

## A long telegram for the 21st century

The People's Republic of China is at war with the United States. The fact that this war is primarily economic in nature, for the moment, rather than a shooting war, should not obscure the key fact that a full-spectrum war is being fought. The public policy of the PRC is aimed at the goal of displacing the United States as the world's preeminent power. No rules or international norms are respected in service of this activity, except to the extent that they are perceived to benefit the PRC: Signed treaties are violated whenever convenient, international bodies are subverted, debt traps are constructed, bribes are dispensed, and military force is used when the PRC leadership feels that these are right tools for the job. The fact that war has not been declared is a result of a calculation by the PRC leadership that their agenda benefits more from stealth and from gradualism than from an open declaration and kinetic action. The PRC regime has no principled hesitation about using violence to meet their policy goals, both against their own people and against adversaries; direct military attacks against US interests have simply not (yet) been the optimal tactic to achieve the PRC's policy goals.

The leadership of the PRC is seeking to architect a world order in which the PRC is the essential power, and where no other state has the technological, financial, military or commercial resources to challenge their pre-eminence, either within their immediate geographic periphery, or globally. Having recognized the failings of Soviet Communism, the PRC has created a new ideology for export to their client states around the world, and one which competes with liberal democracy in the marketplace of ideas. Their ideology of state capitalism, without any development of individual rights or liberties, is every bit as incompatible with liberal democracy as was Soviet Communism - and is extremely appealing to ruling elites in states without a strong liberal tradition.

The continued economic and political success of the PRC represents an existential threat to western liberal democracy on par with Nazi Germany and Communist Russia. Democracy and liberty are the historical exception rather than the rule. When despotic regimes are rich and large, they can defeat rich, liberal democracies - consider Athens and Persia as only one example among many. The Persians failed to defeat the Greeks in the field; instead, they used their immense wealth to subsidize the Spartan naval campaigns against Athens, resulting in Athenian defeat.

The PRC is pioneering a new form of authoritarian regime: A digital despotism. Here in the west, we tend to view telecommunications, the internet, and the tools for digital information access, processing and retrieval, through the lens of our own ideals - freedom of information, open access, transparency, and the opportunities for efficient commerce. The PRC has no liberal tradition, and is not moving in the direction of liberalization.

The PRC regime has co-opted the modern tools of information technology to strengthen their hold on power in unprecedented ways. Entire departments of the government function to carefully control and shape the information that their citizens can and cannot see; access to the open internet that we take for granted in the west simply does not exist. These state organs are extremely effective, and are engaged in information warfare on an unprecedented scale against their own people.

Further, the tools of digital commerce have been shaped to create a pervasive digital panopticon, where the government can inexpensively and seamlessly spy on the activities of citizens at an extremely granular level. The PRC is well on its way to being a fully cashless society, where cellphones and computers are the only practical way to conduct nearly any everyday transaction. With the widespread deployment of facial recognition, and a cellphone in every pocket designed, built, and programmed by a national champion company, operating over a network controlled by yet another national champion company, it becomes nearly impossible to hide even the smallest details of daily life. The sensors - cameras, microphones, accelerometers, etc - on cellphones can be easily activated remotely, and the GPS coordinates provide realtime location data which can be correlated to facial recognition, payment records, et cetera. The PRC has sponsored extensive work to become a world leader in the development of tools like facial recognition - through both internal development and through outright theft of intellectual property.

With access to this type of extremely pervasive, extremely granular information, the PRC is constructing tools (ie the 'social capital' rankings) which allow the government to automatically identify groups and individuals who might constitute even relatively minor or improbable security risks. Having done so, the tools of repression become remarkably efficient and inexpensive: The government can automatically and algorithmically confiscate their assets, curtail their freedom of movement, prevent their associating with one another, prevent them from communicating, censure their speech based on content, locate and detain them and otherwise take away their ability to act against the wishes of

the regime. The PRC has implemented this set of tools most aggressively against the Uighur minority, who are subject to summary imprisonment without trial based on their 'social credit' scores, but these tools are being expanded aggressively both in Tibet and across the PRC as a mechanism of control over their entire population.

