

FUTURE NEWS

TO CONNECT, TO INFORM AND TO INSPIRE

IN THIS EDITION

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The nine kinds of bad futurists

by Alf Rehn



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I'm not that taken with futurists. It's not that I dislike all of them, not at all. I admire some futurists greatly, and others I see as consummate professionals. In fact, I even call some of them friends. Still, there are many people out there calling themselves futurists that I haven't any time for, since I do not think they are very good at what they do. Yes, they give good keynote, and many excel at whipping up newsletters or other pontifications on the importance of developing forecasting models, but as to being serious thinkers about the future? Let's just say that more than a fair few fall short in this area. The curious thing, though, is the many ways in which they're bad at what they do. Some are too vague, others too self-assured. Some are too caught up with concepts, others too enamored of their methods. Many of them are too tedious for words, and some are plainly insane.

So I decided to list the different kinds of bad futurist, as a somewhat handy

field guide for the futurist-spotter. This is not an exhaustive list, and cannot be, for there are very, very many kinds of bad futurists.

I've put the bad futurists into nine categories, but you should remember that there is a great deal of overlap between these categories. For instance, many of the mystics are also obfuscators, and many of the trendsters are neologizers. However, not all obfuscators are mystics, nor are all mystics obfuscators (some of them are very direct about their mysticism).

More than once I've come across people who are four or five of these things all at once. At least I think so: I try to head for the bar once these kinds of people pop up.

So, to the list, then. The typical bad futurists start from one of the following nine archetypes, and then mix-and-match aspects of the others. The list, in no particular order:

1. The Obfuscator/Obscurantist
2. The Shock-Jock
3. The Mindless Optimist/Pessimist
4. The Pseudo-Academic
5. The Trendster
6. The Neologizer
7. The Cookie-Cutter
8. The Proselytizer
9. The Mystic

Our first type, the **obfuscator**, who might also be called the **obscurantist**, is not interested in telling you anything worthwhile about the future. No, the obfuscator sees the future as existing for one reason, and for one reason only – to make him look good. Failing that, to make him look like a deep thinker. For him, futurism is all about spinning weaves of confusion and paradox, possibly with a few neologisms thrown in for good measure.

The second type takes a different tack, although there are similarities with the obfuscator. The **shock-jock** isn't big on being asked questions either, but for different reasons. For him, futurism is all about eliciting gasps from an audience. People giving you scared looks? Good. People getting vertigo? Even better. People looking sick to their stomachs? BINGO! (Not that this ever really happens, but the shock-jock still hopes it might – one day.) The future is a strange place, which is why some futurists have taken to presenting evermore outlandish and *outré* claims about the same. This is great for getting well-paying keynote gigs, as shocking things make for great entertainment, but this doesn't make for great futurism. On the contrary, it often makes for pretty sad futurism, as it becomes more exciting to talk about sexbots and gland harvesting than the more mundane matters that might bankrupt a company or eradicate a profession. The shock-jock doesn't care, however. He's there to get a reaction, not to say anything profound.

And can you blame him? Shock-jocks exist because a lot of people enjoy extreme claims about the future – the odder and more outrageous the better – and are prepared to pay good money for people who are good at this. So maybe we shouldn't be too harsh on this kind of bad futurist. Just like so many of the companies he talks to, he's a victim of market forces. The demand for certain types of future-talk is big enough to practically force certain futurists over to the dark side.

Speaking of dark sides, the third kind of bad futurist comes in two flavors – dark and light. **The mindless optimist/pessimist** only sees one side of the story – and then reiterates that *ad nauseam*. This type wants attention, and knows that the way to get it is to be extreme. For a long time this meant being a doomsday prophet, harping on and on about how everything was going to hell in a hand basket. Be it an environmental disaster, a population bomb, a war between nations, a war between religions, a war between genders or just good ol'-fashioned economic collapse, the mindless pessimist was ready to tell you all about it.

While the mindless pessimists were predicting **doom, imminent doooooom**, a variation began emerging. This is **the mindless optimist**, the yang to the pessimists yin, always declaring that things will, eventually, be OK. In fact, most are adamant that things will not be just OK, they will be absolutely wonderful! Thanks to (mostly) technological developments, we will live in a world far better than our current one, with all of the problems predicted by pessimists swept away by the magic of innovation and development. Some call it "the age of abundance", others "techno-utopia", but all are convinced that it will be great.

