Chaguan | Distrust and verify

Huawei is trying to solve a hard problem: how to sell sensitive tech in the absence of trust



N BALANCE, it seems implausible that a committee—let alone a committee run by grey-suited Communist Party commissars-could design anything as odd as the new research campus of Huawei, the Chinese telecommunications giant. Comprising 12 replica European "towns" spread across lush subtropical hills near the southern city of Dongguan, the campus houses 18,000 scientists, designers and other boffins in turreted German castles, Spanish mansions and Italian palazzi, connected by an antique-style red train. Staff canteens include Illy espresso bars and French bistros. A herd of bronze rhinoceroses grazes by the river that divides faux Verona from ersatz Heidelberg. It is not hard to see why the campus is a stop on tours that Huawei has started offering to foreign journalists in recent months. Impressive, mad and a bit tacky, the research campus is a suggestive bit of evidence. Perhaps Huawei may just be what it claims to be, at least when it comes to decisions about architecture: a privately held company guided by the ambitions and quirks of its billionaire founder, Ren Zhengfei, a former military engineer and Europhile history buff.

After 30 years spent largely shunning publicity, Huawei has turned into one of the world's chattier high-technology firms, inviting journalists into once-secret research laboratories and smartphone assembly lines. The reasons for all this choreographed openness are straightforward. Huawei, whose worldwide revenues exceeded 720bn yuan (\$102bn) in 2018, stands accused by Trump administration officials and members of Congress of being variously owned, subsidised or at least controlled by the Chinese state, with notably close links to the army and intelligence services. American officials accuse Huawei of stealing technology from American and other foreign rivals. They scoff at claims that the firm is owned by its own employees in a benign sort of shareholding co-operative, and that its Communist Party committee is tasked with nothing more sinister than staff training and welfare. The secretary of state, Mike Pompeo, has spent months touring the globe, urging allies not to allow Huawei to help build their 5G mobile telecommunications networks, with mixed success. In May Huawei's reputation landed it on the American Commerce Department's "entity list" of firms that may threaten national security.

Step back a bit, and the company's woes are an early sighting of

a conundrum with no easy solution. Technological advances are expanding the list of products and services that require a lifelong commitment of trust between clients and suppliers, from chips that keep aeroplanes aloft, to devices that control electrical power grids. At the same time, globalisation has built supply chains linking countries that do not much like each other. The problem is acute when those chains connect America, a country used to setting its own technical and security standards, to China, an uneasy mix of trade partner, commercial competitor and ideological rival.

Broadly speaking, when Chaguan visited the firm's headquarters this week, senior Huawei officers advanced two different solutions to the problem of high-tech globalisation in a low-trust age. Only one of those solutions is very persuasive.

That persuasive idea is to treat distrust in global supply chains as a technical challenge, rather than a political one. In this model, distrust can never be eliminated but may be mitigated. A Huawei executive with experience in African and European markets, where the firm's products are seen as robust and cheap, draws an analogy with the "ABC" approach to cyber-security, meaning: "Assume nothing. Believe nobody. Check everything." Huawei highups praise Britain and other European countries for applying a risk-management approach to the task of building such infrastructure as wireless networks, involving common standards for security and transparency with which all companies are invited to comply, and lots of third-party verification. The organising principle is that no product should be either trusted or distrusted unconditionally, simply on the basis of its country of origin.

Huawei's second, unpersuasive solution involves trying to convince outsiders that, given the right written and verbal assurances from the state, firms from China can, as it happens, be trusted not to help Chinese spies steal secrets. Thus Huawei bosses note assurances from the Chinese foreign ministry that no law exists that could make Chinese firms install backdoors in digital devices, for spies to use. Asked about national-security laws requiring firms to assist Chinese intelligence services, they retort that such laws do not apply outside China's borders. A company executive grumbles that Western sceptics seem to doubt that China is run according to the rule of law. At times, a cultural gap in perceptions is detectable. Huawei veterans recall their firm's early years, when state-owned enterprises bullied private businesses, and on occasion lobbied government officials to deny Huawei the right to seek overseas business. China is so much more open now, such veterans say, lamenting that outsiders cannot see this, or prefer to focus on remaining differences with the West.

What Huawei should say, but cannot

Alas, it is not credible to claim that promises or laws bind the Communist Party and its security apparatus. The party explicitly claims "absolute leadership" over courts, calling judicial independence a Western error. Then there is the exceptional size of China's visible machinery of repression and surveillance. Given that security services in every country tend to be like icebergs, with still-larger hidden parts, it is reasonable to be exceptionally wary of China's.

A more convincing approach would see Huawei admit that China is different and concede that some party commands cannot be defied. That agreed, Huawei could then focus on making high-tech products and systems designed for use in a world of low or non-existent trust. Huawei bosses cannot make that argument, because party leaders would be incensed. Those turreted castles are impressive. But outside those manicured grounds is China.