The truly insidious aspects of this type of oppression are 1) That it is nearly invisible to visitors unless they happen to engage in anti-regime activities (such as journalism), and 2) That it creates an overwhelming incentive to avoid even the perception of acting against the interests of the government. Under the Soviet Union's communist regime, it was necessary to employ secret police and to make use of informers in order to gather information on potential enemies of the regime. These measures were visible to both visitors (who were routinely followed and monitored) and to Soviet subjects. While these measures - particularly the use of informers - were quite extensive, they still required considerable human effort to maintain, and were thus very expensive. No longer. Now the minute-by-minute behaviors and communications of every subject can be analyzed in order to identify and neutralize threats. With these capabilities in hand, opposing the regime from within becomes nearly impossible, without the aid of an outside entity willing to provide both sanctuary and support. These tools - even in the relatively primitive form in which they have been implemented to date - make it nearly impossible, as multiple journalists have observed, to have even slight interactions with dissidents and members of oppressed ethnic groups within the PRC.

As a result of the digitization of almost all transactions and through services like WeChat and AliPay, and the wide-scale deployment of face tracking and social credit, the government is in the position of having real-time information on the behaviors and locations of every subject, consolidated into a central database. For opponents of the regime, or people deemed to be 'politically risky', the government can seamlessly deprive them of their privileges and freedoms. In a state where everyone is continuously tracked based on vision systems, transactions, cellphones, etc., and where almost all day-to-day transactions occur digitally, through companies which are government-controlled, freedom of movement, property rights, and freedom of speech can be (and are) instantly revoked for either individuals or groups.

The PRC government is exporting these tools to their allies and clients. The conflict between the digital despotisms (and their client states) and the liberal republics of the world will be the defining one for our generation.

Ever since Kissinger and Nixon's brilliant move to break the PRC away from the Soviet Union, the United States and the liberal democracies of the West have treated the PRC as an ally. The brilliance of this policy gambit was, in fact, because the PRC and the United States were not natural allies: We shared very little in the way of common goals or values, we did not share any political traditions or a language. What we shared was a common enemy in the Soviet Union.

Over the past 30 years in particular, initially due to the continuation of out-of-date Cold War policies and later as a result of the cowardice, ignorance and incompetence of our political leadership, we have enabled the PRC to grow rich. The PRC has been allowed to appropriate intellectual property, to force industries on-shore through means that are gross violations of our treaties, to build a world-class military based largely on technology acquired illicitly from the West, to modernize their economy, and to intimidate their neighbors, many of whom are our allies, with little or no tangible punishment. This set of behaviors has been extensively documented and is no longer subject to serious debate. Our hope has been, broadly speaking, that as the citizens of the PRC became rich, they would demand more rights, and that the PRC would, as it became rich, come to resemble the West. This hope was not particularly based on any facts, and has not been realized in any meaningful way.

With the Kissinger-Nixon pact, the PRC became, in effect, an economic client state of the United States. We hoped that the PRC would mature into an ally, sharing our values and prepared to negotiate over divergent geo-strategic interests. Where we've engaged in conquest - Japan and Germany in particular - this kind of maturation into an ally has been surprisingly successful. But, sadly, the PRC has become our enemy. The current government of the PRC is not and has never been an ally of the United States. Our alliance with China during World War II was not with the current government - it was with the regime that now rules Taiwan, which remains our ally.

It has become abundantly clear, through the actions of the PRC as a prime example, that free trade makes sense only among allies who share values. When liberal democracies invite tyrannies and communist regimes into free trade pacts, these free trade pacts -can- serve as a liberalizing force, particularly if the economies of the liberal democracies are dramatically larger than their unfree trade counterparts. In such a circumstance, the damage that can be done by the unfree states to the economies of the participating democracies are relatively trivial.

