

## Technology sovereignty and the working class

The Johnson government was in complete chaos, but in the midst of resignations and leadership bids it still managed to give its blessing to the takeover by an American venture capital company of one of Britain's most important technology companies – Ultra Electronics.

You may not have heard of Ultra. Still less of the company that has just snapped it up, Cobham.

Ultra has been in business for over a century (it used to be based in the Harrow Road, in west London), and most notably provides sonar technology for Britain's Trident nuclear submarines.

It does a lot of other stuff too, including engineering (and I have to quote from its website here), “world-class, mission-critical, multi-domain intelligence, communications, command & control, cyber security and electronic warfare solutions.”

Cobham is a long-established British company, with a history in flight and especially refuelling technologies going back to 1934 but which has branched out. But it is foreign owned.

Three years ago Cobham was sold to an American venture capital company, Advent, which promptly sold it on to another American company, Eaton Corporation.

To say that the approval for Cobham to snaffle up Ultra was rushed through would be an understatement. Consultation on the takeover was launched on 23 June...yes, that's less than a month ago. It closed a mere six working days later, on Sunday 3 July.

The government insisted there would be no decision until the consultation had ended – and then only “after representations had been carefully considered”. That decision was announced on Wednesday 6 July, one day after Rishi Sunak and Sajid Javid resigned, one day before Boris Johnson said he was going – and just two working days after the end of the consultation.

When it comes to the national interest, that's what counts as careful consideration, apparently.

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Last year the union Unite called on the government to put a stop to what it called a “feeding frenzy” by US investors on British technology companies that put at risk not only jobs but also the national interest. Some hope. The government responded to the feeding frenzy by pouring blood into the waters.

Boris Johnson set out the ground rules while visiting British troops in Estonia in 2019: “I think it's very important that we should have an open and dynamic market economy,” he said.

Essentially he was telling the world's profiteers to come on in and take what they want. Or as a firm of strategic corporate advisers put it “the UK market will be open like the arrival gates at Heathrow”. To which I would add, and you can't get more open than that.

Unite – which by the way has yet to issue a statement on the Ultra takeover approval – took a different view, articulated at the time by Steve Turner, its assistant general secretary, talking about a feeding frenzy going on “with good UK companies on the menu” but with “longer-term stability and investment at risk”.

Incidentally, Unite has yet to put out a statement about the Ultra approval.

Is the expression “feeding frenzy” an exaggeration? Hardly. A week before the Ultra announcement, the government said it was “[minded](#)” to accept the takeover of Meggit by the US motion and control technology company Parker Hannifin. You may not know what Meggit does, but as its brakes are in 73,000 aircraft worldwide you’ve probably had your plane stopped by it. It also supplies ammunition systems for jet fighters and land-based artillery. It’s being sold for [£6.3 billion](#).

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Clearly, British technology is up for grabs. That matters for jobs and skills, but it also matters for technology sovereignty.

What is technology sovereignty? For an answer, I can’t do better than go to [a letter](#) written by technology entrepreneur Hermann Hauser to the House of Commons Foreign Affairs Committee in 2020. He called it “the defining issue of the decade”.

Asked to comment on the narrow question of whether the ARM sale had any implications for national security, he went further.

“Countries used to perceive sovereignty mainly in terms of defending its borders,” he said. “Given the importance of our IT infrastructure which is correctly compared with our water and electricity infrastructure, it [technology sovereignty] clearly relates to national security as well as the basic functioning of our society.”

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Now, technology sovereignty does not mean that every single technology we use needs to originate in Britain. That’s clearly impractical. But it does mean that we cannot be reliant on one or two foreign governments for the technologies we use.

Hauser put it simply in his letter, posing three questions: Do we have the technology here? If not, do we have several suppliers from different stable reliable countries? If still not, and the technology is only licensed by one or a handful of companies, do we have unfettered guaranteed long-term access – for at least five years?

Because if Britain can’t say yes to at least one of these questions, he said, then as a country we can be blackmailed and coerced by other countries – in much the same way Britain’s reliance on imported natural gas allows other governments to turn the screws on us, for example.

Unite raised precisely this point in 2020 when it said that the government had to invest the British space programme or lose skills and put our security at risk.

“A sovereign satellite system will not only defend the UK it will defend the economy post-pandemic,” [said Rhys McCarthy](#), the union’s national aerospace officer. That’s because satellites not only tell cars (and jet fighters and warships, for that matter) where they are, they also underpin all communications.

“Sovereign” in the satellite world means independent of the US, Russia and China, and also of the EU’s Galileo system (the EU has already locked Britain out of this). And a sovereign satellite system is precisely what the government won’t commit to.

You may have noticed that Inmarsat announced in June that it had developed a [highly accurate satellite system](#) (rivalling that sought by the EU’s Galileo) that can give a position to an accuracy of a few centimetres, rather than the two metres of GPS.