Chaguan | Facing a contradiction

China needs global help to grow, so its rulers may have to rethink their obsession with control



ON PAST FORM, boasts of China's openness to the world will come thick and fast when President Xi Jinping addresses the Second China International Import Expo in Shanghai on November 5th. Speaking at the inaugural edition of that trade fair last year, Mr Xi cast China as a champion of free trade and mutually beneficial co-operation. Openness brings progress while seclusion leads to backwardness, he declared. Slipping into fluent Globalese, the blandly uplifting argot used at gatherings of world leaders, billionaires and CEOS, Mr Xi beamed that it was natural to share the fruits of innovation "in our interconnected global village".

China's leader has every reason to offer warm words at the upcoming event. Even as his country grows richer and more powerful, it is dependent on the world in ways that it cannot control. China has ambitions to become a standard-setting technology superpower. For all its talk of self-reliance, it needs foreign knowhow to get there. In the short term, China is anxious for a truce in its trade war with America. It wants to show other countries that it is a team player, unlike that rule-breaking bully in Washington. Further ahead its economy will need growing room. China is running out of useful places to build shiny airports and high-speed railway lines at home, and wants its own global brands to vie with Boeing or Apple. That will require new markets overseas.

Yet before he steps to his lectern in Shanghai, Mr Xi must preside over a different meeting, a four-day session of the Central Committee of the Communist Party ending on October 31st. Such conclaves of nearly 400 top officials are typically held every year or so at a high-security hotel run by the People's Liberation Army in western Beijing. The working language is not Globalese. Communiqués that emerge from these secret meetings are written in unlovely party jargon. State media announced that the plenum would consider "important issues concerning how to uphold and improve the socialist system with Chinese characteristics and make progress in modernising the country's governance system and capacity". That sounds dull, but the meaning is serious. Even tighter controls are coming. Clues were dropped this month by an influential party journal, Qiushi, in extracts it published of a previously secret speech in which Mr Xi pondered lessons from history. "Whenever great powers have collapsed or decayed, a common

cause has been the loss of central authority," he concluded.

Propaganda organs pretend there is no contradiction between these two personas—a smiling President Xi talking to foreigners about global villages, and Xi the general secretary grimly demanding party discipline and vigilance in the face of hostile external forces and internal threats. On the plenum's opening day, Xinhua, a state news agency, asserted that the world had never seen a governing system with such advantages, combining an "economic development miracle" with a "miracle of political stability".

At home, it is fair to concede, many Chinese accept the social contract implicit in that Xinhua commentary, that personal freedoms should be traded for prosperity and order. To outsiders, however, China's two self-declared miracles are increasingly in tension. For a long time, many foreign admirers of China treated party rule as a bit of a joke. This place has only one ideology, they chuckled: making money. Unfortunately for such people, even as China loosens some rules on market access or foreign investment, the party not only refuses to fade away but is becoming ever more visible and intrusive. Very possibly the guiding ideology is a desire for absolute power, rather than Marxist idealism. In a secretive autocracy, it is impossible to know Mr Xi's real beliefs. Similarly, outsiders can only guess at the meaning of fawning adulation heaped on him before the plenum, such as by a regional party committee which said officials should, deep in their hearts, "strengthen their trust and love in General Secretary Xi Jinping as the core of the party, the people's leader and commander-in-chief of the army". This may reflect Mr Xi's mightiness, or his weakness and insecurity. But to judge by his actions, Mr Xi has asserted the party's total authority over China's system of state capitalism, from law courts to private firms and lumbering state enterprises. And one powergrab often prompts another. When modestly paid bureaucrats have sway over billion-dollar assets at the same time that feistier newspapers are silenced and independent lawyers locked up, it is no surprise that the party has to launch anti-corruption campaigns so fierce that some officials fear taking decisions at all.

Running a 21st-century economy with ideas from the 1950s

The very complexity of modern Chinese society, with its growing mobility and personal freedoms for those who stay within partydefined boundaries, seems to convince China's leaders that they must tighten and retighten their grip. Increasingly that involves high-technology systems of control, from algorithms that censor social media, to facial-recognition systems that stop errant citizens from catching high-speed trains. To officials at home, technoauthoritarianism is a saviour. With big data to crunch and nowhere for miscreants to hide, perhaps top-down rule can at last be made to work. Abroad, the trade-offs look different. Not long ago, Silicon Valley investors might have swooned over a mobile-payment system built around Chinese facial-recognition technology, for instance. Now, shrewd fund managers—and young potential consumers in the West—might ask whether the same cameras are used to repress Muslims in the western region of Xinjiang.

The authoritarian turn that China is taking, in the name of saving one-party rule from itself, is hard to square with a quest for globally driven growth. Already foreign bosses privately admit to wondering, as never before, what it means when a Chinese business partner is a party member. Mr Xi seems to want a China that is open to foreign investors and inventions but closed to dangerously foreign (meaning liberal, Western) ideas. Communists are fascinated by contradictions. This one may prove hard to resolve.