However, with regimes whose populations and economies are on the same scale as those of the free world, this is simply not the case - these regimes use economic incentives to their advantage, without any reciprocal benefits being allowed to flow to the capitalist and free trade partners. With the PRC, free trade became, and remains, a one-way door for innovation, manufacturing infrastructure, technology, workforce skills, et cetera. Free trade with China is not and has not been a 'win-win' in at least the past three decades.

The PRC has constructed an 'information diode', where new technology flows in, but never out. And they have constructed a 'wealth diode', where money can flow in for investment, but flows out only when the investments are part of a national strategy to acquire key strategic and technological assets. We can fully expect that any money that has been invested by westerners and western companies in the PRC will be confiscated, in much the same way that the same kinds of investments were confiscated at the end of the NEP in Russia.

The world that the leadership of the PRC seeks is one in which all threats to the stability and security of the PRC are neutralized or trivial. We cannot blame them for this; they are pursuing what they believe to be their national interests - or at least the interests of their ruling elite. The economic might of the United States as an adversary of the PRC will never stop being a threat to the PRC. Our nuclear weapons will never stop being a threat, short of the failure of the United States as a cohesive state. And our liberal republic, where rights are respected and where citizens are able, within broad limits, to exercise freedoms without the threat of dire government interference, represents a competing world-view, a competitor for talent, and an existential threat to the rulers of the PRC.

The leadership of the PRC are despots. They are not elected. They are not subject to any constitutional or institutional limitations on their power of caveat. Every PRC subject - and even expatriates of the PRC who are now US citizens - lives in fear of attracting government attention, and having their liberties revoked without warning. So the example that the United States provides to our citizens, of the possibility of a nation being rich without this kind of oppressive political system - will never stop being a threat to the PRC regime. People, on the whole, prefer to live in places where they can live in security and exercise what we in the US regard as basic freedoms.

So the best and brightest people in the PRC will continue to want to come to the West, for as long as we are free and they are not. Many of our best and brightest citizens came from the PRC.

Our quarrel is not with the people of China, who, by and large, want the same things that we do; it is with the regime that oppresses them. And the PRC is becoming less free and more oppressive with every passing year.

The PRC has approximately 4 times the population of the United States. That means that, if the PRC attains a similar standard of living and GDP per capita, the economy of the PRC will be 4 times the size of the economy the United States. Such a situation will relegate the liberal republics of the world to a status as secondary powers at best. The leadership of the PRC has shown no hesitation in meddling - often very overtly - in the politics of other states. A PRC with that level of economic might would not hesitate to meddle in the economies and politics of the United States, Europe and Japan, in muscular and overt ways. They certainly did not hesitate to invade Tibet in 1950, and force a treaty (the 17-point agreement) whose terms the PRC has never honored in substance or in spirit. And they continue to meddle in the politics and territorial integrity of their neighbors in Nepal, Japan, India, and in the South China sea. It is hard to imagine any liberal democracy surviving long in a world where the PRC becomes the essential power. To prevent this outcome, it is not enough for us to work to grow our own economy; we must work, just as we did during the Cold War, to actively prevent the further growth of the PRC economy and destabilize their ruling regime.

Broadly speaking, the International order which the United States has supported is incompatible with the one which the PRC is seeking to construct. We have a record of seeking, to the extent possible, to construct liberal republics in the places we conquer, and have done so - with several remarkable successes, and a few failures - since the end of World War 2. We have demonstrated again and again that we want allies, rather than clients. Sometimes we've done this in a ham-fisted way, without an adequate understanding of local conditions and culture. But our core impulse is toward building up allies, whenever possible. We want nations with whom we share liberal values, and who are prepared to resolve conflicts through treaty, arbitration, and through international bodies like the UN, NATO, and the WTO.

