



## Da Vinci's Horse *Saper vedere – Sapio audacter*

### **Part One** *Saper Vedere*

September 10, 1999, five hundred years to the day from the date that invading French armies destroyed Leonardo da Vinci's full size clay model, *Il Cavallo*, a 24 foot bronze horse, created directly from da Vinci's detailed notebooks was unveiled in Milan Italy. Sculptor Nina Akamu, studied not only Leonardo's horse sketches, but also his entire body of work, in order to correctly interpret the design. She offers that "Perhaps the modern Leonardo da Vinci's Horse can be seen as a symbol for the power and momentum of creative energy and a vision which is directed and focused on a distant goal. The Horse's awesome size stands as a testament to the magnitude of Leonardo's colossal creation. ... as a metaphor for the immense genius of Leonardo, a paragon of creativity, and the great epoch in which he lived, the Renaissance." Indeed, his name and Renaissance are inseparable. The planned casting in bronze would have been a



revolutionary breakthrough and the “horse that never was” would have assured his unparalleled reputation as a sculptor.

Known as artist, scientist, and designer of weapons, during the seventeen years that followed the Duke of Sforza’s request for the largest equine statue ever conceived, da Vinci worked on the Last Supper, multiple portraits, produced a city plan for Milan, engineered new weapons and a defense system for the Duke’s castle. The illustrations, detail, breadth of subject matter, level of comprehension, and futuristic perspective found in his notebooks reveal a man whose creativity responded to a virtually limitless range of scientific challenges.

In the coming years, no learning paradigm shift will be more needed and forcefully felt than the enrichment of thought through cross-pollination. Da Vinci’s body of work has provided a highly workable model for how this shift might be accomplished. In his world, the lines between the disciplines, pervasive in today’s schools, were absent; the works he did as a scientist, mathematician, and artist all informed the other efforts. His workplace was part artist’s studio, part science lab, and part model-building shop. He recognized that painting



scenes realistically required him to observe with great care how animals, people, and landscapes *really* looked and moved - carefully noticing the differences in how an object looked when it was close by, when it was farther away, and when it was seen in bright light and in dim light. His was a new view on cognition- the artist as transmitter of the true and accurate data of experience acquired by visual observation. He developed a unique theory of knowledge in which art and science form a synthesis – with multiple perspectives as key – *saper vedere*- “to see is to know.”

The first edition of the Project White Horse website featured Dr. Chet Richards’ adaptation and amplification of John Boyd’s Observe-Orient-Decide-Act loop. The *perspective* presented was that the OODA “loop” is a way of thinking about organizational behavior, an “operational scheme for organizational success,” providing a common framework to help individuals and organizations focus on ways to improve their competitiveness -essentially, a model to enable organizations to change their environments before opponents can comprehend. In the last edition, Boyd’s *Destruction and Creation* (predating OODA Loop development) addressed the analysis and synthesis required in the face of ever



changing environments (i.e., actions that must occur inside the Orientation phase of the OODA process) *The perspective:* Everyday life and particularly catastrophic events will present never ending cycles of increasing mismatches between what we observe and the models of response we have developed. As this occurs, our response must be founded in a continuing wide search for knowledge and expansion of our capability to adapt - stating a thesis, developing a contradictory antithesis, and combining and resolving into a coherent synthesis - a “continuous effort to survive and improve one’s capacity for independent action.” (Boyd)

Project white Horse 084640 has offered for a basis of effort that crisis and disaster response decision making in this new century will be made in an environment more multi-faceted, more complex, and indeed, unprecedented in history. Postulated is that models of response developed in the twentieth century are outmoded and use will result in increased uncertainty and eventual chaos if force-matched to catastrophic events such as the WTC attack and Hurricane Katrina. The first step towards survival is recognition of the mismatch of observation and model; the second, broadening the field of view.



*As a forum for exchange of ideas on decision making and leadership in the 21<sup>st</sup> Century*, “broadening the field of view” means that this site’s focus must be on providing for consideration, multiple perspectives – intersections of distinctly different fields, disciplines, and cultures. This third addition offers discussion of experienced based Recognition Primed Decision (RPD) making by Dr. Gary Klein as another *perspective* to our view of decision making. “Strategies of Decision Making” states that there are different ways to make decisions, analytical ways and recognitional ways, and that we must understand the strengths and limits of both in order to improve military (*and all hazards – PWH*) decision making....He suggests that we should be developing techniques for broadening the experience base of potential decision makers through education and training, to facilitate situation assessment more quickly and accurately when crisis and disaster occur.

Gary Klein is Chief Scientist for Klein Associates. His efforts initially focused on the study of wild-land and structural fire fighters, expanding to the study of fighter pilots, oncologists, laundry consumers, and air traffic controllers. Clients



include both military and commercial clients, providing decision solutions and products for the U.S. Army, Navy, Air Force and Marines, and commercial customers AT&T, Duke Power, Duquesne Light Company, Hughes Network Systems, Johnson & Johnson, Lion Apparel, Litton Data Systems, the Marine Spill Response Corporation, Procter & Gamble, and Westinghouse.

Klein's more expansive discussion of RPD in *Sources of Power; How People Make Decisions* that provides the rationale for inclusion of the other featured article and the beginning of a new category of presentations on the site – the perspective of storytelling.

