

Ongoing Discussion “Thought Piece”

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Building Leaders in the 21st Century: Brains 3.0?
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The number of books on the topic of leadership found on a recent search at Amazon.com now numbers 365,539. An impressive number. When further explored it becomes apparent that the extensive theory and literature on leadership has evolved slowly over the last century, often with a lagging view backward, a rather than a much needed forward, leading view articulating the skills our leaders will need in the future and how we will get there..

Mitch McCrimmon puts it this way:

“The fundamental meaning of leadership has not changed in all of recorded history. It has always been about the person in charge of the group. Being a leader has always meant having power over people and the authority to make decisions for the group. We have tweaked the meaning of leadership a little bit, thus moving from dictatorial to more participative styles but the essence has remained basically unchanged for centuries.¹”

The world around us has not slowed however and the significant changes that had begun several years ago have now been accelerated by the current global economic crisis. These changes include:

- New technologies accelerating information transfer around the globe, anytime, anywhere without boundaries, breaking down barriers and democratizing the power of information
- Continued shift in “Western countries” toward knowledge work and service industries away from more traditional manufacturing
- Rapid growth in BRIC countries (Brazil, Russia, India and China), redefining “second world” as a strong contender in the global economic marketplace
- Accelerated rate of change across industries and countries creating an unprecedented need for strategic thinking and a tolerance for ambiguity at all levels of management and leadership
- Increasingly complex and changing demographics around the globe requiring new levels of global dexterity and sophistication in leaders.

In addition, in my view, there has been a shift in power from administration to management to leadership to network as seen in the model provided.

1. http://businessmanagement.suite101.com/article.cfm/21st_century_leadership#ixzz0P4pVDsSP

The Evolution Of Power

1950s and 1960s	1970s and 1980s	1990s and 2000	2010s and 2020s
Power As Administration	Power As Management	Power As Leadership	Power As Network
Conformist Chain of command Stable Introspective Apprenticeship	Exception driven Ad Hoc Turbulent Market-driven Mentoring	Visionary Instant Sustaining Positioning Coaching	Integrator Virtual Global On Demand JIT Coaching

In the last decade, we have seen the definition of leader evolve somewhat from “One who is in charge or in command of others” to a much broader framework extending far beyond previous limits to only the most senior of leaders.

Peter Senge offers his different view: “*The capacity of a human community—people living and working together—to bring forth new realities.* Another way to say this is that leadership energizes.” See the accompanying [“Leadership in Living Organizations”](#) article by Peter for a more thorough review of his perspective.

Thus this new environment places a burden on all of us, especially leaders, to be more adaptive, responsive, and innovative than ever before. These new, rapidly changing and unpredictable situations require new kinds of thinking. When leaders approach a new situation with their habitual thinking, they severely limit their ability to generate new ideas or solutions. If our thought patterns continue to be processed by our brains using the same neural pathways as in the past, our ability to lead in different ways will not evolve to meet the new demands of the situation. Leading in new ways requires new connections and processes the brain, breaking our existing patterns.

As David Rock and Jeffrey Schwartz describe in the attached Neuroscience of Leadership : “Cognitive scientists are finding that people’s mental maps, their theories, expectations, and attitudes, play a more central role in human perception than was previously understood.” Their attached article goes into detail about how difficult it can be to change our thinking and our way of being, since that literally requires we change our brains.

There is broad consensus that the world around us will require a different and changing approach to leadership, and that change is difficult.

Most of us have tried to change not only our own mindsets, but other minds as well. My guess is that more often than not we have failed. The following excerpt from my article on [Changing Minds](#) helps us understand why:

1. *Mindsets are part of our 'cognitive unconscious' where we have already formed mental maps that become our point of reference as we look at the world. Most of the time we are unaware of these mental maps or the impact they have.*

Our mental maps are literally built from our experiences in life. As we process information, most often unconsciously, we are looking for patterns and scanning the mental maps we have already formed neuronally based on our experience. Sometimes our maps are helpful and sometimes they are not.

