Friday Thinking 2 Nov 2018 -
Hello all – Here's today's **Friday Thinking** - dedicated to illuminating tomorrow will be radically unlike yesterday.

If anyone should not want to receive these emails – please feel free to reply johnverdon@gmail.com and I will happily take you off the distribution list. Please feel free to share this with anyone you think would be interested,

If anyone prefers to view this as a web page you can do this by going my **Friday Thinking** web page http://johnverdon-friday-thinking.blogspot.ca/

Many thanks to those who enjoy this. ☺

In the 21st Century curiosity will SKILL the cat.
Jobs are dying - Work is just beginning.
Work that engages our whole self becomes play that works.
Techne = Knowledge-as-Know-How ::
Technology = Embodied Know-How

"Be careful what you 'insta-google-tweet-face'"
Woody Harrelson - Triple 9

Content
Quotes:
Thousands Of Swedes Are Inserting Microchips Under Their Skin

Look how far precision medicine has come

Self-driving car dilemmas reveal that moral choices are not universal

Articles:
Biohackers Are Implanting Everything From Magnets to Sex Toys
Custom-made smart glasses pick up where Google Glass left off
The virtual reality dream is dying
Dr Etienne Wenger: Learning in landscapes of practice
Waymo receives first permit to test fully driverless cars in California
'Ultra rapid' electric car charging network coming to Australia
'A new day for chemistry': Molecular CT scan could dramatically speed drug discovery
Greener coffee pods? Bacteria help turn food waste into compostable plastic
Ground-breaking discovery finds new link between autoimmune diseases and a gut bacterium
75% of people think this AI artist is human

20 top lawyers were beaten by legal AI. Here are their surprising responses
Police are using artificial intelligence to spot written lies
Is Australia on the verge of having too much solar energy?
Apple and Samsung fined for deliberately slowing down phones

Thousands Of Swedes Are Inserting Microchips Under Their Skin

Look how far precision medicine has come

Self-driving car dilemmas reveal that moral choices are not universal

- Biohackers Are Implanting Everything From Magnets to Sex Toys
- Custom-made smart glasses pick up where Google Glass left off
- The virtual reality dream is dying
- Dr Etienne Wenger: Learning in landscapes of practice
- Waymo receives first permit to test fully driverless cars in California
- 'Ultra rapid' electric car charging network coming to Australia
- ‘A new day for chemistry’: Molecular CT scan could dramatically speed drug discovery
- Greener coffee pods? Bacteria help turn food waste into compostable plastic
- Ground-breaking discovery finds new link between autoimmune diseases and a gut bacterium
- 75% of people think this AI artist is human
- 20 top lawyers were beaten by legal AI. Here are their surprising responses
- Police are using artificial intelligence to spot written lies
- Is Australia on the verge of having too much solar energy?
- Apple and Samsung fined for deliberately slowing down phones

Halloween Pumpkins

> *Osterlund believes there are two key reasons microchips have taken off in Sweden. First, the country has a long history of embracing new technologies before many others and is quickly moving toward becoming a cashless society.*
>
> *In the 1990s, the Swedish government invested in providing fast Internet services for its citizens and gave tax breaks to companies that provided their workers with home computers. And well-known tech names such as Skype and Spotify have Swedish roots.*

"The more you hear about technology, the more you learn about technology, the less apprehensive you get about technology," *Osterlund says.*

Only 1 in 4 people living in Sweden uses cash at least once a week. And, according to the country's central bank, the Riksbank, the proportion of retail cash transactions has dropped from around 40 percent in 2010 to about 15 percent today.

Osterlund's second theory is that Swedes are less concerned about data privacy than people in other countries, thanks to a high level of trust for Swedish companies, banks, large organizations and government institutions.

Swedes are used to sharing personal information, with many online purchases and administrative bodies requiring their social security numbers. Mobile phone numbers are widely available in online search databases, and people can easily look up each other's salaries by calling the tax authority.

