

## THE USABILITY OF EVERYDAY PRODUCTS

The International Organization for Standardization has released its new standard for *Ease of Use of Everyday Products* (ISO 20282). The standard relates to mechanical and electrical products that have interfaces through which users directly or remotely access the functions provided. Requirements and recommendations for design are provided, as are user and context of use characteristics that are known to influence usability. The new standard can be obtained at <http://www.iso.org>

## BETTER BRAINSTORMING

Conventional wisdom holds that groups of "brainstormers" will inevitably generate more and better ideas than individual thinkers. Alas, it is not true! In fact, in a number of different settings, group effort and efficiency amounts to less than the sum of individual parts (tug-of-war and rowing are two examples in which individuals produce more power and efficiency when performing



alone). And in brainstorming groups, both social and group behavioral factors get in the way of optimal group performance. The reality is that groups typically generate fewer ideas, exhibit reduced motivation, and do not fully share unique information. In addition, a phenomenon known as production blocking (literally the blocking of new ideas) results from the process of members taking turns to share their ideas.

So, is there a more effective way to brainstorm? Yes there is. Reporting in *Current Directions in Psychological Science*, Vincent Brown and Paul Paulus, at Hofstra University and the University of Texas, describe a new cognitive model that explains the paradoxical group phenomenon. As a result of the model the authors propose new techniques that increase the effectiveness of group brainstorming. These include alternating group ideation sessions with bursts of individual ideation; and a simple but very effective technique known as Brainwriting in which ideas are shared in written form - the next person reviews the idea and then builds on it in writing rather than verbally. Brainwriting reduces production blocking.

## LOVE REALLY IS BLIND!

The notion that "love is blind" turns out to have a neurological basis. A recent study published in the journal *NeuroImage* reports that feelings of both romantic and maternal love lead to a suppression of activity in the areas of the brain that control critical thought. Both forms of love were found to suppress neural activity associated with negative emotions and with critical social assessment of other people.

## THE "JUST RIGHT" WEIGHT

Humans instinctively know the optimal weight for certain functional objects. A report published in *Nature* looks at the origins of this ability. It describes a study in which men were asked to choose rocks from a selection weighing between 180 and 1,900 grams to throw at a target and cause maximum damage. The men instinctively chose rocks weighing around 480 grams. A mechanical analysis, based on arm length and strength, showed that this is the weight that a man can throw with the most force. Recent

discoveries of rocks thought to have been used by prehistoric man as crude weapons revealed that their average weight was 500 grams (and hand grenades, by the way, average around 500 grams). In the rock-choice experiment women instinctively chose 320 gram rocks. This is the weight that women can throw with maximum force.

## TUNNEL VISION

Sometimes effective information presentation requires a revolutionary leap in thinking. In 1933 Harry Beck realized that a sprawling geographically accurate map of London's Underground (Tube) train lines and stations was unnecessary. When underground a traveler has no need to know precise direction and distance, only the relative locations of stops. Basing his design on the circuit diagrams he drew every day as an electrical engineer, he produced the map now recognized around the world. It



became the basis for almost all subway maps and for many other forms of schematic information presentations. Mr. Beck was paid just five guineas (about \$10.00) for his innovative work. The lack of veridical distance information, however, can present some problems, especially for out-of-town visitors. Using Mr. Beck's map to get from, say, Bank Station to Mansion House, visitors understandably board a Central Line train to Liverpool Street, transfer to the Circle line

and continue for five stops to Mansion House. At which point they emerge just 200 yards from where they started!

## NOTABLE QUOTABLES

"I have a lot of trouble with your remote controls. Too many arrows."

- HRH Queen Elizabeth II  
to Sony CEO Howard Stringer

## "NOT MANY PEOPLE KNOW THAT!"

- ◆ 90% of goods sold on the Russian consumer market (from household appliances to food and medicines) are fake, according to the Russian Interior Ministry.
- ◆ Three of the first five US Presidents - John Adams, Thomas Jefferson, and James Monroe - died on the same date. The date? July 4<sup>th</sup>.
- ◆ Arachibutyrophobia is the fear of peanut butter sticking to the roof of your mouth.

## BOOKSHELF

### The Geography of Thought: How Asians and Westerners Think Differently and Why. Richard Nisbett (2003)

Much has been written about the different thought strategies of the East and the West, rooted as they are in the philosophies of Confucius and Aristotle, respectively. Nisbett supports his claim that "human cognition is not everywhere the same" and that those brought up in Western and Asian cultures think differently in scientifically measurable ways. His work has important implications for global relationships, and may also support arguments that the design of product interfaces should reflect these cognitive and cultural differences.