Next on the list is the **pseudo-academic**, who insists that the most important thing about futurism is that it is "a proper academic discipline". This setting of high standards might seem like a good thing, but the pseudo-academic doesn't really care about research and scholarship

(that's why there's a "pseudo" in there). No, what he wants is a title, and a cushy position (preferably tenured) to go with it. This character rarely gets involved in anything as muddy and grubby as actually saying something about the future. Instead, he obsessively describes the processes and methodologies of forecasting, and uses lots of words ending with "ology".

Standing in stark contrast to the pseudo-academic is the **trendster**. He doesn't really care about academic trappings, and sometimes makes a big deal out of not having any kind of education. If you think this is weird, it's because you don't understand what drives the trendster. He wants to be seen as having a special connection to trends, the kind you can only get when you live and breathe them. He wears the trendiest clothes, listens to the coolest music and eats the now-est food. No matter how hard to you try, you will never, ever be quite as hip as he is.

Then there's the **neologizer**, and you'll know you've come across one when you're handed a trend-report full of clever titles, portmanteau concepts and word-play. For this very specific character, the greatest thing about the future is the unending amount of new verbiage he gets to invent to describe it. Nothing is so small that it does not warrant a neologism, nor too grand to escape being described with a funky new combination of terms.

If the neologizer likes words, the **cookie-cutter** likes methods. No, wait a minute. Scratch that. The cookie-cutter likes *his* methods. He couldn't care less anyone else's methods, unless he can impress a client by scoffing at them. The future is his pliant dough, and he believes the best way to approach it is with a really detailed (and impossible to fully deploy) methodology, preferably one with a funky abbreviation. Don't laugh, the abbreviation is important. I've seen futurists almost come to blows arguing over abbreviations. And if you think that sounds funny, you're wrong. It's **hilarious**.

If you like to have your future served in a handy canned format – "Do

exactly what it says on the tin!" – you should talk to a **proselytizer**. The proselytizer isn't confused or baffled by the future, quite the opposite. He *knows* that the future will be defined by X, Y or Z, and is more than willing to explain to you exactly how. In exhaustive detail. Today's most popular version of this is the person who is utterly convinced that social media is pointing towards a future where everything, *everything* is "social".

Finally there's the **mystic** who insists that there is a new kind of future ahead, which only he can see, and which is filled with meaning and wisdom and portent (cue reverb, add echo) and that there is a great change a-coming. If the trendster seems too caught up in the trivial details of the near future, the mystic is primarily interested in the grand sweep of things – and his particular insight into this, along with the adoration he knows will result. No matter when the mystic speaks, one thing is certain – a great change is coming.

So there you have them, nine kinds of really bad futurists, or nine sins that futurists commit. There's an excellent chance you'll come across a combo-sinner; Lord knows I have. Just last week I ran into a pseudo-academic proselytizing mystic who had a penchant for calling everything (and I mean everything) a "wicked problem". Next week I'm meeting a person I suspect is a mindlessly optimistic cookie-cutter with a dash of neologizer. It is enough to drive a man to drink.

