

Simplicity

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Before computing became a way of life, our lives were simpler. There were fewer messages to process on a daily basis, and we generally spent more time on fewer tasks. In that sense, we were a highly unproductive society. Fortunately, we now have modern computing technology, with all its labour-saving capabilities, which allows us to spend minimal amounts of time on an increasing number of tasks. One could consider this the ultimate progression toward the ideal state of productivity — our per-task time is approaching zero, allowing us to, in theory, perform a seemingly infinite number of tasks. Yet we have to question whether these advances are leading to a more satisfying existence. Do we not ache inside for something ... simpler?

1. Introduction

As a marketing term, the word ‘simplicity’ is at the top of the list for all high-technology companies. It is on the front page of Hewlett-Packard’s Web site and on all advertisements for Bose’s new line of stereos. Canon now markets what it calls ‘advanced’ simplicity, which is something of a contradiction. Yet I find it ironic that if any of these companies were to announce new products with 25 % fewer features than were offered the previous year, their stock valuation would be more likely to fall in disappointment, rather than rise with enthusiasm. The average consumer is programmed to demand more out of version 2.0, not less.

2. Simplicity today

We live in a world of metrics, where more is logically better than less. A larger profit is better than a smaller profit; having access to more natural resources is better than having less. More is better, because ‘more’ is not only easily measurable, but also because it supplies an immediate gratification. When you are thirsty, do you prefer a big glass of water or a tiny thimble full? Our instincts are to go for more, often for reasons of survival. But there are exceptions to this rule. It is said that the ornate style of cooking in Kyoto, with its lavish attention to detail around minimal masses of food, evolved from the fact that Kyoto’s inland position gave it less access to the more food-abundant coastal cities of Japan. The minutiae of the delicate bite-sizes of food not only served aesthetic reasons, but also functional reasons — the culinary creations were designed to last longer in one’s digestive system. Less becomes more in a qualitative (aesthetics) sense, but also in a quantitative (nutrition) sense.

The aesthetics of simplicity in today’s retail product vocabulary are quite clear. Make your product smallish, preferably in all white to appear light like a cloud, add a few metallic touches to make it appear more jewelry-like and precious, have as few unlabelled buttons as possible, and place signs in the product’s sales vicinity that read ‘simplicity’. A classic example of this trend in styling is Apple’s enormously successful iPod digital music player — the ‘must-have’ item of 2004. Indeed operating the iPod is enjoyable, which is largely due to the fading novelty of its circular selection dial. But all marketable successes eventually breed new complexities.

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Thus the newer models can now hold more music (making it more difficult to browse through the larger amount of data), do more things (new extra unnecessary features), and new accessory products that push more buttons on to its sister digital software player iTunes. The iPod will surely become unusably complex by 2007, but by then we may already have been successfully programmed to believe that it might be simpler than anything in its class. In any case, today we can expect a rise in cleanly styled products like the iPod from many electronics makers in an effort to leverage the new styling cues of this deceptive flavour of simplicity that is powered by classical product design.

A decade ago in a product design class I was attending in Japan, a classmate proposed that the solution to making the computer more usable was to remove the mouse's monopoly on interaction, and instead have many specialised mice for turning, twisting, pressing hard, or slamming with one's hand. He dubbed this mini-project as '101 Mice', named after the popular Disney animated story on Dalmatians. His first mice were quite exquisite — each one was limited in its input-space, but specifically tailored to an on-screen act in a way that was truly superior for specific tasks when compared to a regular general-purpose mouse. However, he quickly ran into a problem around his twentieth mouse as he ran out of space on his desk to store all the various mice, much less organise them in a coherent fashion. This story highlights the fundamental conflict when designing for simplicity of monofunctionality versus polyfunctionality. By definition, a monofunctional object is simpler to use and embodies Louis Sullivan's classic principle that 'form follows function'. A polyfunctional object can do much more than a monofunctional object, but by its very nature is less simple and obvious to operate. How to resolve this conflict is the primary question presented to us as we move forward in understanding simplicity.

3. Simplicity in the future

At the MIT Media Lab, we have launched a new research initiative called SIMPLICITY, as an attempt to understand the science of 'less is more', and to further develop and refine the

Principles of Simplicity. To get there, we will need to leverage a great deal of design and technological expertise to find the basic laws of simplicity. Our journey is aided by the lexical fortune of our institution's initials 'M-I-T' occurring in natural order in 'simplicity', as well as its opposite 'complexity'. We believe that this is not only a sign that we are on the right track, but also an indication of how closely interwoven simplicity is with complexity. To understand and embrace both, will certainly be the key.

Please follow our progress at <http://simplicity.media.mit.edu> over the next few years.



John Maeda heads the Media Lab's Physical Language Workshop. A recipient of some of the world's most prestigious design awards, he has most recently been honoured with the National Design Award and Japan's Mainichi Design Prize.

In 1999 he was included in Esquire magazine's list of the 21 most important people for the twenty-first century. His publications include *Design By Numbers* and the 480-page retrospective of his work, *MAEDA@MEDIA*.

He was recently named to a professorship established in memory of Muriel Cooper, who founded the Lab's Visible Language Workshop, and with whom he studied before leaving MIT (where he received both his BS and MS degrees) for Japan. In Japan, he earned his PhD from Tsukuba University Institute of Art and Design.