That shows what could be done, with sufficient government support, but it’s not yet a sovereign system since it currently works by augmenting the basic GPS signal, and GPS, the Global Positioning System, is owned and operated by the US Department of Defense.

Inmarsat is a British company. At least it is now. It’s in the process of being taken over – for £5.4 billion – by its [US rival](#), Viasat. That’s not technology sovereignty, it’s technology serfdom.

To be clear: no country is safe from blackmail by another state if it cannot secure its infrastructure. That goes particularly for communications, and also for energy (paying a fortune to China or France to build nuclear power stations is the opposite of technology sovereignty).

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Which leads me to ARM. A R M. The initials reflect its history in the Acorn Risc Machines, a computer spun out of the BBC computer project. It is probably the most important British company most people have never heard of.

You’ve probably heard of Intel. You might even think of Intel when someone talks about a chip company. Well, here’s a thing: in 2015, shortly before it was bought by the Japanese Softbank, more ARM-designed chips were sold than Intel had produced in its entire history – and Intel was founded in 1968.

ARM was founded by a group of people including Hermann Hauser, the same guy whose letter to the House of Commons Foreign Affairs Committee I quoted earlier.

Hauser used to be a major shareholder in ARM. Six years ago this company, whose chips are crucial to new developments in electronics and communications, was bought by a Japanese investment and banking company called SoftBank, for £24.3 billion.

Hauser [opposed the deal](#), calling it “a sad day for me and technology in Britain”.

The government was more than relaxed about handing over a cornerstone of technology sovereignty. Chancellor Philip Hammond (remember him?) said it showed that Britain had

“lost none of its allure to international investors”. A spokeswoman for Theresa May (remember her?) called it a “vote of confidence in Britain”.

So the deal went through, and sure enough, eventually, like most booming investment banks, SoftBank got into trouble – partly after it bungled \$1.5 billion into a dodgy financial tech company called Greensill Capital and lost it all when Greensill went into administration – and tried to sell ARM to the US video chip maker Nvidia.

It was this proposed sale that prompted Hauser to write to MPs. Separately, he described it as a “disaster”.

To understand why, consider this: technologies developed by ARM – in particular its [new V9 architecture](#) – will be at the centre of emerging artificial intelligence, quantum computing and 5G and smart car technologies.

Heard about the Internet of things? These technologies herald a world where big data centres, which use vast amounts of energy and place a huge demand on the Internet, are replaced by billions of tiny chips in local devices doing their own machine learning and communicating with other chips as needed.

And ARM is central to this and more. In the year to April 2022 29.2 billion chips based on ARM architecture were shipped – used in a quarter of all cars made, almost two-thirds of “Internet of Things” devices, and 95 per cent of all mobile phones produced.

One consequence of a sale to Nvidia, said Hauser, would be that “The decision on whether hundreds of UK companies that use ARM processors can export their products anywhere in the world will be made in the White House, not in Downing Street.”

That’s what happens when you lose technology sovereignty.

Finally, finally, six months after the Nvidia deal was announced, the government was forced to refer the inquiry to the Competition and Markets Authority. That was in April last year. It had been due to announce a decision [in May this year](#), but by then events had spiralled out of British control.

On 2 December 2021, the US government’s consumer agency, the Federal Trade Commission, [filed a lawsuit](#) to block the merger, saying that with the merger “the combined firm would have the means and incentive to stifle innovative next-generation technologies”.

In February, Nvidia abandoned the deal, and the Competition and Markets Authority could also abandon its own inquiry. For the time being, we have been saved from the kind of cobbled-together approval studded with so-called “guarantees” – which are all useless in the long run – which we saw with Ultra Electronics.

When the sale was announced in 2020 it was immediately opposed by the Unite union. Its national IT officer, Louisa Bull, [said](#), “The fact is that without a cohesive industrial strategy from the government, and one that supports and invests in innovation and manufacturing across the UK tech sector, we will be overtaken by other nations.”

She's dead right. And right on the money, too, when she added that an industrial strategy must include keeping ARM, which she called "the UK tech sector's crown jewel", and called for gearing Britain's public procurement budget is "towards supporting UK manufacturing and the jobs that come with it."

Yet everywhere you look, the government is abandoning Britain's sovereignty in one area of technology after another. And don't look to the Labour Party for salvation: it finds terms like British sovereignty plain embarrassing, as do some unions. (I should add that Unite has yet to put out a statement about the abandonment of the ARM sale. I do hope that's nothing to do with its new general secretary.)

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And so to Covid-19. "Healthcare threats are just as serious as national security and defence and should be treated with at least the same importance." Not my words. That's Kate Bingham [speaking in Oxford last November](#), the woman whose leadership of the Vaccine Task Force led to Britain being the first Western nation to start Covid vaccinations.

And she went further, saying that the most likely threat to Britain is in fact another pandemic – and that the government was neglecting it. Britain, she said, will need to continue to invest in the capability to design the next generation of vaccines and antivirals.

That, too, is technology sovereignty.

