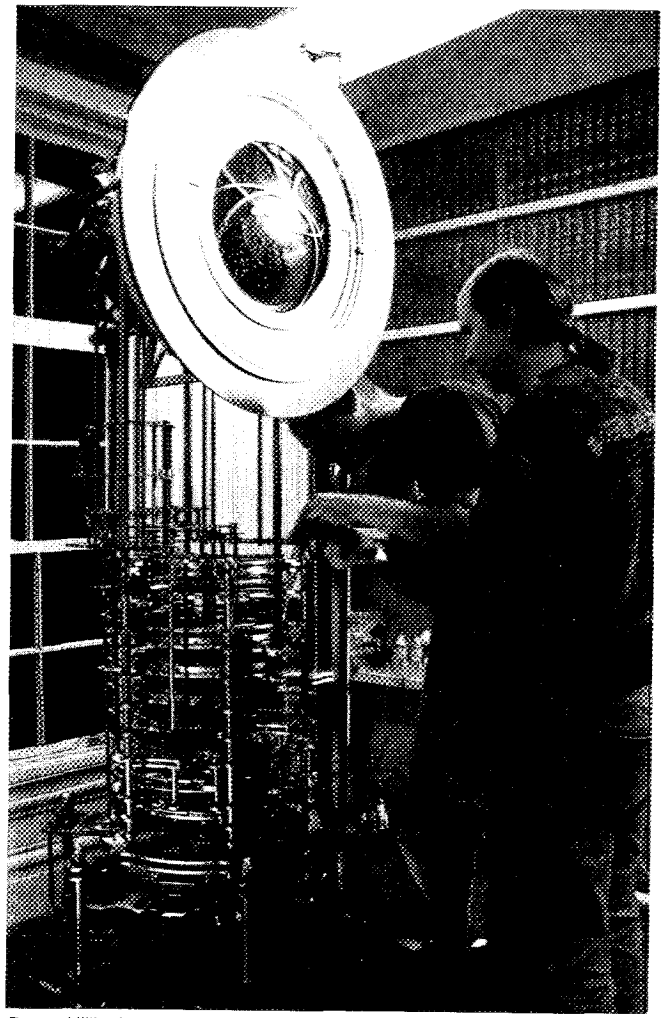
A Tool For Tomorrow

It was Danny Hillis's idea to build a clock that would tick once a year, tock once a century and gong every millennium. By slowing down the usual speedy movements of a clock, he hoped to slow us down and have us think about the long term.

"Long term" to Danny meant about 10,000 years, which, it happens, is about the same length of time as human culture has been ascendant. He wanted to look ahead into civilization about as far as we can look back.

The purpose of a clock that runs for 10,000 years is to encourage us to create things that require 10,000 years to measure. A great civilization, for instance. Or anything we hope to last three generations and beyond.

Just the idea of such a clock can liberate our notions of time and purpose; perhaps we would not have to actually build one. It could be a thought experiment, a specimen of conceptual art.



Danny Hillis, far right, oversees the final tuning of the prototype clock on New Year's Eve, 1999. Alexander Rose adjusts the mechanism so that in a few hours it will trigger a gong—twice—to ring in the new millennium. It worked.

But the difference between the thought of a 10,000-year clock and really building one is the same difference between the idea of a solid 500-foot pyramid and actually hauling stones to erect one. A society that built a clock running for a century of centuries would have to really believe in the power of the future.

Part of the purpose of building a millennial clock is to move our society into this position, so that it can confront its future while keeping in mind its past.

Stewart Brand took up Danny's fantasy, and tried to make it real. The best way to move society into the position of seeing the value of the clock, and thus the value of the long-term responsibility, would be to start building the clock now. Tomorrow if possible. As the clock became real, so would the perspective.

With Stewart's encouragement, Danny began to design the clock. I joined them to tip the critical mass of believers to a safe three, since if three people back an incredible idea it begins to seem credible. Stewart roped other remarkable people into the conspiracy and then hired the brilliant and refreshingly young Alexander Rose, who, more than anyone else, made the thought experiment real.

More of the impetus for building the clock is described at length by Stewart in his book, *Clock of the Long Now* (see *Whole Earth*, Winter 1999). In the spirit of delving into how tools enable a revolution, Danny describes his design process on the following pages.

Adding further reality to experiment, the Long Now Foundation (the nonprofit set up to run the mission) has bought a mountaintop in Nevada completely enclosed by a national park as a home for the clock—far from the turbulent effects of a city. The plan as of now is to put the great clock inside the mountain, to be the unforgettable destination of a pilgrimage up the mountain. For more information, contact www.longnow.org. —KK