Chaguan | The "black hands" conspiracy

Why Communist officials imagine that America is behind unrest in Hong Kong



THERE IS SOMETHING depressing about the Chinese government's claim that foreign "black hands" are behind the protests in Hong Kong. For the claim is both nonsensical and, in mainland China, widely believed. It is a fresh lesson in the power of disinformation to see decent, patriotic Chinese sharing tales of the CIA paying gullible Hong Kongers to join marches or smuggling in foreign rioters on late-night flights (a rumour sourced to a driver at Hong Kong airport, in the version that Chaguan heard).

There is something positively alarming about signs that, at some level, Communist Party bosses believe the black-hands story. Neither evidence nor common sense supports the tale's central charge that outsiders tricked or provoked as many as 2m Hong Kongers into joining marches. The accusations began while the protesters were still overwhelmingly peaceful, focused on a planned law that would send suspects from their city's Westernstyle justice system into Communist-controlled mainland courts. To propagandists in Beijing, no free will has been marshalling those students and pensioners, doctors in hospital scrubs and black-suited lawyers, off-duty civil servants and parents with pushchairs. Instead the protesters are at best dupes, and at worst foreigner-loving race traitors, ashamed of being Chinese.

The drumbeat has intensified as the demonstrations have grown more violent. Police and at least one mainland reporter have endured beatings by young radicals gripped by nihilistic rage. To objective analysts, the causes include protesters' paranoia after days of police infiltration and brutality, and the lack of any further concessions by the government as rewards for pragmatism other than the shelving of the extradition bill. But grim-faced government spokesmen in Hong Kong and Beijing have another explanation. They accuse foreign forces, meaning America, of fomenting a Ukraine-style "colour revolution" to keep a rising China down.

In late July Tung Chee-hwa, a shipping magnate and Hong Kong's first chief executive under Chinese rule, called the "well-organised" protests evidence of "masterminds behind the storm", with "various signs" pointing to America and Taiwan. Communist-controlled newspapers have made much of the handful of protesters who insist on carrying American and colonial-era Hong Kong flags on marches (which is arguably more foolish than sinister). They have shared images of a "foreign commander" directing protests by smartphone, who turned out to be a *New York Times* journalist texting colleagues. They have also published photographs of a meeting between pro-democracy leaders and Julie Eadeh, a diplomat at America's consulate whose job is to talk to local politicians. One such newspaper, *Takungpao*, called Ms Eadeh "a person of mysterious status and an expert in low-key acts of subversion". Given that Ms Eadeh met Hong Kong's most famous democracy activists in a hotel lobby in broad daylight, either the tradecraft of American super-spies is slipping, or the party's media define the term "mysterious" pretty loosely.

Those accusing America of funding revolution in Hong Kong must also grapple with some logical objections. For one thing, the protests do not need much funding. Ordinary Hong Kongers have donated spare T-shirts to replace clothes soaked in pepper spray, and money to buy hard hats, face masks and McDonald's vouchers for hungry youngsters. For another, stability and the status quo in Hong Kong serve American interests profitably and well. More American businesses operate in Hong Kong today than in 1997, when British colonial rule ended. Some of America's largest corporations rely on the city's open markets, transparent legal system, uncensored internet, modern transport links and businessfriendly governance as they access China's vast markets. It is true that congressional leaders have urged rulers in Beijing to avoid sending in troops to crush protests, and that senior American officials have recently hosted pro-democracy Hong Kongers. But America's long-standing policy has been to lobby China to preserve the territory's freedoms, not to seek a democratic revolution. As for President Donald Trump, he has dubbed the protests "riots"-the term used by Chinese officials-and said he has "ZERO doubt" that China's leader, Xi Jinping, can "humanely solve the Hong Kong problem."

The world seen from Beijing: greedy, hypocritical and cruel

There are reasons why propagandists peddle the black-hands myth. For one thing, it works. After initially censoring news from Hong Kong, official outlets are full of videos showing protesters attacking police or hurling petrol bombs, over captions calling them splittists who want formal independence from China (in reality, a fringe position in Hong Kong). Many ordinary folk have heard little about the extradition law that sparked the protests. Chinese opinion is hardly monolithic, but it is not hard to find netizens impatient to see snooty, ungrateful Hong Kongers crushed.

Most worrying, China's rulers are betraying a bleak and cynical worldview in which might is right and the big always dominate the small. To them, it is not conceivable that 7.3m Hong Kongers could believe that their individual, universal rights trump the will of 1.4bn compatriots. If tiny Hong Kong is defying its mighty Motherland, another great power must be egging it on.

When the British government defends Hong Kong's freedoms, Chinese officials are sure that Britain is still sulking about its loss of empire—and will pipe down once Brexit renders it friendless. Other Western envoys in Beijing have been lectured that their support for Hong Kong must be part of a concerted push by American hawks to hurt China. Suggest that Western countries might occasionally be guided by principle and Chinese officials scoff.

Their cynicism is self-serving, of course, as it handily shifts blame for the mistrust the party inspires in Hong Kong. But it also clouds China's vision of the world at a perilous moment. Some propaganda is laughable and tragic at the same time.