"We're always limited by the technology of the present" – The Long Now Foundation

Issue 1 of Hack Circus is all about TIME. We caught up with Austin Brown of the Long
Now Foundation to hear about the extraordinary 1000 Year Clock project – currently underway in a mountainside in Texas. Lots more of this sort of thing in the first issue of Hack Circus.

The Clock of the Long Now is a monument to (and an exercise in) long-term thinking. It is an architectural-scale kinetic sculpture that will tell time for 10,000 years, housed inside caverns carved into a Texas mountain.

When do you think it will be finished?

It's been under construction for several years now, with many years of research and design before that. It will take several years more at least, long enough that we've not set an official completion date.

What sort of things have been taken into account when designing something to such a timescale?

A book could be written on this question, but an outline of the Clock's design principles is listed on our website here: http://longnow.org/clock/principles/

Here are a few examples in my own words:

The location and materials, to start, were chosen for their stability. Texas is dry and geologically calm relative to much of the US. The Clock will be made of things like stainless steel, Monel, Titanium, and ceramics. These materials are hard, strong and resistant to corrosion, making them very durable.

One thing that often surprises people first seeing prototypes of the Clock is that it doesn't display time in terms of hours and minutes. To account for visitors from a distant future civilization that may have no record of our timekeeping system, it primarily tracks astronomical events. Hours and minutes are arbitrary units that may go out of fashion thousands of years hence, but no cultural change is likely to alter the length of a year or the movements of the planets and stars.

Is the goal of the project principally to change people's thinking about the future in the present, actually communicate with the future through a physical link, make a powerful
symbolic point about time and the longevity of humanity, or something else? Is this chiefly a practical or artistic work?

Well, kind of all of the above, but to be more specific, the hope is to give people (now and in the future) who care about the future something to rally around. The Clock is meant to demonstrate and inspire investment in the future. Each generation has to reinvest, though, so a durable reminder is necessary.

Are there other examples of long-term building projects that have inspired the project, or which are happening now that you are interested in?

There are quite a few, some current, some very old. Our Executive Director, and the Clock's Project Manager, Alexander Rose gave a talk a while back on some of these inspirations. He called it Millennial Precedent. You can watch it on our site: http://longnow.org/seminars/02011/apr/05/millennial-precedent/

To name a few, we're big fans of the Svalbard Global Seed Vault, a collection of plant seeds stored in a vault on an arctic archipelago; the Internet Archive, a massive database of books and digital culture; and Japan's Ise Shrine, a structure that's been rebuilt every two decades for many centuries.

How do you feel about the prevailing cultural idea that we are 'living in the future'? The Long Now projects seem to see things from a different perspective: the optimism of knowing we are not yet in the future but can influence it.

We sometimes quote our co-founder Stewart Brand: "This present moment used to be the unimaginable future." So, we're not immune to that perspective ourselves and wouldn't necessarily consider it a bad thing. Looking at the long-term, it's important and valuable to note how far we've come, but we're also trying to remind people that there's a long way to go yet.

How do you counter criticism around the idea that thinking ahead like this has morbid or idealistic connotations?

Clearly, considering a 10,000 year timeframe does require acknowledging one's mortality, but it's also not so vast a scale as to get into geological time. Rather than get
lost in the vastness of geological or astronomical time, we've specifically chosen
civilizational time – humans began transitioning from hunting and gathering to
agriculture roughly 10,000 years ago – as our framework because it's a stretch, but not
incomprehensible to imagine having an intentional impact at that scale.

What are some of the issues involved in creating for the future when we're limited to
the technology of the present?

Well, we're always limited to the technology of the present and I think creation is always
future-oriented. I recognize, though, that you're pointing out that the Clock is created, in
part, for a more distant future than most creations. What's interesting is that that
challenge has pushed the designers towards less high-tech solutions than if they were
building for a more immediate future. New technology is often untested in the long-
term and tends to rely on a great deal of infrastructure that we can't assume will remain
reliable over millennia. So in a way, there's a lot of technology of the past in the Clock.
But the design and fabrication has also leveraged, and even created, new technologies.
The more durable an outcome you seek, I suppose, the more broadly throughout history
you'll want to look for strategies and solutions.

Do you think we genuinely are living in an unusually exciting time, or is it a condition
of humanity to always feel this way?

Both, maybe. Just because it's a condition of humanity to always feel that the present is
unusually important doesn't mean that we're not going through some very serious times.
Geologists have started discussing the idea of the Anthropocene, that our species now
influences the planet so significantly that the present geological epoch should be named
for humans. That's a big, unprecedented deal and whether you say it started with the
industrial revolution or agriculture, you have to recognize that we're affecting the
biosphere more and more deeply than ever before. And while our dominance over the
planet's systems may remain up for debate, our competence to manage them is
undeniably lacking. As we grow as a species, we may not have the choice to not be a
dominant force on the planet. That's exciting in sort of a frightening way since so far
we're exerting our influence rather haphazardly and unintentionally. But with an
increasing focus on the long-term we might be able to rise to the occasion and start to
take a more intentional approach.

*The Rosetta Project has captured language in a very beautiful way – is it important that these projects involve beautiful artefacts and design, and what are the most important things to try to preserve and conserve about the present?*

To have the intended effect, the projects must speak to people in an immediate way as well as in an enduring one. Making them beautiful helps.

As to preservation, The Rosetta Project is meant as a way to show that we value preservation and want to encourage and support it, without taking an overly prescriptive stance on what should be preserved. By trying to preserve as many languages as possible, we hope to help future archaeologists and historians access as wide a swath of human culture as possible. The Rosetta Disk is a highly durable decoder ring of sorts – it contains parallel texts in over 1,500 languages, as well as documentation of those languages. That way, any culture’s textual artifacts discovered in the distant future will be more likely to be readable, even if their language is no longer spoken.

Clock One: Winder & Main Differential

What is *The Clock of the Long Now*?