The leadership of the PRC clearly does not share these values or these goals. The PRC seeks client states, where they can corrupt or co-opt the local leadership to do their

bidding. They seek to create political classes which are dependent on PRC aid - technical, political and economic - to retain their hold on power. To the extent that other states are not prepared to act as clients, the PRC seeks to destabilize their governments, and is prepared to use force to seize resources. Infrastructure loans are set up through extensive bribery as debt traps, and the money generally flows back to the PRC, in the form of PRC contractors being awarded the relevant contracts.

The PRC has demonstrated a willingness to engage in international treaty bodies only to the extent that membership in these bodies confers asymmetric benefits to them; there is a consistent pattern of accepting the benefits without enduring any of the costs, and then applying pressure, rhetoric, and tactical lies to avoid the downsides of membership. In effect, because the other members have allowed the PRC membership in groups like the WTO without comprehensive punishment when they violate the terms, the PRC leadership has concluded that taking the pain of compliance with these terms is, in effect, optional.

China does not have a liberal tradition. There has never been a republican government in China, other than the Nationalists, who lost their civil war and were forced to flee to Taiwan. This is a profound fact, which seems to be widely under-appreciated in the West. Things we take for granted about the relationship of citizens with their government are simply not true there. It's easy to be confused about this, perhaps especially for western elites who have spent significant time in China. After all, on a day-to-day basis, it's easy not to notice that you don't have any rights; you stay in the Marriott or the Hilton, you can buy and sell personal items - and even most commercial goods - without any noticeable restrictions. The streets in are lined with KFC, McDonalds, and Starbucks. Accessing the internet may be a little inconvenient, because of the Great Firewall, but even that is attenuated by special connections for the hotels that serve westerners. As long as you're not involved in politics, and don't try to do something commercially that harms a locally owned company, you're very unlikely to have a negative interaction with the PRC government. Visiting Beijing as a tourist or normal business person, you might as well be visiting Washington DC.

But if the PRC government decides that you have something that they want, or you make a deal with the wrong person, you're in serious trouble, as many foreign business people have discovered, much to their dismay. Because, in the PRC, you have no rights. Among the community of businesspeople who work in China, a commonly accepted trope is the importance of making connections into the government, so that when a counterparty

threatens you with death, confiscation or summary imprisonment as part of a negotiation, you can bring in someone on your side. Sometimes this works; often it does not. With the ramp-up of tensions currently ongoing over Huawei's flagrant treaty violations, westerners in China have much to fear from the government. Unlike the Soviets, who engaged in systematic surveillance of nearly everyone through the use of informers, the PRC regime is using digital tools to very precisely target individuals - both foreign and domestic - who they surveil comprehensively and repress in a much more targeted manner. This makes it easy for westerners to lose track of the fact that repression is even occurring; the people with whom they typically interact are, necessarily, of the class that the PRC government has identified as trustworthy.

This is not unique to foreigners. Citizens in the PRC have no meaningful rights. There is no court to which they can appeal -individually or in a group - and expect to stop the government from abusing them - physically, financially, or otherwise. Land in the PRC is all owned by the state, and its use is granted to individuals at the caveat of government officials; expropriation is common. The very idea of individual rights, which can be enforced against the government and which limit the power of the government, is a foreign import which is viewed as a de-stabilizing western innovation by the Communist Party. The Chinese tradition is one of empire, hierarchy, cycles of consolidation and disintegration, and bureaucracy. Corporations which exist with private ownership and with an agenda separate from that of the state do not exist - and cannot exist - in an environment where individual citizens have no enforceable rights. Liberal values and traditions like private property are fundamentally foreign to the PRC.

To put a particularly sharp point on this: In the PRC, it is well-documented that political prisoners, who have been sent to prison based solely on the ideas that they have expressed, and never given access to anything that even vaguely resembles a fair trial, are literally cut up and their bodies are used - needless to say without their consent - as a source for organ donations. In fact, it is profoundly grim and perverse that 'art' exhibitions composed of the skinned and preserved bodies of PRC political prisoners (Falung Gong members, if accusations in the press are correct) have been sent on tour to the West. The PRC regime imprisons hundreds of thousands - perhaps as many as millions; nobody knows for sure - of ethnic Uyghurs, without even the pretense of a hearing or trial, and has enslaved them to work in prison factories.

