that style of living, I know that many people hunger for some of the aspects of that connectivity. There are a number of places where they're trying to reweave community and recreate a sense of being part of each other. A number of interesting stories have been told by people who were doing this in different communities. One was a block in Chicago where everybody was living in these townhouses, and everybody was disconnected. There was a racial event in this school where, I don't know whether the child was from Pakistan or someplace, but he got teased and humiliated.

The people in the community decided this shouldn't happen and our kids need to know more about this. They had lots of ethnicities on this street. This group of mothers, just a handful of three or four, said, "What we're going to do is that I'm from Pakistan, I'm from India, I'm from Asia, and what we're going to do is we're going to introduce the neighborhood to our culture and we're going to have a meal." Once a month they would go around and they would have a meal. They'd invite everybody on the block. The first time hardly anybody came. The second time more people came, and pretty soon it's gotten to the point where now it happens every month, and everybody in the block goes. All these people know each other, and there's a different theme every month to highlight some ethnicity, their cooking, their dancing, and all kinds of other things. That kind of recreating, the sense of belonging is like I said earlier, emerges from people in the community. It grows into something very amazing, and now there are people that are coming from all over that are saying, "Gee we want to do this on our block." They're starting to pop up all over the place, these kinds of community parties and community meals and communal activities that recreate some sense of community. I think that there are lots of different ways that this is being looked at and people are trying to remedy some of this stuff.

MY QUESTION IS: I DO RESEARCH USING SOME BEST PRACTICES PARENTING PROGRAMS IN AMERICAN INDIAN COMMUNITIES. ONE OF THE ISSUES I'M RUNNING INTO IS PEOPLE THAT HAVE BEEN BORN, SAY FETAL ALCOHOL EFFECT OR THEIR PARENTS USED DRUGS OR ALCOHOL, THEN THEY'RE GROWING UP AND HAVING KIDS. THEY'VE GOT SOME LIMITED COGNITIVE ABILITY. TEACHING THEM THE PARENTING SKILLS, ANY SUGGESTIONS FOR THAT?

Yeah. Actually I do a lot of work with native populations in Alberta, and I have done some with native populations in the states. It's a huge problem, because many of these children are born with limited capabilities. Even if they get good nurturing and good caregiving, they're impaired. As they become parents, they're less capable of doing a lot of the things that are required for optimal caregiving. What we do actually is we say, "Listen, you need to really return to the old ways and you need to recognize and that this child has to have multiple people involved in her life or his life." We don't extrude this sort of impaired caregiver and remove the child from that caregiver. We just make sure that that caregiver is not responsible for all the material, emotional, social and cognitive needs of the infant. In some cases it will be a healthy aunt or it will be a grandmother or it will be a neighbor who ends up being the primary stable caregiver. The parent plays a major role as a presence and as a parent, but when the parent gets easily overwhelmed because the baby is crying, they just give the baby to the auntie, and auntie calms the baby and the mother can kind of guiet down. Then when she feels more capable, they give the baby back to the mom. The way we address it almost all the time is that we say, listen, we're not going to be able to create a perfect parent in this child, or this young parent, but what we're going to be able to do is actually weave them in the social fabric so that their child doesn't carry forward unnecessarily some of their own vulnerability.

As you well know, this is easier said than done. We've found that in the communities that have done a good job at reweaving and reconnecting to the old ways it works pretty well. In the communities that are still fragmented and sort of partially urban and partially reserve and they go back and forth and they've been sort of gambling and oil money and all the kinds of other stuff that's sort of been destructive for these communities, it's been much harder.

YEAH I AGREE WITH WHAT YOU'RE SAYING.

Good.

IN WORKING WITH THE PERSON THAT'S COGNITIVELY IMPAIRED, DO YOU THINK IT'S A WASTE OF TIME TO TRY TO WORK WITH THEM ON THE PARENTING?

No, no, no, not at all. Not at all. In fact, some of the most loving parents I've ever had worked with have been cognitively impaired. They've been very, very nurturing, and what their cognitive impairment gets in the way of is helping them understand that it's okay, let them go, let them try this, let them try to walk a little bit. They still want to be nurturing and clingy and loving and it's great for when they're little, but you need somebody that will kind of coach them along and say, "They need this, they need to try to hold up themselves. See if he can hold it himself." Then you need a coach to help them get along. You don't want to take them out of the life of the child. You want to take advantage of the strengths they have and make sure that they feel good about parenting in that regard. I don't know if that makes sense. The whole thing is about people. You've got to get more people in the lives of these kids. You can't have a program that sends somebody in once a week into the home and teaches parenting. You can't teach that kind of stuff. You need to be there. That's the way that person who is cognitively impaired will acquire that information.

IS IT TIME TO TAKE A BREAK?

I guess. I would be in favor of that.

Thank you. Thank you very much.