## Roger Martin and The Design of Business

by Bonnie Toland

Some men see things as they are and ask "Why." I dream things that never were and ask "Why not." - George Bernard Shaw

Design thinking has ignited the business world, becoming a mantra at business schools such as Rotman in Canada and Stanford in California, as they take a page from companies such as Apple and IDEO. Many designers are welcoming this development wholeheartedly, as confirmation of their value and often with the hope that this will lead to a better, more involved professional future. To reciprocate the interest, NeoCon invited a leading business thinker, Roger Martin, dean of the Rotman School of Business, to speak on design thinking to an audience of designers, and, at last, we have someone who can bring some balance to this auspicious beginning.

Dean Martin's cheerful, almost playful demeanor surprises those with fixed ideas about the business world. These misconceptions, rampant both within business and outside of it, are exactly what he wants to change. Business, he claims, has embraced *reliability thinking* and must, if it intends to compete, move toward *design thinking*. In the presentation of his new book, Dean Martin steps out of his role as dean and into a room of designers. Gratifyingly, instead of the usual smarmy adulation of design, he focuses not only on how business must change, he also targets designers, explaining how to improve their interactions with the business world, making the discussion highly relevant to the setting.

According to Dean Martin, two main styles of thinking exist: reliability thinking and validity thinking, the latter appearing to be a form of abduction, or working backward from an imagined or hoped-for result. Basically, reliability thinking is analytical. It runs on deductive and inductive logic and depends on existing consistent and replicable data. Reliability thinking requires "proof," which kills innovation, because, as Dean Martin cleverly points out, one cannot prove something that has not been tried. New ideas cannot be born in a "prove it" atmosphere. Instead of truly innovating, businesses with this traditional mindset tend to focus on honing and refining existing ideas.

On the other end of the spectrum, validity thinking works primarily on intuition and a melange of data. The goal is to produce something beautiful that works, with the details and methods to be determined. Validity thinking, however, is unreliable, unreplicable, and

unquantifiable and, as such, is often too risky to use in a business model.

One might ask at this point, what is innovation? Innovation, according to Dean Martin begins with a mystery, becomes a heuristic (an aid to problem solving), and develops into an algorithm (a recipe). To explain this process, he provides the example of drawing in perspective. The representation of threedimensions on a two-dimensional plan began as a mystery, evident in early paintings that lack depth. Artists made great strides when they observed foreshortening and began incorporating it into their drawing. Dean Martin refers to this leap as a heuristic. It became a rule-of-thumb that objects could appear to recede into the distance by drawing them increasingly smaller. This heuristic evolved into an algorithm producing the vanishing point and other formulaic methods for creating the illusion of depth in a two dimensional plane. He claims that reliability thinking cannot make the leap from mystery to heuristic. Instead, reliability thinking has produced masters of the algorithm.

Dean Martin offers the contemporary example of McDonalds, which began with the mystery of what Californians wanted to eat. The heuristic was the quick simple hamburger stand. The algorithm refined the heuristic into a formulaic and exact methodology that has spread McDonalds throughout the world. Although greatly successful, the environmental footprint and the seemingly soulless repetition of the algorithm has created considerable backlash. The next generation of business will seek not only to perfect the algorithm, but also to master the heuristic. In order to do this, he claims they must become *design thinkers*.

Dean Martin suggests that design thinking blends reliability and validity thinking. He shows a model of two overlapping shapes. A small yellow-green space represents where they intersect. Design thinking marries the analytical thought process of reliability with the intuitive thinking of validity. With design thinking, people explore unknown possibilities for what could exist, not just the evidence for what does exist. To tie his discussion to the audience, Dean Martin notes that while business thinking leans too far on the analytical side, designers often lean too far toward validity. His story of presenting a new idea to a bank early in his career illustrated this clash humorously. Full of excitement, he approached the board of a bank with a fresh idea, to which the president asked if it had been tried before (reliability thinking). In his enthusiasm, Martin exclaimed, "no, you will be the first!" (validity

thinking). Martin thought he had sealed the deal, but from the bank's perspective, the unpredictability made the idea seem too risky. Now, he says, the bank's competitors have incorporated the idea, but that bank has yet to try it. To aid in the communication and collaboration between the two camps, he recommended five tips for each.

Five tips for **designers** in a "validity hostile" environment:

- >Understand "design-unfriendliness" as a design challenge.
- >Empathize with "design-unfriendliness" understand the *reliability thinkers*' fears.
- >Speak the language of reliability if Martin had known this, that bank might have tried his idea.
- >Use analogies and stories without data, a *design thinker* can help "prove" an idea through analogy and story.
- >Bite off as little a piece as possible to generate proof a small experiment instead of a big one.
- Five tips for **business people** in dealing with a "reliability hostile" environment:
- >Understand inattention to reliability as a management challenge.
- >Empathize with "reliability-unfriendliness" understand how stifling it must feel.
- >Speak the language of validity.
- >Share data and reasoning, but not conclusions allow the possibility for different conclusions to be drawn. >Bite of as big a piece as possible to give innovation a chance – make as large an experiment as possible.

Although Dean Martin claims that designers tend toward validity thinking, a successful designer understands the challenge of making the abstract concrete and of bridging analytical constraints with imaginative solutions. In order to have any chance at success, a designer must work within that yellow-green space where the two thought processes intersect. As the business world moves into that shared space, great possibilities for designing sustainable and graceful solutions to enormous environmental, social, and economic challenges emerge. Dean Martin represents a welcome and realistic shift in consciousness that promises a future of boundary-crossing and real innovation.

After his talk, Roger Martin signed books for business and design professionals at the IIDA Headquarters. Approachable and pleasant, he acted as an excellent

ambassador between the fields of design and business. Hopefully this enthusiastic interchange will continue.

Bonnie Toland is a recent graduate of interior design at The Art Center Design College. This was her first NeoCon. Ms. Toland's main interests include multidisciplinary and conceptual design. She won Best in Show and 1st Place Commercial Design at the ASID Design Excellence Awards in Tucson, AZ and won Best in Show at IIDA SW Couture 2010 in Phoenix, AZ. In addition, she also holds a BA in Political Science and Cultural Studies from Hampshire College. She can be reached at bontoland@hotmail.com. To learn more, visit www.bonnietoland.com.