Thousands Of Swedes Are Inserting Microchips Under Their Skin
https://www.npr.org/2018/10/22/658808705/thousands-of-swedes-are-inserting-microchips-under-their-skin?utm_source=nextdraft&utm_medium=email

The number of people getting DNA reports has been doubling, roughly, every year since 2010. The figures are now growing by a million each month, and the DNA repositories are so big that they're enabling surprising new applications. Consumers are receiving scientific predictions about whether they'll go bald or get cancer. Investigators this year started using consumer DNA data to capture criminals. Vast gene hunts are under way into the causes of insomnia and intelligence. And 23andMe made a $300 million deal this summer with drug company GlaxoSmithKline to develop personalized drugs, starting with treatments for Parkinson's disease. The notion is that targeted medicines could help the small subset of Parkinson's patients with a particular gene error, which 23andMe can easily find in its database.

Look how far precision medicine has come
https://www.technologyreview.com/s/612281/look-how-far-precision-medicine-has-come/?utm_source=TR&utm_content=10-24&utm_source=MIT+Technology+Review&utm_campaign=97bc14b958-EMAIL_CAMPAIGN_2018_10_24_12_46&utm_medium=email&utm_term=0_997ed6f472-97bc14b958-153847613

many of the moral principles that guide a driver's decisions vary by country. For example, in a scenario in which some combination of pedestrians and passengers will die in a collision, people from

relatively prosperous countries with strong institutions were less likely to spare a pedestrian who stepped into traffic illegally.

"People who think about machine ethics make it sound like you can come up with a perfect set of rules for robots, and ***what we show here with data is that there are no universal rules****," says Iyad Rahwan, a computer scientist at the Massachusetts Institute of Technology in Cambridge and a co-author of the study.*

The debate about whether ethics are universal or vary between cultures is an old one, says Christakis, and now the "twenty-first century problem" of how to programme self-driving cars has reinvigorated it.

Self-driving car dilemmas reveal that moral choices are not universal
https://www.nature.com/articles/d41586-018-07135-0?utm_source=briefing-dy&utm_medium=email&utm_campaign=briefing&utm_content=20181025

Are we ready for a full blown digital environment? Some people are readier than others.

Digiwell's microchip implants run from $40 to $250, and Kramer charges $30 to inject them, either in his Hamburg office or while traveling (he did Geronimo's implant in the lobby of a Berlin hotel). His clients include a lawyer who wants access to confidential files without remembering a password, a teen with no arms who uses a chip in her foot to open doors, and an elderly man with Parkinson's disease who once collapsed in front of his house after trying for two hours to get his key into the lock. He now uses a chip in his hand to open the door.
Size of the chips sold by Digiwell for implanting: 12mm

Biohackers Are Implanting Everything From Magnets to Sex Toys

https://www.bloomberg.com/businessweek

The human augmentation market may grow tenfold, to $2.3 billion, by 2025. BOTTOM LINE - Biohacking advocates say 100,000 people have chips implanted under their skin, which they use to open doors, store passwords and personal data, and augment their art.

Patrick Kramer sticks a needle into a customer's hand and injects a microchip the size of a grain of rice under the skin. "You're now a cyborg," he says after plastering a Band-Aid on the small wound between Guilherme Geronimo's thumb and index finger. The 34-year-old Brazilian plans to use the chip, similar to those implanted in millions of cats, dogs, and livestock, to unlock doors and store a digital business card.

Kramer is chief executive officer of Digiwell, a Hamburg startup in what aficionados call body hacking—digital technology inserted into people. Kramer says he's implanted about 2,000 such chips in the past 18 months, and he has three in his own hands: to open his office door, store medical data, and share his contact information. Digiwell is one of a handful of companies offering similar services, and biohacking advocates estimate there are about 100,000 cyborgs worldwide. "The question isn't 'Do you have a microchip?' " Kramer says. "It's more like, 'How many?' We've entered the mainstream."

