

: One, Two, Three, Faux: The Myth of Real Time

3

Lewis Mumford once wrote that he believed the industrial age was merely a passing phase in which the quality of human life would be sacrificed to further the prowess of technology. In contemporary culture, technology's legacy—and Mumford's prophecy—do indeed suggest a society utterly transfixed by its passion for speed. And most ironically in our impatient electronic culture, the phrase "Real Time" has come to symbolize the instantaneous, the nanosecond, or, what distinguished media oracle Marshall McLuhan once referred to as "allatonce." Today, as we struggle to reconcile the virtual against the tangible, what does it mean to be real at all?

As it is, there is nothing particularly real at all about Real Time, and certainly nothing human about it. In electronic media, where the transmittal of data depends upon the generally unreliable support of varying bandwidth, Real Time is immediate time, everything at once time, time without interruption or delay. Real Time implies no waiting—but in the Real World, don't we occasionally wait for things? We wait in supermarket lines, at the bank, in movie queues; we wait "on hold" on the telephone, or put the vcr on "pause" to answer the door. Information transmittal, whether on cd-rom or via networked phone lines or in face-to-face conversation, takes time. Delays, whether momentary or extended, are the casualties of such unpredictable transmittals and mirror the very real delays we face in everyday life. "Historical time is intermittent and variable," notes George Kubler in *The Shape of Time*, suggesting quite reasonably that indeed, life happens in between those moments. For electronic experiences to resonate with equal meaning, it would seem imperative for such lapses to be duly recognized, if not celebrated altogether.

Time takes many forms, and not all of them are real. There is psychological time, perceptual time, imaginary time, spiritual time. Social psychologists have observed that reality is made up of an amalgam of all of these. Noted sociologist P. A. Sorokin once observed that each culture and discipline has its own perception of time and its meaning: his definition of socio-cultural time is a conceptual model

This essay examines ways in which time itself is visualized and critiques the pronounced emphasis on acceleration that typifies contemporary culture. Looking at analogous models, historical antecedents, and parallel disciplines—from late-nineteenth-century parlor games to early twentieth-century radio broadcasts—the intersections of lifestyle, time progression, and human interaction are discussed with an eye to understanding what it is that makes time real at all.

that lacks the distinguishing characteristics of horological time, instead using points of reference that are determined by unique social conditions. The irregular ebb and flow of time as it parallels human experience is a rich pattern marked by speed as well as slowness. By definition, the multifaceted nature of this concept prevents us from adopting a singular model for understanding the shape of time.

But by equating "real" with "efficient" we mistakenly perpetuate the idea that acceleration is the principal goal not only of performance, but of life itself. In so doing, we minimize both the value of human interaction and the potential for design to mediate that interaction. Real Time, in this context, is a misnomer: a more worthy definition comes from cognitive psychologist Donald Norman, who rightly observes that "real time is what humans do."

Like the concentric rings that indicate the age of a tree, the course of time takes many forms. Typically, we have come to recognize and respond to the kinds of visual codes that depict the gradual passage of time. While it takes only a fraction of a second to take a photograph, for example, the reverse side of a print from a photo library is stamped each time it is requested for publication, revealing, over time, a rich texture that bespeaks its long, productive life. Imagine if it were possible to build texture such as this in email, or over the Internet, or as a consequence of one's participation in a chatroom. Yet as long as digital is understood to be ephemeral, the genesis of an idea—and its very rich evolution over time—will be impossible to visualize in quite the same manner.

Fake Time—or time as it currently exists—implies slower time. The implication here is that it is sluggish, retarded, anathema to the very acceleration that characterizes technological achievement in the twentieth century. Why is this non-instantaneous time not perceived as reflective time? Or thoughtful time? Or quality time? Writing half a century ago of their disenchantment with the high-velocity life, poets such as T. S. Eliot and William Carlos Williams lamented the lack of tranquility and leisure in the face of emerging industry. Today, leisure itself has become such a rare commodity that it is deemed an area worthy of serious sociological inquiry—an anachronistic relic of our lost culture.

