



## Stanford eCorner

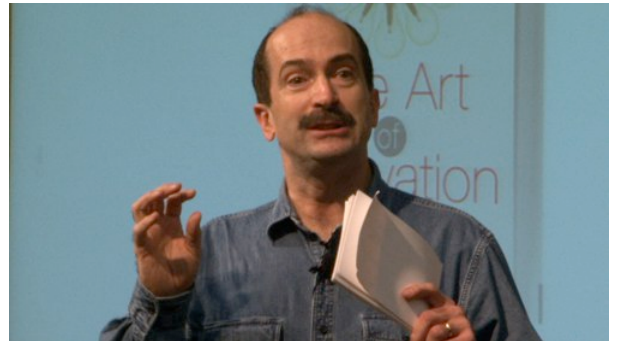
### Using Your Whole Brain

Tom Kelley, *IDEO*

November 12, 2008

Video URL: <http://ecorner.stanford.edu/videos/2104/Using-Your-Whole-Brain>

Fine tune your left brain, but don't overlook the opportunities to let your right brain make its mark. Tom Kelley, General Manager of IDEO, also discusses the use of the "hare" brain, meaning the aspects of thinking that we can control, and the "tortoise" brain, meaning giving thought processes time to sit, ruminate, and percolate to slowly process creative solutions. Kelley claims this slower level of background thinking is even smarter than our cognitive problem-solving, and that it can be used to address dilemmas directly. Creative thinkers should schedule some time for daydreaming to give these slower mental processes a chance to be effective.



#### Transcript

So, let's see, we have think like a traveler, we have treat life as an experiment, we have an attitude of wisdom. Number 4 has two parts actually. Part one is use your whole brain and since your K through 12 education was so good at developing your left brain analytical skills - anybody from the law school or the business school here? Very good at that - let's continue refining, let's continue exercising, fine tuning your left brain. But in fact there's lots of opportunities out there for your right brain to make its mark. Roger Martin at University of Toronto calls it the "opposable brain". Applying the left brain and right brain at the same time. What I'd really love to do at this point is there was a wonderful presentation at the TED Conference in Monterey this year. A woman named Jill Bolte Taylor, where she's talking about how the left brain and the right brain, she says, "They're really pretty separate." She says, "Let me show you what I mean." There's a little screen here, she turns behind the screen and she comes out with a brain. With a human brain, with the spinal cord hanging down and I'm thinking, "You don't see that everyday." I wish I have the brain here I could hold out but basically since your left brain is already very well taken care of, this whole-brained approach that Dan Pink talks about in his great book "A Whole New Mind". It's really talking about bringing your right brain into play.

And I'm going to go out on a limb and predict that the winners of this year's Global Innovation Tournament, they're going to use a lot of right brain intuitive skills as part of their successful entry. So that's part one, use your whole brain. But part two is use this thing that Guy Claxton calls your "tortoise mind". There's this great book, it's called "Hare Brain, Tortoise Mind" and he says the hare brain is the one that you know really well. Hare brain, that's the brain you can focus, you can concentrate with, it's under your direct control. But he says there's this other part of your brain that is not under your direct control, that's actually smarter than the hare brain. He calls it the "tortoise mind". And this is where contemplation happens. This is where rumination happens. Your tortoise mind is working on things in the background all the time.

And if you work at it, you can actually assign little tasks to the tortoise mind. There are people who are really good at this. They'll write a question down before they go to sleep in the hopes that their brain will work on it overnight and maybe come up with an answer. So there are ways, if you can address the tortoise mind, you can do things with them. I think it's partly got the metaphor of growing an idea from seed. I worked on a farm in North Dakota one time and we were growing wheat. And you know, all of the concentration in the world, all of the heat and light and moisture and fertilizer and everything you apply to that,

you're not going to grow that wheat overnight. It just doesn't happen. It's not in the realm of possibility. Growing wheat, just like growing certain kind of ideas, takes time.

And you try to build the right greenhouse, you try to build the right atmosphere, but you can't always accelerate the process. And so there are researchers now looking into the science of epiphany. People have these flashes of brilliance. Allegedly Newton is under the apple tree, the apple falls, and he suddenly has a fully formed point of view of the idea called gravity. I seriously doubt that it happened exactly that way but there are epiphanies. There are "ah-ha moments" and what's really happening in that "ah-ha moment", according to the neurosciences looking into this, is it's not like you had a lightning bolt come down and deliver all that knowledge to you. It's that your tortoise mind has been working on this for days, or weeks or months or in some cases, even years and you've just crossed the finish line. You've just gotten to a place where you say, "Oh, it's obvious now, isn't it." But it wasn't obvious for the previous how-ever-many number of years. So here's the thing is, if your mind running like this, like Grand Central Station, it is a big distraction to the tortoise mind because the tortoise mind needs a little space. And so what you have to do, and this is sometimes easier said than done, you've got to find a way to take some time to daydream.