

Fire Pits & Flat Screens...and the Interbrain

Over the past few years, I have had the opportunity to work with and learn from Dr. Stuart Shanker. His groundbreaking research, clinical work and writing on self-regulation have combined to increase awareness of and accessibility to this field for educators, parents and countless others who are curious about the human dynamic and how to take what we know and have it influence what we do.

Stuart's work has dramatically impacted our understanding of the human brain, its evolution and how various parts of the brain work and interact. This brief note isn't intended to be neuroscience 101 (wrong prof/wrong forum), but I hope it is helpful in supporting understanding of a few fundamentals that underpin the self-regulation framework:

- Our brain operates at three basic levels as noted in the diagram below. When we are fully functioning and well-regulated, the three elements work together and work well, each with its unique role. What makes us human is the size and influence of the limbic and neocortex parts of the brain, with the neocortex being the most recently developed/evolved part of our neurology;
- when the reptilian brain (the ancient brain) is in full flight/fight/freeze mode, it overrides the potential for the other parts of the brain to contribute to whatever circumstance a person is dealing with in the moment. Fear and threat almost always trump logic;

So what?

- Now to the firepit and the flat screen: Humans' more recent and more sophisticated parts of the brain (limbic and neocortex) take us beyond our ancient brain ability to be alert and responsive to danger (survival). They have more subtle capacities related to emotions and logic, and those capacities develop and refine over time through social interaction.

Stuart refers to the earliest of those social interactions as coming through the dyad/the "interbrain" connection between mother and infant. Babies endlessly soak up the cues from their mothers and other caregivers and begin to read signals and make sense of the world around them. Throughout human history, the rhythm of those interactions – socializing, reassuring, context-setting and many other elements of maturation – have continued beyond infancy around the fire pit or through other real time and face to face engagement the child had with her community.

Youngsters learn by absorbing and analyzing the experiences around them. They observe, they mimick, they are chided, encouraged, corrected, coached... In other words, the results achieved through the dyad/interbrain don't come to an abrupt end when babies are weaned. Reading the cues and soaking up the environment continues throughout the formative years (and beyond) with more members of the community playing a role. Fire pits were great learning places for that social shaping. So are family dinner tables if and when we are able to create the time and space for that ritual. And let's not forget about the magical connection time of the parent/child team washing dishes – a dying art.

Now to flat screens and other recent technologies. How much have the interbrain relationship and context setting been impacted as a result of decreased real time, face-

to-face engagement? Is *techno-interaction* and the pursuit of efficiency a good bargain if it replaces a real human exchange?

This post isn't about avoiding technology for learning & entertainment, banning dinners on the run or expelling dishwashers from the kitchen. But let's at least wonder how new realities will impact the next phases of the brain's evolution.

How does human neurology adapt as we make obsolete more and more of the foundational human connection experiences that develop its capacity? Will industrial and post-industrial innovation integrate into or overwhelm a brain that has been shaped over the ages? How can we ensure that efficiencies don't replace real experiences?

There may be an app to replicate the family camping trip – ants and all – but let's be careful about what could be lost in that trade. We need to strive for balance and ensure that the interbrain connection isn't compromised. The intricate dance of brain development and human learning needs real people playing the leading roles.

