

Patt Morrison Asks: The Possibilian, Kevin Kelly



Kevin Kelly, co-founder of Wired magazine, says that a Klein bottle "reminds me of the essence of life and mind. The bottle circles back to itself in the same way that DNA self-organized into life, and the same way that a mind circles back to itself to produce consciousness. All are strange loops." (Rick Loomis / Los Angeles Times)



Patt Morrison Contact Reporter

Patt Morrison Asks

This is a Klein bottle, a kind of Mobius strip rendered in glass. The man holding it has a brain not unlike these confounding items, possessed of unusual twists and multidimensional turns that can be challenging for lesser mortals to get their own heads around. Kevin Kelly began reflecting on the techno-Internet world before most people even knew it existed. A co-founder of Wired magazine, and still its "senior maverick," his brainstorming writings influenced the films "Minority Report" and "The Matrix," but that's the stuff he has already done. It's the stuff Kelly still wants to do -- and to take the world along him -- that boots him up.

The paperback of your book "What Technology Wants" is coming out. C'mon, paper? You?

I know -- paper! This is my last paper-native book, the last book that will be written to be born on paper. From now on I'm going toward digital first.

The title makes technology sound like some greedy Cronus devouring its children.

There is a certain aspect to technology that is cannibalistic, eating its offspring. And I recognize that sometimes we are slaves to the "technium," to this larger thing we've made. Sometimes we are doing what it wants; other times we are in charge. We are the creators and the created. We will always have two minds about it: that it's wonderful, give me more, and at the same time, oh my gosh, we've got to stop it. Technology is an extension and acceleration of life, so I think of humanity as being more symbiotic with technology.

You write about how the Amish pick and choose the technology they embrace.

I'm a great admirer. They're not Luddites. In my experience they're totally into technology and trying to do what they can within the rules. The main distinction is that they're more selective of technology.

Each of us is actually choosing technology these days; we're being forced to, because there are so many choices, so much stuff.

We have choices? What's that "Star Trek" line, "Resistance is futile"?

Individually we have choices. Collectively we don't. We should work to always permit the

choice of opting out. Most people are not going to opt out -- in that sense technologies are inevitable, but not for an individual. If you really don't want to use a laptop, you don't have to. The rest of society is going to be biased against you, but it is an option. I predicted there are going to be people who make a stand and make a living by not being connected. We're going to be defined by what we don't do, rather than by the technology that we do do.

You're an example of that, starting with your plastic analog wristwatch.

I still don't have a smartphone. I still don't do Twitter. We still don't have a TV at our house. I did buy a laptop six months ago. And I reserve my right to change my mind at any time and drop things I once did and adopt things I didn't do before. It's not that I'm against technology; I want to minimize the technology in my life, but I want to maximize the technology [available] in the world at large for others. I'm a Minimate!

Theodore Kaczynski, the Unabomber, was notoriously anti-technology. Were you tempted to buy anything of his at the recent auction of his possessions?

I'm missing the collector gene! I wrote about this: There's an element of superstition in this collecting of artifacts. I think it's technological superstition. All the things he used were just copies -- whether it was his typewriter or whatever. You could buy the same typewriter somewhere else. The only reason why his was valuable was because of the idea that he touched it, that there's some aura you're going to get when you buy it. You could swap out the identical model and you would never know.

That persistent fear of technology, from Luddites to Mary Shelley to "Robocalypse" -- is it well-founded?

Yes. I think we have to recognize and acknowledge that there is a possibility of things going wrong. It's a remote probability; the [result] is complete collapse rather than [our creations] being so smart that they take over.

How do you think we can make money in a Web economy? We've got a generation that will pay \$5 for a cup of coffee but won't pay a cent for information, for music, for entertainment that required lots of money and labor to create and present.