More information about Alf Rehn can be found at: www.alfrehn.com



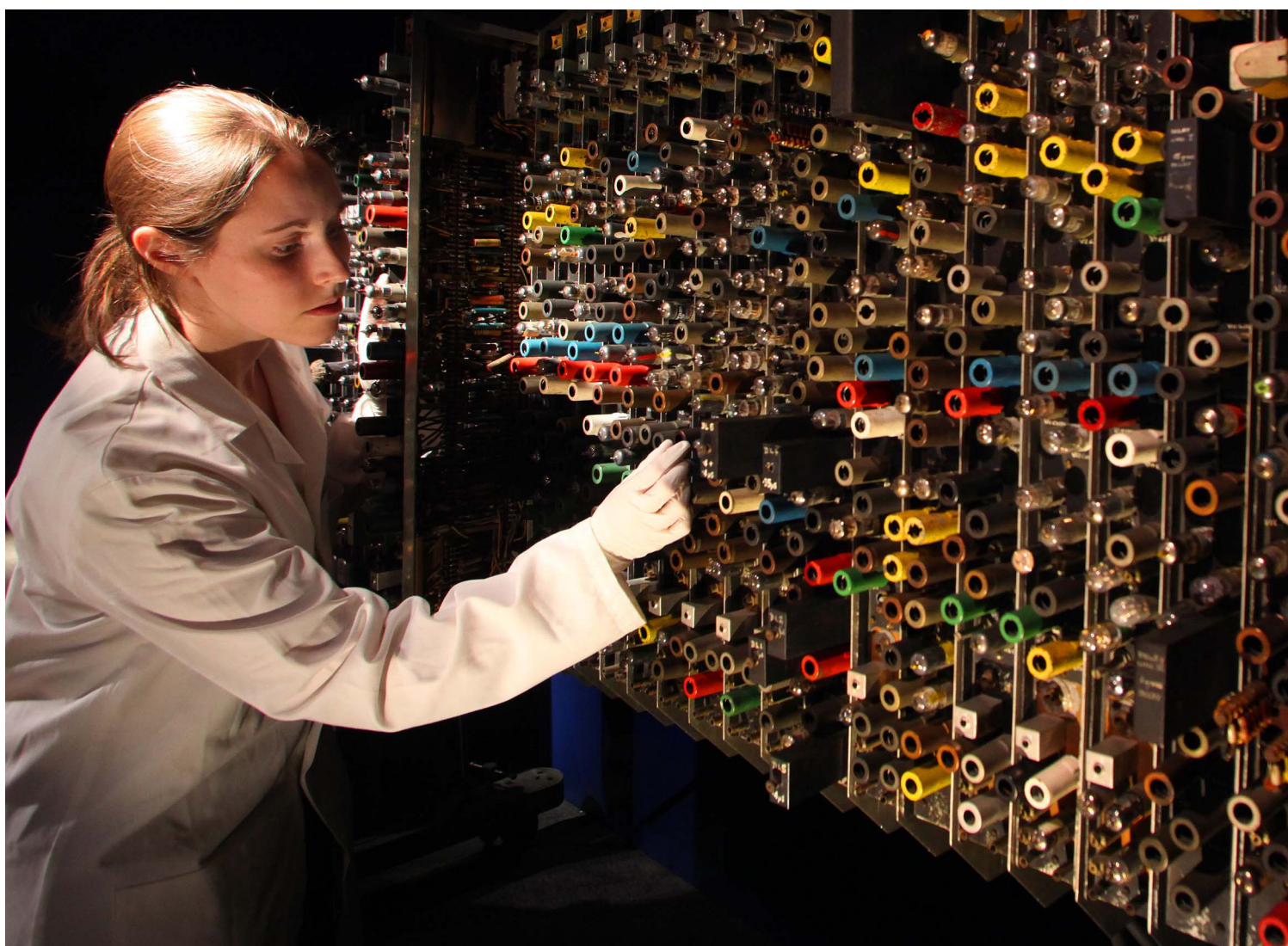
Book Review

TURING'S CATHEDRAL

The Origins of the Digital Universe

by George Freeman

Reviewed by Charles Brass



In the middle of the second decade of the twenty-first century it is easy to take computers and information processing systems for granted (though see the article in the June 2014 edition of Future News about one organisation striving to make the workings of these machines accessible to school children). It is also easy to forget the massive explosion in computer power in the latter half of the twentieth century, or that much of early work in this area was done as part of the US

Government Manhattan Project to create nuclear weapons.

This book explains just how all this took place, and remembers the people who were intimately involved in creating the worst working computers at the Institute for Advanced Studies at Princeton University in the 1940s and 1950s.

It is written by the son of one of the physicists who worked there (Freeman Dyson arrived in 1948 and his author son George was born in

1950 and grew up in the Institute grounds), and meticulously retells the story of the development of computers from 1953 “when there were 55 kilobytes of high-speed random access memory on planet earth”(p4) comprising “less memory than is allocated to displaying a single icon on a computer screen today”(pix); to 1958 .when “Julian Bigelow turned off the master control, shut down the power supplies, picked up a blunt No. 2 pencil and made the following entry in the machine log: Off

– 12:00 midnight – JHB”. Knowing there would be no more log entries to follow he extended his signature diagonally across the rest of the page” (p315).

Some historians content themselves with describing only what happened, others are fascinated by who was

largely put together to John von Neumann in Princeton New Jersey from July 1945.

Dyson begins his 400 page book by describing the intellectual and physical environment in which theorists such as his father, von Neumann, Richard Feynman, Robert Oppenheimer and Norbert Weiner to mention just some found themselves in the latter years of the second world war – including nearly two chapters on the history of the farm on which the Institute was built.

Then, through thoughtful biographies of the key players he describes how computing (then largely manual not electronic) created the atomic bomb and was then transformed into an electronic machine through the careful accumulation of the various components needed to make it work.”