You are often encountering mental maps when you travel to a new place, and attempt to make change in a currency you are not accustomed to. This is also true when interacting with the differences that may appear in dress, road signs, habits, customs, food etc. Our maps are often of little help and create confusion as we are challenged by some subtle differences in a system we think we already know. In fact, our experience and knowledge actually stops us from looking around for other options and ideas that might help us solve those challenges.

Most change requires that we challenge our mental maps and form new connections in the brain. This takes energy and motivation. When we understand how our mental maps are working and how they have created our mindsets, we are better prepared to adapt and respond to the change that is constantly occurring around us

2. *Mindsets are firmly engrained in the brain. They are reinforced by the structure and very nature of the brain itself.*

The brain is where we go as we are processing any new information, and we need to learn how to develop, practice and maintain it. Dr. Michael Merzenich, an expert on the brain's ability to change (known as plasticity) at the University of California at San Francisco (UCSF) stated it this way: "The brain was constructed to change." It is the single body organ that is the central processor of all our mental processing. Our neurological system is involved in all aspects of the change process. Each and every brain is as unique and different as your thumbprint. We literally build that print throughout the course of our lives, creating and fine-tuning our own unique style and building our mindset.

Our maps lead the brain to fill in gaps we might initially see and then quickly move on, but often with incomplete information. This is helpful when the map matches the situation and provides us with great efficiency so we do not have to sit and think about how we start our car every day. However, this is critical to understand as all learners are constantly filling in the blanks unconsciously, based on their prior experience. Look at the diagram and read what you see:

ICE CREAM IS GOOD

What did you say? Ice cream is good? Groups around the globe who have completed this exercise are 100% sure that is the phrase provided. However, when you reveal the entire phrase you see: JGF GPFAM JS CQQD. (If you do not believe me take a piece of paper and cover up the lower portion of the letters, JGF GPFAM JS CQQD and you will see how this works.) Thus all of our experiences will preprogram what we see and how we think about or feel about a given topic or model. Years ago a participant in a program stood up during a segment and declared: "Excuse me, I do not DO metaphors." It was clear that this person was shutting down his own mental process because of a previous experience. Think of the times that has happened to you, to your team and to your organization. When we engage others in a change process we are asking them to challenge their previous mental maps and make new neural connections in their brains.

- 3. Isolated facts have little effect on mindsets. If the fact does not fit the current mindset it gets rejected instantly.*

When 90% of heart patients do not take action after being told about changing their lifestyle in order to prolong their life, then you know something is wrong. What is it about how our brains that resists change so tenaciously? Why do we fight even what we know to be in our vital interests?

The reason is that our thinking relies on our mental maps and mindsets, not facts. Neuroscience tells us that each of our mindsets, the long term concepts that structure the way we think, are instantiated in the synapses of the brain.

Dr Michael Merzenich found in his research that habits actually showed up on MRI scans. In studying flute players he found their brains had

developed larger representational areas that control the fingers, tongue and lips. He could see that flute playing had physically changed the brain.

This is why mindsets are not things that can be changed by someone telling you a few facts. Facts that do not fit with our mindsets and the mental maps that form them that are wired into our synapses, get rejected.

Leaders are just like flute players. They have developed thinking habits or mindsets which have changed their brains. The cumulative weight of knowledge and experience and the mental maps that have formed makes it very hard to change their approach to leadership.