In this world of ubiquitous copies -- and the Internet is the world's largest copying

machine -- how does anybody make money on an idea when copies of ideas are free, and are actually required as the [economic] engine? My theory is that you'll want something better than free, what I call generatives. Let me give you an example: You can find a free copy of a movie on the Internet, but if you want to see a movie in the first hour of release, you'd be willing to pay. You're not really paying for the movie [but] for the immediacy of the movie. Or the music. Or findability, accessibility. Authenticity -- you can get [copies of] software for free, but if you want the authentic version, you're going to pay. There's been no better time in the world to be a reader or a watcher or a listener than right now.

What about being a writer?

That's tough. But the audience is winning. I don't know how the actual business model is going to work. One thing that's going away is this idea that the only stuff we consume is made by professionals. [Historically] if you wanted a really good picture, it had to come from a professional. A professional photographer will on average take a better picture of the Eiffel Tower than a nonprofessional, but there's no professional as good as all amateurs together. We are all becoming creators.

What about privacy? Should we just get over it?

It's not like you are private or not. It's a slider. I want to be treated as an individual, [by] people, companies, the government. For them to treat me as an individual means I have to reveal myself to them. If I move the slider all the way, absolute personalization means absolute transparency.

How does all this make us more human?

What humanity is about is increasing options and possibilities. So today you have more options and opportunities than someone 100 years ago, 1,000 years ago. I need options, I need possibilities. I am a possibilian.

You say you've been online for 30 years? How on earth?

Where were you guys? It was very lonely! There were these bulletin boards, you dialed a telephone line and went through a computer in someone's bedroom, and that computer would allow, like, 10 people to dial in and you could chat to each other about bulletin boards. Remember when CB radio came along, all the chatter was about CB radio? Now we have Google+ and people talk about Google+ on Google+.

We've struggled for the vocabulary for all this. You still like "grok," a word from a 50-year-old novel, "Stranger in a Strange Land."

The words count. Metaphors are sometimes even more important than facts. A lot of the troubles we have are because of a lack of vocabulary. When the Web started, everyone thought it was going to be like better TV, that you'd have, like, 5,000 channels, there'd be a channel about saltwater aquariums. When we think about what the Web is going to be like in five or 10 years, it's going to be as different from the Web now as the Web was from TV. We don't have words for what it's going to be.

You write about parallels in biology and technology, but nature doesn't invest in a specific outcome the way humans do.

The technium is an extension of the biological realm of life; it's not exactly the same, and the difference is that we want to direct [it]. We don't accept just any outcome, any mutation. We are trying to minimize the amount of destruction in the world, the amount of harm. With the technium, we can actually minimize that.

You've been crusading to identify and catalog every species on earth, a task that combines what Adam did in [Genesis](#) and [the work of Swedish botanist Carl] Linnaeus.

I was shocked to learn we don't know how many different species there are on earth. That's an incredible shame. If we discovered life on another planet, almost the first thing we would do is a systematic survey of life on that planet, and we never have done that [here]. We were trying to raise money [during] the dot-com bust, and it didn't work. But a

Web page for every known species -- that has actually begun. There's now a kind of place holder Web page for every known species. This area of science is very, very poor. Field biologists are real heroes. Every one of them loves their critter, whether it's a starfish or a fern or a slime mold. To a field biologist, a \$10,000 grant is a reason to break out champagne; \$10,000 doesn't cover the glassware in an ordinary molecular biology lab. It's all done for love.

Why are you a Christian instead of, say, a Buddhist?

The honest answer is because I was born a Christian. But I also happen to think that the myth of a god who comes into his creation to give assistance to [humans] is true -- to help guide them, to understand why we have pain and suffering. When we make our own artificial world, when we make robots that think and are conscious, when we make a robot that stands up and says "I am a child of God," I think we'll come back to ideas that Christian thinkers have talked about for 2,000 years.

You think we will make robots like that?

Absolutely. This is the trajectory of technology. Life wants to make minds. At the technium, we're using technology to make different kinds of minds that [life] could not make just with DNA directly. It's going to take not just human thinking but other kinds of thinking to understand the full mysteries of the universe.

Patt.morrison@latimes.com

This interview is edited and excerpted from a longer taped transcript. An archive of past interviews is at latimes.com/pattasks