The visualization of time itself has always challenged designers, perhaps because the very unpredictability of its character precludes its

being pummeled into any finite shape. And yet, for centuries humans have been trying to rationalize time, to harness it into a form at once controllable and clear. Since the fourteenth century, the civilized world has measured time by the 24-hour clock. Agricultural societies and less technologically sophisticated cultures have typically operated in a similar manner, relying instead on the natural but highly regulatory movements of the planets. The seven-day calendar takes its cues from the movements of these celestial bodies, as the seven principal planets—beginning with the Sun and ending with Saturn—still provide the English (and French) speaking world with the etymological basis for its naming conventions. Human time-keeping systems are equally cyclical, if less apparently so: sleep rhythms and metabolic balances are as predictable as seasonal changes. Like the cycles that characterize planetary phenomena, such conditions can neither be anticipated, nor precipitated, nor accelerated at will.

While our current systems for mapping time have their roots in the Egyptian solar calendar, the rationalization of time that has come to characterize the modern world has evolved over numerous centuries and across multiple cultures. As a tool for managing time, the calendar itself offers a tabular system of temporal subdivision, enabling the rational and lateral compartmentalization of time. Seeing our weeks laid out in front of us, the assumption is that we can better control our time. Ironically, the great failure of the calendar lies in the homogeneity of its basic form: Monday is the same shape as Saturday, and June looks just like December. As the physical embodiment of this rationalization, the Filofax celebrates this efficiency by chopping time up into more digestible subdivisions, thus allowing us to conceptualize our days in "at-a-glance" modules of mornings or meetings or "to do" lists. Add to this the hyper-efficiency of electronic calendars and time management software, and time looks to be careening by even faster than the last time you checked.

Conversely, in time-based media the serendipity we pretend to enjoy is buried in a calculated process where all the permutations have been anticipated in advance. It is time-based because it is dynamic, but can it ever mirror the magical unpredictability and believable rhythms of real life? The basic economics of making interactive products depends to a considerable degree upon the technological wizardry of

compression: speedy downloads are looked upon more favorably because they save us time, but the hidden danger here lies in truncating an experience as a consequence of so doing.

This urge to race through information may explain why so much of the metaphor and visualization in new media takes its cue from game culture. Woefully overlooked here are strategic games—chess, for example—that historically have had much more to do with human interaction and the speed with which such interaction naturally takes place. A better model might lie in the parlor games of the nineteenth century, board games and puzzles that were played at a slower and, indeed, a more social pace. To date, such games demand a kind of reflective time which, though very real for those engaging in such activities, remains virtually ignored in the race to achieve Real Time nirvana.

Overlooked, too, are previous examples that successfully merged technology and society, addressing issues of social harmony and community interaction. Radio broadcasts half a century ago engaged and united audiences around boxes with plugs connecting them to an outlet in the wall. All radios did was deliver information electronically: they were tools for social congregation, valuable for their ability to disseminate a signal across the globe. But listening even today to the voices of Roosevelt and Churchill reminds us that the signal drew its real meaning from the rich cadences and intonation of the politicians themselves. Time compression would not have helped in the least: yet today, as we channel-chase and net-surf across the digital landscape, we are under the mistaken notion that we are richer for the experience of doing so.

Time itself is unquestionably our richest and most imperiled resource, underscoring everything we do and see and feel. If McLuhan was correct in his assumption that technologies achieve purpose when they extend humanity throughout the world, then our relentless pursuit of speed seems an illogical method for doing so. It is perhaps his more pragmatic observation that instantaneous electronic communication results in noticeable social disturbances that demands our immediate consideration: for designers, this means taking the time to rethink ways of visualizing messages to engage new and increasingly complex audiences.

Remarkably, studies of visual perception have found that two-dimensional images projected onto the retina only achieve full dimensionality as a result of our perception: we infer the third dimension of depth. Sadly, though, as the urgency to expedite all communicative transactions usurps our customary patterns of exchange, perception is accelerated as well. There does not seem to be a great deal of time left over to infer—or interpret, or imagine—much of anything at all. In the end, of course, there is nothing real about this at all, except for our propensity to let it happen.