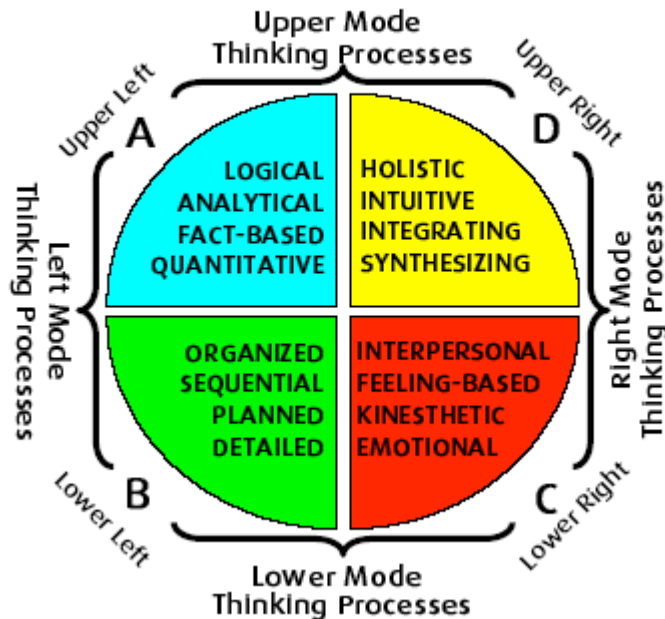
A Whole Brain Approach

An important filter for our mindsets is our thinking style preferences across the Whole Brain Thinking Model and measured by the Herrmann Brain Dominance Instrument (HBDI.)

The concept of Whole Brain Thinking is based upon our distribution of specialized modes throughout the brain system. The metaphoric model, developed from research done by my father Ned Herrmann while head of Mgt Education at GE (Crotonville) is divided into four separate quadrants, each one different and equal in importance. The model has been highly validated over the last 30 years with over 2 million learners worldwide.

In the Whole Brain Model, a more logical, analytic, quantitative and bottom-line approach appears in the Upper Left A quadrant. The more planned, organized, detailed and sequential style is processed in the Lower Left B quadrant. Synthesizing, integrating, holistic, and intuitive approaches reside in the Upper Right D quadrant. Finally the interpersonal, emotional, kinesthetic and feeling modes are associated with the Lower Right C quadrant.

Whole Brain Thinking Model



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If you think of each of these quadrants as four different leaders, imagine how each might approach the process. Or better yet, imagine one leader embracing all four of these approaches. In fact, the role of CEO, a classic leadership position, actually requires Whole Brain Thinking by design: the need to work with and lead a wide range of functions ranging from finance to strategy to people issues to execution. Our research on CEO HBDI® thinking styles data has demonstrated that CEO's have a high percentage of the rare whole brain profile (less than 3% of the profiles), a profile that has preferences equally distributed across all four quadrants.

The demand for Whole Brain® Thinking is no longer limited to the CEO ranks of leadership. Our world now requires the adaptive and integrative thinking hat spans all four quadrants. We no longer have the luxury to relegate ourselves to "limited brain bandwidth."

The effective leader of the future will be a **"thought leader"**, a highly skilled thinker that is able to situationally access the different thinking skills across the Whole Brain® Model, required for any given challenge, as needed, irrespective of their natural preferences. Recent informal analysis of current leadership programs in large Fortune 200 companies across the globe show that we are woefully behind in the development of such leaders.

We know that by actively engaging the brain's capacities from both hemispheres and all four "quadrants", you have a larger "playing field" from which to draw your thinking – there is more cross fertilization between neural synapses, providing the opportunity for new connections to form.

Questions to consider:

- What organizations have you experienced who are doing this well?
- For those that are not, what do you believe is the greatest barrier?
- How prepared are you personally as a leader for what we will need in coming years?

The model below shows a Whole Brain Map of the critical leadership elements for 21st Century leaders:

<ul style="list-style-type: none">❑Rapid problem solving❑Managing an endless stream of data, facts & information❑Effective financial know-how and global business acumen❑Decisive, in less time, under pressure❑Leveraging new technologies & technical approaches❑Analyzing new types of global business issues❑Solving complex business & competitive challenges	<ul style="list-style-type: none">❑Embracing constant rapid change❑Being future focused❑Thinking as a global, holistic "citizen of the world"❑Decision making in a world of greater ambiguity❑Intelligent risk taking❑Building a culture where innovation and creative thinking thrive❑Effective at scenario planning and strategic thinking
<ul style="list-style-type: none">❑Managing complex operational issues❑Just in time planning and deadlines❑Staying on task & focused in a changing world❑Delivering results, implementation and taking action❑Driving flawless execution and zero defect quality initiatives and evaluations❑Managing conflicting priorities requiring❑Simultaneous processing	<ul style="list-style-type: none">❑Sensitive to diverse people and generations in virtual and co-located environments❑Good emotional intelligence (EQ)❑Sensitive to community & environmental issues❑Responsive to increasing interaction with associates, customers & stakeholders❑Culturally and globally savvy❑Driving a customer & service focus❑Collaboration and teaming