The development of each component is described in some detail (eg p65: “the thermionic valve – within an evacuated glass envelope, a charged cathode was heated to a temperature enough to boil off electrons, whose flow to the anode (or plate) could be controlled by a secondary current applied to a very thin filament... known as the grid”), along with the history of those involved in discovering or developing it (such as Kosma Zworykin a pioneer in television who worked out how to use these vacuum tubes to transmit information). At each stage Dyson attempts to make the science and technology accessible to a lay audience.

Eventually ENIAC was created (“... incorporating 17,468 vacuum tubes and 1,500 relays, consumed 174 kilowatts of power and occupied a 33 by 55 foot room. There were 500,000 hand-soldered joints.”(p72)) and from there things moved very fast. By the mid-1950s there were a number of similar machines (many smaller and more powerful) around the world.

Dyson explains that bomb making was only one of the imperatives driving the creation of the digital universe – weather and climate prediction and understanding how biological systems worked were also

prominent (“Our understanding of life has deepened with our increasing knowledge of the workings of complex molecular machines, while our understanding of technology has diminished as the machines approach the complexity of living things”(p277)).

The development of mathematics played a prominent role in all this work – there three main classes of researchers at Princeton were engineers, systems theorists and mathematicians and logicians.

A large portion of the latter pages of Turing’s Cathedral are devoted to what seems to be the biggest difference between how our brains and computers work:

“The brain is a statistical, probabilistic system, with logic and mathematics running as higher-level processes. The computer is a logical, mathematical system, upon which higher-level statistical, probabilistic systems, such as human language and intelligence could possibly be built.”(p278)

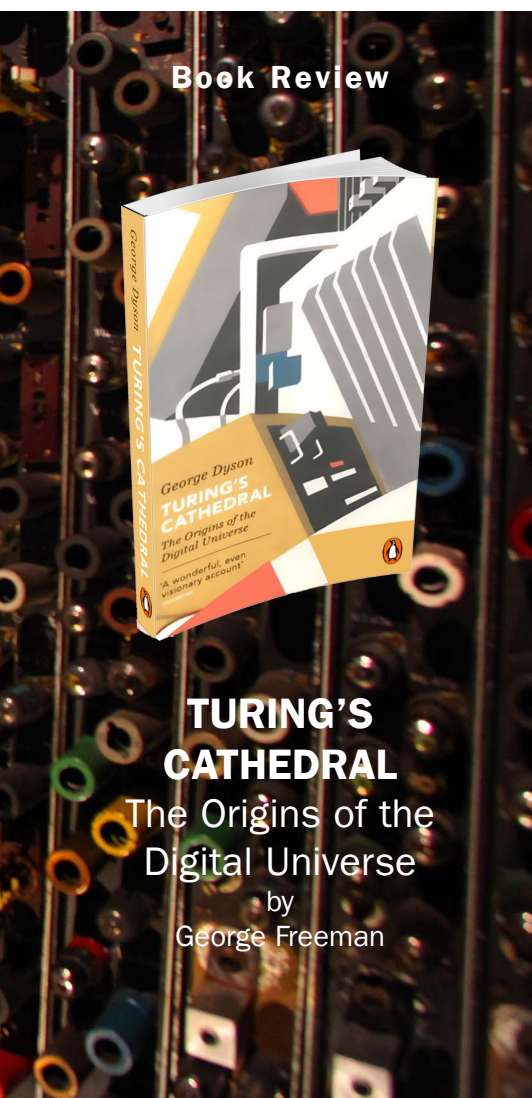
as part of Dyson’s fundamental desire to help the rest of us understand just what it means to compute anything. From this reviewer’s perspective this is perhaps the best reason to read this book (though just getting a better appreciation of this critical period in human history through both words and photos is also worthwhile).

Just how big an achievement this effort was is summed up by this quote:

“By mid-1953, five distinct sets of problems were running on the MANIAC, characterized by different scales in time: (1) nuclear explosions, over in microseconds: (2) shock and blast waves, ranging from microseconds to minutes: (3) meteorology, ranging from minutes to years: (4) biological evolution, ranging from years to millions of years, and: (5) stellar evolution, ranging from millions to billions of years. All this in 5 kilobytes – enough memory for about one-half second of audio, at the rate we now compress music into MP3s.”(p298)

there when it happened, what they did and how they felt. George Dyson is one of the latter, and he lovingly describes the roles played by nearly 90 international scholars in creating the first workable computer.

There were other labs working on these challenges – building on work by Francis Bacon, Gottfried Leibniz and Thomas Hobbes in the 17th century, Charles Babbage in the 19th and Kurt Goedel and Alan Turing in the 20th – but none were as well resourced or successful as the team



FUTURISTS IN ACTION

Report from the annual conference of the World Future Society

WORLD FUTURE 2014:

A small group of futures foundation members recently joined over 600 others from 29 countries at the annual conference of the World Future Society in Orlando Florida.