Well Google Glass may not have become the next tablet - but neither did it go away (it's become a manufacturing aid) - and this may not either (especially given the cost) - that said - augmented reality is … getting ever closer to a daily tool. The images are worth the view - they give clear indications of use and style.

> *"Focals are a pair of everyday smart glasses that are designed from the eyewear-first perspective," Stephen Lake, North's CEO and co-founder, told Engadget. "We realized that it can't be like previous approaches of smart glasses, where they try to stick a computer or tech on your face."*

Custom-made smart glasses pick up where Google Glass left off

https://www.engadget.com/2018/10/23/north-focals-smart-glasses-hands-on/#/

Focals look like something you might actually wear.

Earlier this month, Thalmic Labs announced it would be ending the production of Myo, a gesture-controlled armband that it's been developing for the past few years. The company has now changed its name to **North** and have decided to shift focus to an entirely different project. Today, it's finally ready to reveal what that project is. It's called **Focals**, a pair of smart glasses that uses holographic display technology.

Focals are designed to take your head away from being buried in your phone. "The core philosophy of the product is about keeping you present in the world," said Lake. "It's subtle and designed around the human experience."

One of the ways it achieves this is by relegating all the controls to a ring you wear on your index finger. The ring is called the Loop, and it has a joystick as well as a little D-pad (That's why the Loop needs to be on your index finger, so you can use your thumb to manipulate the joystick).

"Some of the previous products with a tech-first approach, they were putting touchpads on your head," said Lake, an example being Google Glass. "And it was just awkward and weird, to be tapping at your glasses and talking to yourself during a meeting." Using Loop, on the other hand, is very discreet. You could be going through your messages with your hand in your pocket, without anyone ever noticing.

This is a very interesting signal - how difficult it can be to track trend to predict the future of new technology. It could be that augmented reality headsets could be a necessary precursor to virtual reality - or it could be that the 'killer app' for VR is education rather than gaming. What is clear is that technology to be truly disruptive has to be cheap and have a key use. Is VR really dying? I don't think so - but it may take much longer to become ubiquitous - until a great use case (and related content) is developed.

> *In my opinion — as someone who watched this new generation of virtual reality emerge from the earliest days, and was one of its biggest fans — VR adoption will only happen when the barrier to entry is akin to slipping on a pair of sunglasses (and even then it's no sure thing). Most people don't want to wear a bulky headset, even in private, there's no must have "killer app" for VR, and no one has made a simple plug-and-play option that lets a novice user engage casually.*

The virtual reality dream is dying

https://theoutline.com/post/6443/virtual-reality-dream-is-dead-hype-oculus-rift-facebook-playstation?zd=4&zi=tysuggf7&utm_source=MIT%20Technology%20Review&utm_campaign=59de97c147-EMAIL_CAMPAIGN_2018_10_29_12_43&utm_medium=email&utm_term=0_997ed6f472-59de97c147-153847613

We were promised better worlds, and all we got was this lousy headset.
Hilmar Veigar Pétursson, CEO of the studio CCP Games (responsible for the massive Eve: Online), says the company doesn't see much of a future for virtual reality gaming. "We expected VR to be two to three times as big as it was, period," Pétursson told gaming site Destructoid just a few days ago, adding, "You can't build a business on that." There's a chance the company could jump back in, but their own data showed adoption was slow, even among enthusiasts. "The important thing is we need to see the metrics for active users of VR. A lot of people bought headsets just to try it out. How many of those people are active? We found that in terms of our data, a lot of users weren't," Pétursson said.

So what happened here? VR was supposed to be a revolution, with companies like Oculus pioneering a whole new way for gamers and non-gamers alike to be immersed in digital environments — but that excitement has markedly cooled. The media (yes, me included, at least early on) has gone through several cycles of fawning, optimistic prognostication, and... wishful thinking? — but for all the hype we have very little consumer interest to show for it. Oculus sold off to Facebook and has become little more than a parlor trick Mark Zuckerberg shows off at every FB event. As Ben Thompson recently noted, the bet on the company is an awkward fit for Facebook that strays from Zuckerberg's strengths in several ways:

Talking about learning - this is an excellent 1 hour video presentation by the key author of the concept of 'communities of practice'. This is vital for anyone concerned with knowledge generation, transfer, management and governance.