The PRC regime has constructed the gulags of our time, targeting in particular the Uyghurs, but also Christians, regime opponents, and members of multiple other ethnic,



political and religious groups. These camps are notorious for all manner of abuses, which have been extensively documented. In Tibet, the PRC regime is believed to have killed over 1,000,000 of their own subjects. Though, to be sure, the assertion that Tibet is a historically legitimate part of the PRC on the basis of anything other than a successful military invasion is an extraordinarily hollow one. Furthermore, the PRC regime flagrantly, routinely and comprehensively violates the terms of the 17-point agreement which they imposed on Tibet after the invasion. In reality, Tibet remains occupied territory and has been since 1950. Incidents of mass extrajudicial execution, forced infanticide, forced abortion, forced sterilization, torture, and other abuses too numerous to mention have been repeatedly reported. The government has even constructed an alternative, officially approved and government-controlled version of the local Buddhist religion, and ruthlessly suppresses the original religious hierarchy and practices.

Many westerners thought that with the incorporation of Hong Kong into the PRC, a compromise would have to be struck, with the citizens of the mainland of the PRC beginning to enjoy more rights. Instead, the PRC has systematically and gradually rolled back the rights of HK citizens, and can be expected to do so until HK is substantially under the same system as the mainland. The same process occurred in Tibet, more or less. The agreement with the British about the preservation of HK rights was, in all likelihood, something that the PRC leadership regarded as a useful fig leaf to protect British pride, while allowing them to reincorporate Hong Kong into the PRC, over a period of a couple of decades. This is a great example of the PRC attitude about treaty obligations: If there's no punishment for violation, then why enforce the costly parts of the treaty? Take the benefits, mouth the relevant pieties, and endure none of the downsides. This is a formula that has worked well to date.

To reiterate: The PRC is engaged in non-conventional, full-spectrum warfare against the United States and our allies. Again, the instances of this have been extensively catalogued elsewhere. But to cite a few particularly egregious examples:

- The theft and subsequent release of the US security clearance database: This undermines competent people's willingness to work for the US government, creates numerous opportunities for blackmail and leverage of existing people carrying clearances, and makes our government look profoundly incompetent.
- The commercial and treaty related asymmetric warfare outlined in the recent white house report
- Consistent use of catspaw/client regimes (i.e., North Korea) for political leverage, including extensively supporting the North Korean nuclear programs

- Sponsorship of political lobbying and spying on universities and Chinese students studying abroad through the Confucius institutes, CCP and United Front-sponsored organizations.
- Challenging a key principle of international order - freedom of the seas - in the South China Sea, and consistently lying about their intentions with regard to the construction of island bases
- Co-opting US elites by creating financial entanglements, including 'false IPO's' of PRC companies which create financial interdependence without actually giving up any control of said companies to the public markets
- The export of extraordinarily strong opiates in large quantities, thereby imposing huge costs on US social services and contributing to a range of social and economic problems. To be fair, the PRC leadership probably regards this as turnabout for western interference in Chinese politics and economics, including an invasion and the toppling of their government during the Opium Wars and the Boxer Rebellion.
- Lack of substantive compliance with WTO treaty requirements
- Capital controls preventing movement of money overseas, except in support of nationally-approved strategic initiatives
- Investments in US and western strategic industries, such as the recent push into semiconductors, with associated requirements for technology transfer in exchange for access to the PRC market.

Consider the following thought experiment: If the PRC were the world leader in a key technological industry - say something like building CPU's, or artificial intelligence, or in the development of operating systems - does anyone seriously believe that U.S. companies would be allowed to set up a location next to the PRC national champion companies, in order to recruit key technical talent and learn from the local innovation culture? Certainly not. Such a thing would *never* be allowed - it might not be explicitly banned, but the permits would simply never be issued to make it happen; in practice it would be impossible, regardless of legality or treaty obligations. By contrast, we invite PRC national champion companies into the Bay Area to recruit our engineers and scientists into their projects. There is no symmetry to this relationship. With the UK, or France, or Japan, the answer would obviously be different; these are our actual allies.