Under the overarching theme “What If...” we had access to 11 one day masterclasses with themes ranging from “Introduction to Future Studies” to “Wiser Futures – using futures tools to better understand and create the future” and over 70 sessions on topics ranging from writing science fiction to understanding and using 3D printers.

The conference was opened by Stanford University Professor Paul Saffo who reminded us that while foresight can be imperfect, it is still essential to society. He talked at some length about how foresight was all about mapping uncertainty and gave us some insights into how to help everyone become more comfortable with the inevitable uncertainty we all face.

The conference also included a rare public appearance by long-time activist and author Hazel Henderson who proposed that desert greening was the ‘next big thing’. She explained how researchers now know of 10,000 salt tolerant plants and how their judicious use could help humans rehabilitate desert and salt affected landscapes (an increasing issue in Australia). She also talked about how her Ethical Markets company was helping finance these projects as commercial ventures. She told us that the new project “the Exploratorium” an on-line course for global activists would be launched later this month (more details can be found here: <http://ethicalmarketsexploratorium.com/completing-the-exploratorium.html>).

One of the other keynote presentations featured the Director of the Pew Research Centre’s Internet project which studies the social

impact of the internet. The project has issued more than 450 reports based on its surveys that examine people’s on-line activities and the internet’s role in their lives. All these reports are available for free at www.pewinternet.org.

The closing plenary was given by the CEO of the New Schools Venture Fund. This is a new initiative in the USA and grows out of Stacey Kedress’ role as Deputy Director of Education for the Bill and Melinda Gates Foundation. The fund’s prime role is to connect up all the technologies which students, teachers and schools use so that they actually create the individual learning environment which is so effective in helping kids learn and grow. Stacey gave examples of individual learning maps through which students’ activities and learning at school, at home and in the community could be integrated. Her presentation was an engaging “back-cast” from the perspective of a student who entered school this year looking back on how things had changed over their time at school. Many of us were encouraged to believe that the things Stacey was describing could actually occur during the next 12 years.

Some of us were fortunate enough to enjoy two site visits as part of the conference experience. One was to the town of Celebration, a community of 7,500 people built by the Disney Corporation in the 1990s to demonstrate what they thought an ideal community would actually look like. The visit highlighted that one person’s utopia is another person’s dystopia. I am sure that those who live there enjoy it, but I for one found it as shallow and plastic as the numerous Disney theme parks which surround it.



On the other hand, the tour of the Kennedy Space Centre was inspiring,

challenging and multi-dimensional. This is the actual site from which all American manned space missions have been launched and it has been formally hosting visitors since the 1960s. As one might expect, it contains artefacts covering the entire history of man in space (including actively acknowledging the pioneering and on-going role of the Russian people in this endeavour) culminating in an exhibit featuring the actual space shuttle Atlantis which retired in 2009. There is much more to the centre than passive displays, however. Staff, including astronauts, are rostered to explain exhibits and answer any questions. Clearly, although the American government has wound back public expenditure on space exploration the private sector has stepped in to fill the void, and the sheer number of projects planned for 2020 and beyond, about which we could talk with the actual people involved, was inspiring.



The next World Future Society Conference will be held in San Francisco in late July 2015 and the futures foundation will again look to facilitate Australians who wish to attend. Please contact our office if you are interested.

It is also worth noting that the 50th birthday of the World Future Society will be celebrated at the Washington conference in 2016, and we anticipate inviting Australian members to become involved in some exciting projects leading up to this anniversary.

Signals in the Noise

33 DRAMATIC PREDICTIONS FOR 2030

by Thomas Frey



***Humanity will
change more in
the next 20 years
than in all of
human history.***

By 2030 the average person in the U.S. will have 4.5 packages a week delivered with flying drones. They will travel 40% of the time in a driverless car, use a 3D printer to print hyper-individualized meals, and will spend most of their leisure time on an activity that hasn't been invented yet.

The world will have seen over 2 billion jobs disappear, with most coming back in different forms in different industries, with over 50% structured as freelance projects rather than full-time jobs.

Over 50% of today's Fortune 500 companies will have disappeared, over 50% of traditional colleges will have collapsed, and India will have overtaken China as the most populous country in the world.

Most people will have stopped taking pills in favor of a new device that causes the body to manufacture its own cures.