Dr Etienne Wenger: Learning in landscapes of practice

https://www.youtube.com/watch?v=qn3joQSQm4o

Dr Etienne Wenger presented 'Learning in landscapes of practice: recent developments in social learning theory' on Wednesday 1 May 2013 as part of the Festival of Research in the Brighton Fringe.

Learning is often viewed as something individuals do as they acquire information and skills. It is usually associated with some form of instruction. Dr Wenger presents a different perspective on learning, one that starts with the assumption that learning is an inherent dimension of everyday life and that it is fundamentally a social process. From this perspective, a living "body of knowledge" can be viewed as collection of communities of practice. Learning is not merely the acquisition of a curriculum, but a journey across this landscape of practice, which is transformative of the self. Achieving a high level of "knowledgeability" is a matter of negotiating a productive identity with respect to the various communities of practice that constitute this landscape. This lecture reviews the main tenets of this learning theory, the ways in which it has been used in practice, and more recent developments.

The self-driving vehicle is coming ever closer to becoming a common feature of our transportation reality.

> *California already has more than 50 companies testing autonomous vehicles on its public roads, but at the current time, they all include safety drivers.*

Waymo receives first permit to test fully driverless cars in California

https://www.digitaltrends.com/cars/waymo-receives-first-permit-to-test-fully-driverless-cars-in-california/

Waymo's plan for a robot-taxi service has just taken another big step forward after the company became the first in California to receive approval for testing fully driverless cars on the state's roads.

It announced the news on Tuesday, October 30, after the California Department of Motor Vehicles (DMV) gave it the green light to test its self-driving cars without the need for a safety driver.
In a blog post, the autonomous-car unit of Google parent Alphabet said it will start off by testing its vehicles in the streets around Mountain View, California, close to its headquarters.

"Waymo's permit includes day and night testing on city streets, rural roads, and highways with posted speed limits of up to 65 miles per hour," the team said in the post.
It added that its permit also allows for driving in fog and light rain, conditions that its autonomous cars can already comfortably handle.

In a bid to reassure local drivers that safety is its top priority, Waymo said that should one of its driverless vehicles come across a situation that it's unable to comprehend, it will do "what any good driver would do: Come to a safe stop until it does understand how to proceed. For our cars, that means following well-established protocols, which include contacting Waymo fleet and rider support for help in resolving the issue."

Another signal that marks the inevitable transformation of our transportation paradigm. Essentially the electric vehicle will soon surpass the carbon fuel vehicle - for cost and range.

'Ultra rapid' electric car charging network coming to Australia

https://www.theguardian.com/environment/2018/oct/22/ultra-rapid-electric-car-charging-network-coming-to-australia

Chargefox stations will allow drivers to charge electric vehicles in just minutes

Drivers travelling between Australia's major cities could soon charge their electric vehicles in just 15 minutes with a super-fast network being rolled out across the country.

The 21 sites on highways between Adelaide, Melbourne, Canberra, Sydney and Brisbane will be powered entirely by renewable energy. Sites are also planned for Western Australia.

The "ultra rapid" stations will allow electric vehicles to add up to 400km of range in a fraction of the hours it takes to charge at existing points.

Australian start-up Chargefox raised $15m to start building the network, including $6m from the federal government's Australian Renewable Energy Agency. Arena's chief executive, Darren Miller, said it was a "game changing" project that would help ease worries about range and encourage more people to drive electric vehicles.

A new technique for chemical analysis represents a significant breakthrough - and could accelerate our knowledge of living systems.