Unless and until thought (and perhaps real-world) experiments like this yield reasonable outcomes, where the relationship is generally symmetric, we must stop pretending that we are engaged in free trade. Trade with China needs to be regulated in the context of warfare and national competition - not in the context of shared values.

Imagine if the Soviets had wanted to set up an R&D center on transistors and circuit designs in Palo Alto. Would we have allowed this? Certainly not. And yet, here we are with Huawei running huge research centers in the Bay Area. This is so intensely foolish that it boggles the mind. No amount of money or number of jobs are worth allowing these organizations - which are for all intents and purposes branches of the PRC government - into the United States.

China is a communist, totalitarian state - but one that makes more strategic and nuanced use of oppression than the Soviet Union did. One reality that has to be recognized is that there is no such thing as a private company from the PRC. They simply do not exist; every national champion company in the PRC is a branch of the PRC government. They are controlled by the government. They are financed by the government. Their executives are party members. Companies are required to have political officers as part of their leadership. The ownership of most of the 'national champions' is murky at best and is widely believed to be largely in the hands of the PRC government.

Even 'public' PRC companies, like Alibaba, are not actually controlled in any way by their overseas investors. These investors get an interest in the profits of the company, through an entity in a place like the Cayman Islands, but get no vote in how the company is run. What we have here are the trappings of capitalism without the substance.

And if the government wants these companies to do something, there will be no serious debate, because if there is, the executives will be replaced. So when we levy a fine against a PRC firm like ZTE for export violations, we're just sending the PRC government a bill. They can afford it. The idea of a 'private sector' in the PRC creates a false dichotomy between the activities of their government and those of their major companies. There is no such distinction. Furthermore, the tools of the state are at the disposal of these companies: The PRC government is widely believed, for instance, to bring pressure onto Chinese expats who have been identified as recruiting targets by threatening their families back in the PRC. The national champion companies also leverage the tools of statecraft, including the intelligence apparatus, in order to gather IP from competitors. In a world where state actors have access to zero-day hacks, it is all but impossible for corporate networks to be secured against these types of attacks.

That is not to say that there is no competition within the PRC; the various companies compete, within a government-defined walled garden. In cases where it benefits the

government, monopolies are established. When it benefits the local companies to allow foreign competitors in, so that they can learn from these outside organizations, that happens, but joint ventures and other mechanisms for extracting know-how and IP are forced as the price of entry. If overseas corporations resist moving strategic manufacturing, and eventually R&D, into the PRC, incentives are constructed by the government that are so attractive in the short term as to be impossible to justify turning down on purely economic grounds. And once the knowledge has been sucked out of the foreign company through a joint venture, the foreign company discovers that their ability to continue operating within the PRC disappears. They're locked out, through either legal means, permits being withdrawn, property being confiscated, new rules about local ownership being introduced, executives being threatened with imprisonment, et cetera. In fact, the PRC operates permitting bodies specifically to require detailed applications including design information, so that it can be expropriated for local companies. Furthermore, internal standards bodies operate specifically to create perverse requirements, so as to keep foreign competitors out of key domestic markets without the need for an explicit ban. All or nearly all of the major national champions was created through variants of the above recipe - a foreign company was lured in, their IP was stolen or copied, the national champion gained a foothold, and then the foreign competitor was kicked out of the PRC, or their market share limited to a small toehold. A few years later, the national champion competes in the world market, with major (tens of billions of dollars in some instances) subsidies from the PRC government, and goes toe-to-toe with major US and international corporations for the international market, while the home market in the PRC functions as a protected, walled garden, in which foreign competitors cannot play.

