



## Press Coverage

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## Tech Forum

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### Measuring Our Escape Velocity as We Exit the 20th Century

With a forward lean and the sound of wind in our ears, we squint into the future and nothing seems to be slowing down. Surely, this century did not arrive with the same rush that it is accelerating away from us.

Stewart Brand explains the situation this way: “Now that we have progress so rapid that it can be observed from year to year, no one calls it progress. People call it change, and rather than yearn for it, they brace themselves against its force.”

Two books published late this year offer similar testimony (Faster: The Acceleration of Just About Everything by James Gleick and The End of Patience: Cautionary Notes on the Information Revolution by David Shenk).

Is the increasing speed shortening our attention span? Are we content with the shallow, the disconnected, the temporary? Shenk describes the amount of information overwhelming us as “data smog.” And he warns against the “thoughtlessness that creeps into our lives when we speed it up.”

Obviously, our technologies have created a much faster pace, but whether that’s good or bad isn’t a simple question. Information that was once described as legacy now must be real-time to be useful. At the beginning of the century, legal documents were carefully copied by hand. Today, we open four screens, cut and paste between multiple documents, and then tap a button on a printer—accomplishing what once would have taken weeks. What’s next does come up very quickly. And the question remains—are we controlling the chaos or creating it?

#### The Long Now Foundation

In 1996, a group of nine unusual people including Stewart Brand (Director of the Global Business Network and founder of The Whole Earth Catalog), Daniel Hillis (inventor of the massive parallel architecture of the current generation of super-computers), Mitch Kapor (founder of Lotus), Esther Dyson, Brian Eno, and others came together to consider the problem.

Several concepts emerged. The first involved our idea of now. Is now today, this week, this year? Esther Dyson suggested, “On the stock exchange it’s today, on the Net it’s a month, in fashion it’s a season, in demographics a decade, in most companies it’s the next quarter.”

The group eventually defined six distinct time scales that are like layers—some innovate at the speed of the short now (for example, fashion and commerce) while others change slowly, and their longer now provides a continuity and stability (for

example, culture and nature). Having these different “pace layers” is good.

In an age that’s accelerating as ours is, it’s a good idea to remind everyone of the presence and importance of the long now. How this group evolved their plan is told in a fascinating short book by Stewart Brand called *The Clock of the Long Now* (1999, Basic Books).

#### The Clock/Library

The Long Now Foundation decided to create a monumental technological metaphor to encourage us to take the long view and accept our responsibility for what will be. If sufficiently well-engineered, the group hopes the Clock will “embody deep time for people.”

The Clock will be both mechanical and binary-digital, a clock and a computer. It will be set up to measure the next 10,000 years with “precision equal to one day in twenty thousand years.” It will use gravity and turning wheels and will be phase-locked to the noon sun to self-correct. It will be the world’s slowest computer, making two calculations a day—one at noon, and one at midnight.

More important, this clock will be 60 feet tall, and you’ll be able to walk inside it. Brand hopes that “after an encounter with the Clock, a visitor should be able to declare with feeling, ‘Whew. Time! And me in it.’” Built in a setting like a desert, the Foundation wants to create an experience “like coming upon the Grand Canyon by surprise, where you simply want to sit and watch for a while and let your life adjust to two million years visible in one glance.”

Dan Wolf has commented, “A traditional clock depicts time in the context of our lives. This Clock depicts our lives in the context of time.”

The second part of the experiment is to create a library in which all knowledge can be digitally stored. “Hillis sees the Library as the Clock’s evolutionary companion. The Clock is Newtonian time, physical time—reversible, regular, steady. The Library is information time.” Brand says it’s physically possible to do this because, “In 1998 a major (but unheralded) milestone occurred: Available digital data storage capacity surpassed the total of information in the world. We now have more room to store stuff than there is stuff to store.”

The Clock exists in models today, and the Library is a plan. If the Foundation is successful, and one or several of these timepieces are constructed, a future visit to them will perhaps be as restorative for time-battered citizens as a trip to the massive monuments of time in Yosemite or a day spent at the edge of the earth’s motion-clock, the tidal seas.

But before we are jettisoned out of this century, it’s definitely worth what little time there is to read Stewart Brand’s book and to check out the Long Now site at <http://www.longnow.org/>. If you can multi-task, you can probably do both and save time.



The Long Now Foundation  
Fostering Long-term Responsibility  
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