Space colonies, personal privacy, and flying cars will all be hot topics of discussion, but not a reality yet.

Most of today's top causes, including climate change, gay liberation, and abortion, will all be relegated to little more than footnotes in Wikipedia, and Wikipedia itself will have lost the encyclopedia wars to an upstart company all because Jimmy Wales was taken hostage and beheaded by warring factions in the Middle East over a controversial entry belittling micro religions.

Our ability to predict the future is an inexact science. The most accurate predictions generally come from well-informed industry insiders about very near term events.

Much like predicting the weather, the farther we move into the future, the less accurate our predictions become.

So why do we make them?

In the segments below, I'll make a series of 33 provocative predictions about 2030, and how different life will be just 17 years in the future.

I will also explain why predictions are important, even when they are wrong.

**“Our greatest motivations in life come from
NOT knowing the future.”**

33 DRAMATIC PREDICTIONS FOR 2030

1. By 2030 over 80% of all doctor visits will have been replaced by automated exams. [Details here.](#)
2. By 2030 over 90% of all restaurants will use some form of a 3D food printer in their meal preparations. [Details here.](#)
3. By 2030 over 10% of all global financial transactions will be conducted through Bitcoin or Bitcoin-like crypto currencies.
4. By 2030 we will see a growing number of highways designated as driverless-vehicle only. [Details here.](#)
5. By 2030, a Chinese company will become the first to enter the space tourism industry by establishing regular flights to their space hotel.
6. By 2030, the world's largest Internet company will be in the education business, and it will be a company we have not heard of yet.
7. By 2030 over 20% of all new construction will be "printed" buildings. [Details here.](#)
8. By 2030 over 2 billion jobs will have disappeared, freeing up talent for many new fledgling industries. [Details here.](#)
9. By 2030 a new protest group will have emerged that holds anti-cloning rallies, demonstrating against the creation of "soul-less humans."
10. By 2030 we will see the first city to harvest 100% of its water supply from the atmosphere. [Details here.](#)
11. By 2030 world religions will make a resurgence, with communities of faith growing by nearly 50% over what they are today.
12. By 2030 over 50% of all traditional colleges will collapse, paving the way for an entire new education industry to emerge. [Details here.](#)
13. By 2030 we will see a surge of Micro Colleges spring to life, each requiring less than 6 months of training and apprenticeship to switch professions. [Details here.](#)
14. By 2030 scientists will have perfected an active cross-species communication system, enabling some species to talk to each other as well as humans.
15. By 2030 we will see the first hurricane stopped by human intervention.
16. By 2030 we will see wireless power used to light up invisible light bulbs in the middle of a room.
17. By 2030 we will see the first demonstration of a technology to control gravity, reducing the pull of gravity on an object by as much as 50%.
18. By 2030 democracy will be viewed as inferior form of government.
19. By 2030 traditional police forces will be largely automated out of existence with less than 50% of current staffing levels on active duty.
20. By 2030 over 90% of all libraries will offer premium services as part of their business model. [Details here.](#)
21. By 2030 forest fires will have been reduced to less than 5% of the number today with the use of infrared drone monitoring systems. [Details here.](#)
22. By 2030 over 30% of all cities in the U.S. will operate their electric utilities as micro grids.
23. By 2030 we will have seen a number of global elections with the intent of creating a new global mandate, forcing world leaders to take notice. [Details here.](#)
24. By 2030 traditional pharmaceuticals will be replaced by hyper-individualized medicines that are manufactured at the time they are ordered. [Details here.](#)
25. By 2030 we will have seen the revival of the first mated pair of an extinct species. [Details here.](#)
26. By 2030 swarms of micro flying drones - swarmbots - will be demonstrated to assemble themselves as a type of personal clothing, serving as a reconfigurable fashion statement. [Details here.](#)
27. By 2030 marijuana will be legalized in all 50 states in the U.S. and half of all foreign countries. [Details here.](#)
28. By 2030 cable television will no longer exist.
29. By 2030 a small number of companies will begin calculating their labor costs with something called "synaptical currency." [Details here.](#)
30. By 2030 it will be common to use next generation search engines to search the physical world. [Details here.](#)
31. By 2030 basic computer programming will be considered a core skill required in over 20% of all jobs. [Details here.](#)
32. By 2030 we will have seen multiple attempts to send a probe to the center of the earth. [Details here.](#)
33. By 2030 a form of tube transportation, inspired by [Hyperloop](#) and [ET3](#), will be well on its way to becoming the world's largest infrastructure project. [Details here.](#)