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Other questions for our discussion include:

- How do you define the "new normal" we will see post recession and what will be the impact on the leadership requirements?
- How will younger generations emerge as leaders? Do you think their very different life experiences influence their level of interest and capacity for this breadth of thinking?
- How will social learning and networks impact how we look at developing leaders and the leadership function?
- What are the most radical "pictures" you have of the new organizational models, which will of course require different leadership?
- What questions do you have?
- Should we look for ways to devise a "leadership chip" to insert into peoples brains once we can do that safely. If so, what would be the characteristics? What we would want to keep? Let go of?

Biography

Ann Herrmann-Nehdi is CEO of Herrmann International, a global training and consulting company and publisher of the **Herrmann Brain Dominance Instrument (HBDI)**. Ann has led the company's last 20 years of *applied* research on thinking and the brain. Leading to key applications of the company's *whole brain thinking model* include innovation, strategic thinking, problem solving, management, leadership, sales teaching and learning, self-understanding, communication and team/staff development. Since joining the company, Ann has established the company's worldwide offices throughout Europe, the Pacific Rim and Latin America.



Nine out of ten of the Fortune 100 have used the Whole Brain® approach to improve their performance. Clients include AIG, Allstate, AXA, Air France, Bank of America, Barclay's, Boeing, BMW, Cirque du Soleil, Cintas, Cisco, Coca Cola, GE, Hallmark, Hugo Boss, IBM, Institute for Management Studies, JP Morgan, Limited Brands, Milliken, Microsoft, MTV, New Zealand Telecom, National Semiconductor, Novartis, P&G, Purdue Pharmaceuticals, Rogers Communications, Shell Oil, State Street Bank, Target, US Forest Service, NSA, PWC, MIT, Wharton School, Queens University, Miami University, Yale College, and partner distributors around the globe.

A sought out researcher on learning and creative thinking, Ann has designed and delivered studies, keynotes and programs for a wide array of Fortune 100 organizations around the globe including Dupont, IBM, Purdue Pharma, MTV, The American Creativity Association, Novartis, the Indian Society for Training and Development, The Training Directors Forum, SHRM, CPSI, The Innovation Network and the Project Management Institute. Ann is an ISA (Instructional Systems Association) and Eureka Ranch board member, an advisor to the American Creativity Association and Innovation Network, a founder of the Hickory Nut Gorge Community Foundation and serves on other non-profit and for profit boards. Ann's undergraduate work took place at American University (Washington DC) and the Sorbonne and University Paris VIII (Paris.) as Ann lived in Paris for 13 years before returning to the US to work for Herrmann..

The founder of Herrmann International, Ned Herrmann, was Manager of Management Education for General Electric where he began his groundbreaking study of the brain, creative human development and learning which resulted in the formation of the HBDI funded and developed by GE. Herrmann authored several books outlining his findings, including *The Creative Brain* published in 1986; *The Whole Brain Business Book*, published in 1998.

The work of the company has been featured in the Harvard Business Review, Fast Company, Business Week, USA Today, Discover, Scientific American The Times Education supplement and was featured on the Australian Today Show. Ann has contributed chapters to over two dozen publications including The ASTD Handbook for Workplace Performance (2007), the Trainer's Portable Mentor (2008) and has been featured in many other publications over the last decade including The Art of Visual Management. Ann is working on a book due for publication in 2010, currently titled Return on Intelligence: Developing Tomorrow's Thought Leaders.