

Box 4. Deepening Perceptions of Time

The Long Now Foundation was founded in 2002 to help change long-term thinking from being difficult and rare to common and easy. (The foundation uses five-digit dates; the extra zero is to solve the deca-millennium bug that will come into effect in about 8,000 years.) It started with an idea from Danny Hillis, who pioneered the massive parallel logic of today's fastest super-computers. Hillis wanted to build an all-mechanical 10,000-year clock as an icon to long-term thinking.

Hillis was inspired by a story relayed to him by *Whole Earth Catalog* editor Stewart Brand: "I think of the oak beams in the ceiling of College Hall at New College, Oxford. Last century, when the beams needed replacing, carpenters used oak trees that had been planted in 1386 when the dining hall was first built. The 14th-century builder had planted the trees in anticipation of the time, hundreds of years in the future, when the beams would need replacing."

Over the last 14 years, several prototypes and material studies have been completed of the clock, and the monument-scale version is now being built. It will be located at one of the foundation's high desert sites and stretch out through several hundred feet of underground caverns. Hillis hopes that a clock "that ticks once a year, bongs once a century, and the cuckoo comes out once a millennium" will help reframe the way people look at the future. Since that first inspiration, the foundation has embarked on several projects to promote long-term thinking.

Long Bets is an online wagering site where anyone can make bets and predictions of social and scientific consequence. All the proceeds plus half the interest go to the charity of the winner's choice; the rest of the interest goes to Long Bets to maintain the service.

Since its inception in 2002, bets have covered a diverse set of topics, from when the human population will peak to when solar electricity will become cheaper than fossil fuels.

The Rosetta Project is a compendium of all the world's documented languages micro-etched as readable text onto a three-inch wafer of pure nickel. The disk was designed to last for millennia and act as a key to languages that may become lost or extinct. In 2009, one of the disks was accepted into the Smithsonian's National Anthropological Archive. Just as discovery of the original Rosetta Stone allowed researchers to decipher ancient Egyptian hieroglyphics in the 1800s, this modern version could provide the same service for future civilizations.

All these projects, as well as a monthly seminar series about long-term thinking hosted by Stewart Brand, are attempts to change the conversation. If society only works on problems that can be solved in a four- to eight-year election cycle, then none of the truly large issues can be tackled. Solving problems in education, hunger, health care, macrofinance, population, and the environment all require a diligence and responsibility over decades, if not centuries. If the right time frame is used to solve these issues, what was once intractable can become possible.

Humans are a tenacious species. Chances are that 10,000 years from now, just like 10,000 years ago, there will be people walking on Earth. Just what kind of Earth, and just what kind of life those people may be living, will likely depend on the acorns we sow today that grow into the great oaks of our future.

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Source: See endnote 14.

carbon fast as a way to demonstrate restraint in consumption and solidarity with people affected by climate change. The call was sup-

ported by Ed Milliband, the Minister of Energy and Climate Change in the United Kingdom, and promoted by a development agency, Tear-