## **Part Two *SapioAudacter***

*On May 31, 2002, more than eight months after the (911) attacks, the work of cleaning up Ground Zero was finished. In a moving ceremony, an empty stretcher was carried from the vast pit symbolizing the victims who were never recovered. Then, laid out on the back of a flatbed truck, a multi-ton girder that*



*once stood at the base of the Towers was draped in the American Flag and hauled up the long ramp from the pit. It was as if we were watching a funeral for a pair of grand buildings and all that they once had suggested about American prowess and invincibility.*

*If anything else was put to rest that day it was the innocent belief that our government could surely protect us at home from any men so dark or deeds so evil.*

*Was that day also the funeral for the notion that “**we can’t manage a crisis until it’s a crisis?**”*

These are the final words of *The Cell: Inside the 9/11 Plot and Why the FBI and CIA Failed To Stop It* by John Miller (interviewed Osama bin Laden while with ABC News), Michael Stone, and Chris Mitchel. By their own definition, the book is a narrative, told mostly through the stories of investigators going back to the late 80s.

Official governmental investigation and reports like the 911 Commission and all scientific research supply data, results of analysis, conclusions and



recommendation. What they don't provide is the richness of the people and the events. Klein notes that "the limitation of a story, which makes it non scientific, is that no one has controlled the conditions...We have lost precision, the ability to trace each factor, in order to gain richness, the full set of interacting conditions. For most purposes the trade-off is worthwhile."

This formal investigation and analysis of "9/11" leaves us with several labels - an intelligence failure, an organizational interoperability failure, and a failure of imagination. *Can't manage a crisis until it's a crisis* appears synonymous with *failure of imagination*. This thought encompasses a people problem, a decision making bottle neck problem, and an outmoded response model - mismatched with observations of a complex changing world environment. Solution will require *destruction and creation*, broadening of observation and learning and applying a sophisticated form of recognition-primed decision making. It will also require acceptance of the abstract nature of the problem/solution set - mandating multiple perspectives.



In *Sources of Power*, Dr. Klein notes that “people draw on a large set of abilities that are sources of (decision making- PWH) power. The conventional sources include deductive logical thinking, analysis of probabilities, and statistical methods. Yet the sources of power that are needed in natural settings are usually not analytical at all – the power of intuition, mental stimulation, metaphor and storytelling...The power of storytelling helps us consolidate our experiences to make them available in the future, either to ourselves or to others.” *Sapio audacter* – “dare to know.”

The richness of experience in stories should parallel the more formal and necessary academic/scientific investigation/concept development efforts. To that end Project White Horse 084640 will endeavor to add storytelling as a perspective on decision making.

The first story offered, “Detours off the Path to 9/11” by Cyrus Nowrasteh may at first seem a strange choice for a website focused on time critical crisis decision making, but this story about the resistance to televising the ABC two part six hour show *The Path to 9/11* is direct fallout of *couldn't figure out how*



*to manage a crisis until it became an incredibly painful disaster* and underpins the complexity and continuing lack of understanding of our post Cold War environment. As much as any story from the 9/11 experience, it is indicative of observation and response model mismatch and difficulty in just getting the right people on the same page in searching for long term solutions.

Cyrus Nowrasteh wrote and directed the Paramount/Showtime 2001 TV production *The Day Reagan Was Shot*, which received a number of awards including the Pen USA West Literary Award for Best Teleplay 2001-2002. In addition his other writing credits include Showtime's *10,000 Black Men Named George*, the true story of activist A. Philip Randolph's struggles in leading the Pullman Strike of the 1930s. He is currently writing the screenplay for *Jawbreaker*, the story of Enduring Freedom operations in Afghanistan for Paramount Pictures with Oliver Stone as director.

For *Path...* the major element of concern and controversy— dramatization of decisions involved with aborted attempts to capture Osama bin Laden- had been discussed in significant detail in *The Cell*, in *The Man Who Warned America*;



*The Life and Death of John O'Neill*, in *The Age of Sacred Terror*, and in *Against All Enemies*, among other well known books following the 9/11 attacks. Yet the film was attacked by the media, by bloggers by U.S. senators who threatened Disney/ABC with station license revocation, and Nowrasteh was threatened. On the other hand it was defended by Michael Scheuer, former chief of the Osama bin Laden unit at the CIA's counter-terrorist center and by Steven Emerson, one of the foremost terrorism experts in the world, a man who has testified before and briefed Congress dozens of times on terrorism, who stated that "The Path to 9/11 is 100 percent accurate. Lt.Col Robert Patterson, chief White House military aide to President Clinton said it was 100percent factually correct in terms of how the Clinton administration handled the opportunities. The most prevalent role is that of FBI agent John O'Neil, *the man who warned America*, and died in his new job at the World Trade Center on September 11<sup>th</sup>. His is a story that all should know if we are serious about surviving in this century. O'Neill's story and *The Path to 9/11* are one and the same – the story of mismatch of observation and response model and the dire results when that mismatch goes unresolved.



Reading these books, viewing this movie, one's perspective on decision making in crisis might be worth considering in light of the ceremony at ground zero and the question the authors of *The Cell* ask: *If anything else was put to rest that day it was the innocent belief that our government could surely protect us at home from any men so dark or deeds so evil. Was that day also the funeral for the notion that “we can't manage a crisis until it's a crisis?”*

The first step towards survival is recognition of the mismatch of observation and model; the second, broadening the field of view – learning, unlearning, relearning.

While da Vinci's Horse stands as a symbol of the Renaissance and his unique perspective, creativity and gifts to the world, when historians look back on America and the problems unmasked by the attacks on the World Trade Center and the Pentagon, what will be noted as our symbol of creative response in the 21<sup>st</sup> Century? Indeed, will there be one?

*Saper vedere, Sapio audacter ...sapere aude*

To see is to know – dare to know ... dare to be wise-think boldly