



Naturally Selected

The Evolutionary Science of Leadership
by Professors Van Vugt and Ahuja's

Most of you who know me personally are aware of my background. While my academic training is in law and economics, I have also had the privilege of creating and managing several businesses. What very few of you know is that relatively early in my academic career I became frustrated with the way we were preparing young people for careers in business. In fact, I was already on my way to the private sector when, fortuitously, the opportunity to create CIMBA presented itself.

During those early years in academia, I found myself both teaching business students and then later employing them. I was surprised at the amount of additional training we had to undertake to bring the functional skills of far too many of those very talented young people to a productive level. I was recently reminded of those days by a CEO of a Fortune 50 company who said to me: "We hire the best, we pay the best, and yet we still experience a normal distribution in performance. Why?"

In the early years of the CIMBA MBA program, I made an effort to understand what was missing in the learning process. Like many others, I focused on the way we develop young people as leaders. I was and remain convinced that MBA and undergraduate business programs do an excellent job in teaching axioms, formulas, theorems, and principles. But as the quote from the CEO indicates, we do not do such a great job in showing our students how to use them.

We first approached this "ability to do" issue by focusing on the importance of critical thinking. After considerable investigation and testing, we embraced Kepner Tregoe and have been teaching their brilliant rational process methodology to students at all levels for nearly 20 years. While we saw improvement, too many talented young people still had difficulty making the adjustment to leading others.

Our observations encouraged us to then move into coaching with the intent to assist students in developing more productive and constructive behavioral traits and attributes. Frustrated with the

tools that leadership development suggested and that coaching training all-to-willingly utilized, we moved into neuroscience looking to hard science to unlock the door to leadership development. Although the science brought additional clarity to understanding leadership and leadership development, its use to simply improve the way we described the physiological responses of leaders to workplace stimuli had limited impact on individual growth and development. Just because we could make an individual aware of brain functioning would not then by itself bring about behavioral change. Although understanding brain functioning was important, we needed to work on rewiring the brain to be more productive, constructive, and creative.

Over the past 18 months at CIMBA we have been looking at this more intently than at any other time in our 30-year history. Our intense emphasis on the use of leading-edge technology to assess an individual's physiological response to stimuli has provided us with a significant number of interesting insights. Our students have been an incredible source of inspiration. Many of them have found their way into some of the very best companies in the world. They appreciate the advantages that the CIMBA MBA and undergraduate programs have provided them, but fortunately for us they are very open in expressing their frustration with their company's leadership development program.

Our ventures into the NeuroLeadership Summits, ATD, SHRM, and other gatherings of leadership development professionals have only served to confirm that the frustration with leadership development efforts is widespread and universal. Industry estimates put the success of such development programs at something less than 25 percent. For a \$60 billion annual expense, that it is quite a dismal rate of success for something so central to business success. Interestingly, the vast majority of criticisms levied against development programs and reflected in the continuing flow of "new and improved" programs being offered all seem to focus on leadership development with the leader in place. This is the notion that has troubled us the most, and it is the focus of this ABC.

In an effort to bring our student groups together, we have found that both low and high ropes courses can serve as an effective bonding experience. They also provide an efficient vehicle for us to introduce students to our language and way of thinking before they enter into our formal development program. As those of you who have experienced our program know, our students typically do not know each other when they first arrive. In other words, they are "strangers" to each other. As a group of us were observing such a ropes course some 18 months ago, we realized something that has caused us to refocus our thinking about personal development, and particularly as it relates to leadership development. We observed that although these people did not know each other well, it took between 15 and 20 seconds for them to organize themselves into

a functioning team. After considerable debate, we hypothesized that humans may very well be wired to be followers. However, what concerned us most was the way they went about choosing their leader.

Before getting into the significance of that hypothesis, let me take a moment and walk you back through some of the thinking we have expressed in this column in the past. As we discussed in last month's ABC, we are advocates of the recognized anthropologist Professor Robin Dunbar's Social Brain Theory. Prof. Dunbar, in his book *Thinking Big: How the Evolution of Social Life Shaped the Human Mind* that basically summarizes his research over the past 25 years, argues persuasively that our brains became bigger as they evolved to manage the demands of its social environment. I encourage you to read or reread last month's ABC both for more of the details of his thinking and on how we have been influenced by that thinking. I would like to highlight what we believe is a fundamental notion: We believe that if you embrace a relationship between neuroscience and leadership, then it is fundamentally important to understand how and why the brain evolved.

To that end, an interesting and provocative research article written by Prof. Todd Heatherton further focused our thinking (<http://www.annualreviews.org/doi/abs/10.1146/annurev.psych.121208.131616>; payment for access required). Professor Heatherton makes the argument that if in fact we are wired to be social then our brains evolved specific circuitry to ensure our ability to be social. More specifically, we have evolved wiring that makes us acutely sensitive to threats that may bring about our exclusion from our social group. He states that those circuitries would necessarily need to support and provide self-awareness, social awareness, threat detection, and self-regulation. If for any reason one of those circuitries failed in its function our "survival" would be threatened in that sense that exclusion from our social group often meant death. Those individuals who were not able to maintain good group member status were not likely to see their genes passed forward as they were not likely to survive. Put differently, through these circuitries your brain collects and interprets information, social cues, which allow you to make sense of a group's social norms. They make an effort to tell you what behaviors are appropriate and inappropriate. Importantly, those social norms are very likely to change as you move from one social group to another - something we refer to as a social transition (which can lead to deceptive brain signals, something we have talked about in more detail in previous ABCs. Internally, we refer to Heatherton's circuitries as being our "Social Brain."