> *"I am blown away by this," says Carolyn Bertozzi, a chemist at Stanford University in Palo Alto, California. "The fact that you can get these structures from [a sample] a million times smaller than a speck of dust, that's beautiful. It's a new day for chemistry."*

'A new day for chemistry': Molecular CT scan could dramatically speed drug discovery

https://www.sciencemag.org/news/2018/10/new-day-chemistry-molecular-ct-scan-could-dramatically-speed-drug-discovery

This week, two research teams report they've adapted a third technique, commonly used to chart much larger proteins, to determine the precise shape of small organic molecules. The new technique works with vanishingly small samples, is blazing fast, and is surprisingly easy.

Because it does work so smoothly, the new technique could revolutionize fields both inside and outside of research, Bertozzi and others say. Tim Grüne, an electron diffraction expert at the Paul Scherrer Institute in Villigen, Switzerland, who led the European group, notes that pharmaceutical companies build massive collections of crystalline compounds, in which they hunt for potential new drugs. But only about one-quarter to one-third of the compounds form crystals big enough for x-ray crystallography. "This will remove a bottleneck and lead to an explosion of structures," Grüne says. That could speed the search for promising drug leads in tiny samples of exotic plants and fungi. For crime labs, it could help them quickly identify the latest heroin derivatives hitting the streets. And it could even help Olympics officials clean up sports by making it easier to spot vanishingly small amounts of performance-enhancing drugs. All because structures rule—and are now easier than ever to decipher.

Here's a great signal of a development of domesticating DNA - not only is there work on developing microorganisms to metabolize current types of plastic - but also this initiative is developing similar microorganisms to make truly biodegradable plastics from compost.

> *The company has signed agreements with Ontario firms that plan to use it to make compostable coffee pods and the plastic that's printed out by 3D printers.*
> *PHA is already on the market. Because it's biocompatible and biodegradable, it's used in lots of medical applications ranging from heart valves to dissolving sutures.*

Greener coffee pods? Bacteria help turn food waste into compostable plastic

https://www.cbc.ca/news/technology/genecis-compostable-plastic-1.4667524

Toronto-based cleantech startup uses 'the fat of the bacteria'

What if plastic were made from waste like banana peels, coffee grounds and cardboard takeout containers instead of petroleum? And what if, after use, that plastic decomposed like the biological materials it was made from?

Toronto-based Genecis, a cleantech startup, is trying to make that dream of greener plastic a reality, and to make it cheap enough to use in everyday throwaway items like coffee pods and other food packaging.

Genecis harnesses bacteria to turn kitchen waste into compostable, biocompatible plastics called PHAs (polyhydroxyalkanoates).

The plastic-making bacteria eat waste that has been pre-processed by other bacteria into molecular bite-sized pieces. And, like us, if they're well fed, they pack on some extra weight — strangely enough, as plastic.
"It's like the fat of the bacteria," explains Luna Yu, the company's 24-year-old CEO.

This is another fascinating signal regarding our microbial ecology.

> *"When we mapped the genome of Bacteroides fragilis a few years ago we were astonished to discover a human-like gene not present in any other bacteria. The protein produced from this gene is nearly the same shape as a protein in almost every human cell."*
>
> *"When we discovered that Bacteroides fragilis produces lots of this mimic protein we were very excited. No other bacteria produced a mimic of human ubiquitin and this one lives in our gut. We immediately wondered if it might be linked with autoimmune diseases such as lupus. It has been known since the 1990s that some people with autoimmune diseases have antibodies that target their own human ubiquitin, but we don't know why this happens. So we decided to see if people also had antibodies that target the Bacteroides fragilis version of ubiquitin."*

Ground-breaking discovery finds new link between autoimmune diseases and a gut bacterium

https://medicalxpress.com/news/2018-10-ground-breaking-discovery-link-autoimmune-diseases.html

Queen's University Belfast researchers have, for the first time, found a specific microbe in the gut that pumps out protein molecules that mimic a human protein, causing the human defence system to turn on its own cells by mistake.