The government's actions in healthcare technologies have been particularly shameful.

Kate Bingham described the careful planning, right through the manufacturing chain, to ensure that Britain could make the vaccines it needed.

But even by November 2021 the government had rowed back on the approach that put planning for Britain's vaccine sovereignty, if I can use the expression, as its top priority.

It began a series of disastrous steps that asserted not the sovereignty of the nation but the sovereignty of private capital, of the free market.

First, against Bingham's clear advice, it drowned in a sea of red tape a proposal to bring to Britain virus-like peptide vaccines – a process that could produce effective vaccines at unparalleled speed.

Then it turned round and dumped Valneva, a vaccine company it had encouraged to invest in a plant in Livingstone, Scotland. That was not only an act of staggering bad faith on the part of the government, it also handed a gift to the SNP, which promptly offered to step in with devolved support.

And as if that weren't enough, the government then sold its stake in the much-trumped Vaccine Manufacturing and Innovation Centre at Harwell, Oxford. It's now owned by an American company, Catalent. You can read about all that in the latest edition of [Workers](#).

For 15 months or so of the pandemic the government had resorted to the planned economy, and, embarrassingly for it, the planned economy had worked. It was time to stop this flirtation with socialism and self-reliance.

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But there's more to technology sovereignty than safeguarding defence or power or even health. It's also central to the future of the working class.

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As a nation, there are really only two ways for Britain to make a living.

We can be a manufacturing nation, a country that makes things that people need. And manufacturing still accounts [for about 10 per cent of economic output](#) – more, it should be said, than [financial services](#). (I'm using House of Commons Library figures here.)

Or we can rely on banking and tourism, and just buy in what we need. In that scenario, there's no need for an industrial working class, no need to create value – just use the power of finance capital to cream off profits from value created elsewhere. Britain would then become just a parasite.

Except, of course, we can't rely on being able to buy in what we need. Witness the disruptions to supply chains (translation: inability to import) in the Covid-19 pandemic (and which continue now).

But even if we could, it's a shameful way for a nation like Britain to live. And it fosters the reactionary thinking that comes from relying on other people.

Look at London. It used to be a centre of manufacture. Now the big factories and the huge industrial estates such as Park Royal in west London have gone. [Only 2.2 per cent](#) of London's workforce is engaged in manufacturing, about a third of the level just 25 years ago – and a smaller proportion than work for estate agents (2.4 per cent). And less than a third of the numbers working in financial services.

Is it any surprise that in a capital dominated (politically and architecturally) by the City, the banking and finance companies, we saw the highest votes to Remain in the EU? And, for that matter, the highest vote in mainland Britain in the referendum for the ridiculous [alternative vote system](#) in 2011. That was Hackney, by the way. Only ten British boroughs voted yes for that system, and six of them were in London.

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If I've been talking about companies you probably have never heard of it's because by their nature these top technology firms don't sell consumer goods. They sell to companies and governments.

Perhaps that's why there's been less fuss generally about their sales than, for example, Walmart taking over ASDA or Kraft's takeover of Cadbury's.

But as Karl Marx noted in the 19<sup>th</sup> century, the production of means of production, as he called it, is central to the functioning of the capitalist system. We used to think of it in terms of the production of iron and steel, and machine tools. But in the 21<sup>st</sup> century it is equally – if not more – about technology.

The companies I spoke about that are being blithely handed over to US interests are at the core of a healthy British economy.

But it's not all doom and gloom. These firms, their very existence, reflect the deep and persistent skill and knowledge that resides the British working class, aided by a university system that successive governments have not managed to completely pervert.

They are hard evidence that Britain is a country with huge potential an industrial future.

We do not have to be content with assembling products elsewhere, welcoming tourists, and bowing down before the City of London.

And with them a truly independent Britain would be in a much better position to withstand hostile boycotts and embargoes.

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Earlier this year we organised an online discussion meeting around the theme of “a working class needs modern industry”. The second part of the title was “Can a working class without real employment create progress?”. I think we're discussing much the same thing here.

The speaker who introduced the topic works for a big tech company in the Midlands. But he noted that modern hi tech industry is typically composed of many small companies with highly focused and skilled workers feeding medium sized factories supplying to large multinationals.

Instead of the huge factories of the past we have interconnections, reliance on one another – a supply chain with service industry supporting around it with the foundations of energy and water supply enabling everything.

The essence of what he was talking about is that making things means the real creation of value, and that takes skills and relationships. This, he said, is what you could call real employment, while noting than many other types of employment are need this to facilitate it – in water, energy, education, health, agriculture and many other areas of course.

The potential for collective organisation as a result of real employment is the key to creating progress, he said. Think about it.

Without technology sovereignty we are simply not going to keep our high-tech industry

With technology sovereignty we can have that crucial employment, and with it the maintenance of a highly skilled, interconnected, creative and productive working class – the kind of working class with the self-confidence and belief in the future that alone can take on capitalism and build socialism.