This brings us to this month's ABC: Professors van Vogt and Ahuja's *Naturally Selected: The Evolutionary Science of Leadership*. Please understand that this book was written some 5 years ago, but only recently did we become aware of its significance. The author's basic premise is that

we are wired to be followers - consistent with our observations at the ropes course. The "why" of their argument follows on directly from the thinking of Professor Dunbar. In fact, because their motives for investigating our social brain differ from Dunbar's, they delve more deeply into the mechanics of the social groups and the roles and responsibilities individuals accepted in those social groups. They make the compelling argument that leaders were chosen from within the social group, which meant that they had first acquired a fundamental leadership competency - an understanding of the group's social norms; they had learned to be a good follower. They were then chosen on the basis of their technical expertise in meeting the group's need for social coordination to bring about the fruits associated with that technical expertise. In other words, if a social coordination need arose for a specific technical skill, then the individual with both the technical expertise and the ability to function well with others with whom he would be working drove the criteria for that person's selection.

Now, let's get a sense of how we now attempt to accomplish the same thing. Let's go to a typical business class at your local university. The professor, in response to the business community's request that students do more team-based projects, assigns group projects and then directs students to various groups. Within each group, it is not uncommon for the professor to have placed a student within each group she has identified as being particularly technically competent. Upon seeing his team for the first time, that student's first response is not atypically: "The professor must really dislike me; look at the people she put on my team!" It will not take that student long to realize that if this project is going to get finished in a way that maintains his grade point, he is going to have to do most of the work himself. He completes the project, turns it into the professor, reports that all of the students worked together to complete it (knowing that his social life that evening is likely to involve being isolated, ignored, or ridiculed if he does otherwise). So what did the students learn about being a good follower? First, the person who actually did the project "learned" that team members are unreliable, undependable, and can be not trusted to deliver quality work. Delegation and trust building are not likely to be important criteria in subsequent team-based experiences for this person.

And what about the other members of this so-called team? What did they learn? As a general matter, they learned that if they are willing to sit back and free ride someone else will take on the responsibility to make sure that the work gets done. They do not risk being responsible to other group members if the project turns out to be less than satisfactory. In what I would call the "best of this worse case" scenario, those who free ride are also "rewarded" both with a satisfactory grade for their nonperformance and thus incentives to behave the same way in the future. In a situation I consider to be the "worst of the worst" case scenarios, those "free-riding" students who actually make an effort to provide an input often find their work being ignored or rejected and are going to be far less willing to put themselves out in their next team-based experience. Can we put the

blame on the professor? This is a developmental function that goes beyond the technical expertise of the professor and points out the need for behavioral training, something that is universally lacking from the business school experience. In our terminology, students are not provided with an understanding of and developmental guidance in their social brains. Interesting, the DAVOS World Economic Forum is on record for saying that this "points to a need to adapt and integrate professional and academic education" to better assist the current and subsequent generations in building a better future. For example, you are far, far more likely to find coaching support outside academia than in it.

The situation is further compounded when we begin to more closely investigate how we choose our leaders. From our ropes course experience, almost all of the groups begin by choosing a leader who maybe more extroverted, or in some other way stands out. As the authors point out, as this decision unfolds the persons in the team quickly assess other's reaction to the choice with their brain's System 1 thinking circuitry being strongly influenced by confirmation bias: "If the others seem to be in agreement, then so will I." Little or no inquiry is made as to whether the chosen "leader" has either the competence or the experience for the task. In those situations where we allow the group the complete freedom to make the choice, if the person proves not to be up to the task, the team will slowly drift toward a more competent person as the day proceeds. If, however, we take their choice and fully anoint that person with authority and responsibility for the day and the person then turns out not to be up to the task, anarchy and chaos typically become the order of the day.

How does this differ from today's typical selection criteria for advancement to leadership roles and the high percentage of leadership failures we ultimately experience? In large measure due to our brain's System 1 thinking biases (and an unwritten need to protect ourselves from criticism later), a disproportionately large number of individuals are selected for leadership positions based on their technical skills (which can largely be measured objectively). In other words, we are very likely pulling from that group of individuals from the university example above who learned to rely on their technical skills and to avoid building trust and delegating to others (the "free-riders") because their social brains had been wired by experience to believe that the "free-riders" were unreliable, unaccountable, and unable to deliver a work product to the expected standard. "If I delegate to my team members, they will deliver an inferior product and I will not live up to the expectations that others expect of me." Importantly, note the difference with how leaders were chosen by our ancestors. First, you needed to be able to read the social cues in order to understand the group social norms. Then, and only then, did technical expertise become a relevant selection criterion. In other words, first and foremost was the person's ability to objectively demonstrate a functioning social brain.

So where is the social brain on-the-job training our ancestors found so beneficial to be found in our leadership development programs today? After reading volumes and volumes on leaders and leadership from a variety of perspectives, I believe this key follower competency criterion - the functioning of your social brain -- has been all but ignored. As further evidence, a Google search of "leadership" will generate more than 2 million hits; a Google search of "followership" will generate less than 200,000. Worse, many of those followership discussions largely focus on the importance of the follower being both loyal and manageable, with disproportionate emphasis placed on discipline and obedience. The authors here clearly see the distinction between leaders developed on the basis of relevant social brain criteria and those that are not. I truly believe it is a function of the resistance of traditional leadership theorists to embrace hard science outside of their expertise like biology, economics, anthropology, and primatology, in addition to neuroscience. I have lost count of the articles and speeches and discussions that I have given to others in the personal and leadership development space that hasn't ended with: "Maybe it is time to take a neuroscientist to lunch." Perhaps we should add: "And also an anthropologist who understands followership competencies and how to develop them in young people."