The culprit in this case is called Bacteroides fragilis, a bacterium that normally lives in the human gut. The Queen's team has shown that this bacterium produces a human-like protein that could trigger autoimmune diseases, such as rheumatoid arthritis. This human protein is called 'ubiquitin' and is needed for all the normal cell processes in our bodies

The study, recently published in the *British Society for Immunology journal Clinical and Experimental Immunology* is a significant discovery. "Mimic proteins" fool our immune defence system into reacting with our own bodies, resulting in autoimmune disease, a condition in which your immune system mistakenly attacks the body.

This is an worthy signal of the emerging power of AI to hover around the Turing test - or some proxies of a Turing test. The images of created works are worth the view - they are fascinating - we don’t know what art is - but many recognize it when they see it - even if they don’t know the creator.

75% of people think this AI artist is human

https://www.fastcompany.com/90253470/75-of-people-think-this-ai-artist-is-human?utm_campaign=Abundance%20Insider&utm_source=hs_email&utm_medium=email&utm_content=67015256&_hsenc=p2ANqtz-_ztVmN6hhncyu3bnHh2u7s-AbQAgdZdIDP4B3oR1k_I2hNWJ86UAa384oepvR5qTB1DpQixPswXX7GqlKoaWvEHQB9Gg&_hsmi=67015256

One piece recently sold for $16,000 at an auction.
When artificial intelligence has been used to create works of art, a human artist has always exerted a significant element of control over the creative process.

But what if a machine were programmed to create art on its own, with little to no human involvement? What if it were the primary creative force in the process? And if it were to create something novel, engaging, and moving, who should get credit for this work?

At Rutgers' Art & AI Lab, we created AICAN, a program that could be thought of as a nearly autonomous artist that has learned existing styles and aesthetics and can generate innovative images of its own.

People like AICAN's work, and can't distinguish it from that of human artists. Its pieces have been exhibited worldwide, and one even recently sold for $16,000 at an auction.

Now the practice of law may seem antithetical to the creative practice of art - but on the other hand - creating compelling and novel arguments for or against may require similar doses of creative talent - here again we may be approaching a proxy of the Turing Test.

> *most of the participants stressed that high-volume and low-risk contracts took up too much of their time, and felt it was incumbent on lawyers to automate work when, and where, possible. For them, the study was also a simple, practical demonstration of a not-so-scary AI future. However, lawyers also stressed that undue weight should not be put on legal AI alone. One participant, Justin Brown, stressed that humans must use new technology alongside their lawyerly instincts. He says: "Either working alone is inferior to the combination of both."*

20 top lawyers were beaten by legal AI. Here are their surprising responses

https://hackernoon.com/20-top-lawyers-were-beaten-by-legal-ai-here-are-their-surprising-responses-5dafdf25554d

In a landmark study, 20 top US corporate lawyers with decades of experience in corporate law and contract review were pitted against an AI. Their task was to spot issues in five Non-Disclosure Agreements (NDAs), which are a contractual basis for most business deals.

The study, carried out with leading legal academics and experts, saw the LawGeex AI achieve an average 94% accuracy rate, higher than the lawyers who achieved an average rate of 85%. It took the lawyers an average of 92 minutes to complete the NDA issue spotting, compared to 26 seconds for the LawGeex AI. The longest time taken by a lawyer to complete the test was 156 minutes, and the shortest time was 51 minutes. The study made waves around the world and was covered across global media.

Is it going to become much harder to lie with our written words? An interesting signal.

Police are using artificial intelligence to spot written lies

https://qz.com/1441034/using-artificial-intelligence-to-detect-written-lies/?utm_source=MIT+Technology+Review&utm_campaign=44758e116f-EMAIL_CAMPAIGN_2018_10_30_01_06&utm_medium=email&utm_term=0_997ed6f472-44758e116f-153847613

There's no foolproof way to know if someone's verbally telling lies, but scientists have developed a tool that seems remarkably accurate at judging written falsehoods. Using machine learning and text analysis, they've been able to identify false robbery reports with such accuracy that the tool is now being rolled out to police stations across Spain.

Computer scientists from Cardiff University and Charles III University of Madrid developed the tool, called VeriPol, specifically to focus on robbery reports. In their paper, published in the journal *Knowledge-Based Systems* earlier this year, they describe how they trained a machine-learning model on more than 1000 police robbery reports from Spanish National Police, including those that were known to be false. A pilot study in Murcia and Malaga in June 2017 found that, once VeriPol identified a report as having a high probability of being false, 83% of these cases were closed after the claimants faced further questioning. In total, 64 false reports were detected in one week.

VeriPol works by using algorithms to identify the various features in a statement, including all adjectives, verbs, and punctuations marks, and then picking up on the patterns in false reports. According to a Cardiff University statement, false robbery reports are more likely to be shorter, focused on the stolen property rather than the robbery itself, have few details about the attacker or the robbery, and lack witnesses.

Taken together, these sound like common-sense characteristics that humans could recognize. But the AI proved more effective at unemotionally scanning reports and identifying patterns, at least compared to historical data: Typically, just 12.14 false reports are detected by police in a week in June in Malaga, and 3.33 in Murcia.

Jeremy Rifkin has written about the emerging 'Zero Marginal Cost Society' - which is a very important signal for the need to develop a different social-economic-political paradigm to displace the current efforts of artificial scarcity. This is an important signal confirming that emerging new energy economic geopolitics. One caveat - the article should be talking about energy not simple solar energy

Is Australia on the verge of having too much solar energy?

https://www.theguardian.com/commentisfree/2018/oct/30/is-australia-on-the-verge-of-having-too-much-solar-energy

Solar will represent a very substantial part of our power supply, but we're hardly at risk of generating too much. Here's why

Over the last few weeks there have been a number of reports in the media that Australia is on the verge of hitting too much solar energy.

This includes claims by some electricity generators that we are heading towards a "solar peak" – a point at which "there is no point in putting any more solar power into the system" because it will just be spilled and wasted.

Some are claiming it might even cause blackouts. Andrew Dillon, head of the Energy Networks Association, told the ABC's 7.30 Report solar was likely to cause, "voltage disturbances in the system which will lead to transformers and other equipment tripping off to protect themselves from being damaged and that will cause localised blackouts."

This is all occurring within a furious battle over a recommendation by the Australian Competition and Consumer Commission that by 2021 the federal government should remove the rebate provided to solar systems under the small-scale renewable energy scheme (SRES). So are we faced with a serious problem of there being too much solar which means we should scrap the rebate?

This is an interesting signal - a warning to watch as more devices become integrated with the Internet-of-Things.

> *Apple acknowledged in December that it had intentionally slowed iPhones with degraded batteries through software updates to avoid sudden shutdown problems, but denied it had ever done anything to intentionally shorten the life of a product.*
> *The company later apologised for its actions and reduced the cost of battery replacements. It also added battery health information to iOS and allowed users to turn off the slowing down of the iPhone's processor.*

Apple and Samsung fined for deliberately slowing down phones

https://www.theguardian.com/technology/2018/oct/24/apple-samsung-fined-for-slowing-down-phones

Italian investigation found software updates 'significantly reduced performance', hastening new purchases

Apple and Samsung are being fined €10m and €5m respectively in Italy for the "planned obsolescence" of their smartphones.

An investigation launched in January by the nation's competition authority found that certain smartphone software updates had a negative effect on the performance of the devices.

Believed to be the first ruling of its kind against smartphone manufacturers, the investigation followed accusations operating system updates for older phones slowed them down, thereby encouraging the purchase of new phones.
In a statement the antitrust watchdog said "Apple and Samsung implemented dishonest commercial practices" and that operating system updates "caused serious malfunctions and significantly reduced performance, thus accelerating phones' substitution".

It added the two firms had not provided clients adequate information about the impact of the new software "or any means of restoring the original functionality of the products".

Halloween Pumpkins

This year I only did five pumpkins for Halloween - picture (which don't do them justice by a great distance) are here
https://drive.google.com/open?id=1Zbi4OdeDiUeibS4cgygk5hfzQvxp8cYh