As painful as this is to contemplate for western companies who have been lured into the PRC investment traps, they need to start thinking of their investments there as 'already nationalized'. They will never be able to pull their money or IP back out of the PRC, and they will never be allowed to be more than a bit player in the PRC domestic market.

In the boardrooms of the United States and the west, a narrative of inevitable PRC domination has taken hold. It is tacitly or explicitly assumed that any industry targeted by the PRC as a strategic one for them to dominate will inevitably end up being taken away from the west. The questions asked are not 'how do we stop this?', but instead 'Since this is inevitable, how do we profit from it?'. The governments of the US and of the West must act to stop the PRC from dominating new industries, and must disrupt their ongoing plans.

We are losing this war, at least in part through a lack of perception of the overall picture. The evidence is all around us, and we have become inured to it: Take the train along the northeast corridor from Boston to New York, and look out the window at the parade of shut-down and empty factories. Whenever a factory or R&D team needs to be built, the first questions that get asked are “Will it be cheaper to do it in China?” And “if we put it in the US, we’ll be subject to export control; why don’t we just put it in China where the government will pay us to do it, and we can export our widgets anywhere we want?” Many of our best engineers in the US spend a significant fraction of their lives on conference calls and airplanes, working with factories and design centers in the PRC - often educating them. This is now accepted as normal. But it’s not. These are symptoms of profound dysfunction.

The PRC government has made no secret of their intentions. In fact, they have published a number of plans which specify not only their goals and intentions, but even articulate some of the means by which these goals will be attained. They have engaged in a clear pattern of behavior, and have found recipes that work consistently for taking asymmetric advantage of the US and the rest of the free world. They have repeated these same recipes again and again. These published strategy documents serve as a blueprint for the behavior of both officials and members of their ersatz ‘private sector’ - because, with no actual civil rights, PRC citizens know that if they don’t follow these directives, their lives and their property are in danger. In effect, these policy statements carry the force of law.

The PRC is no longer, incidentally, one of the cheaper places in the world to do manufacturing. If the PRC actually lived by WTO and other treaty rules, the high cost of labor and relatively poor legal protections available in China would be driving manufacturing out to places like Vietnam, Malaysia, etc - but it’s not doing so in any significant way, because technological expertise goes into the PRC but is never allowed to leave. The recent Trump administration tariffs are starting to have the effect of forcing alternatives to be examined, because US companies are averse to geopolitical risk, which is, on the whole, a good thing. But in general, the only technical activities being moved out of the PRC are being moved by Western companies, who hold the key IP offshore. Nothing of technological or strategic significance is ever sent offshore from the PRC to cheaper places by their local corporations - or if it does happen, it’s so rare as to be negligible.

All of the above has contributed in a huge way to the economic hollowing-out of the American and European middle class, as manufacturing has been systematically forced offshore to the PRC. This has contributed to significant class conflicts here in the US, and has exacerbated historical divisions. If you think this is an accident, you're mistaken: The individuals running the PRC have surely read Marx carefully, and think about the world in terms of class conflict. What has changed is that class conflict is no longer primarily the result of domestic "exploitation"; instead, it is an artifact of the government-subsidized appropriation of manufacturing and R&D facilities from the United States and Europe by China.

A lot of the debate in the West today is centered around the idea that the PRC is continuously "stealing" intellectual property and technology from the United States. This is certainly true in spirit - though of course this theft is a crime here, but these thefts aren't a crime there; in reality these are treaty violations or perhaps acts of war, rather than crimes. But another key dynamic is that a lot of R&D now occurs in the PRC. There are actually very few industries left in the U.S. where the PRC government has not succeeded in building up their own substantial R&D capability. So this is not just about stopping the expropriation of IP - it's more about disabling their capabilities, while rebuilding our own. And the few key industries that have not been replicated or expropriated to the PRC need to be reinforced and carefully protected.

For those readers who think that the location of the manufacturing 'doesn't matter' - extreme free-traders in particular - it's useful to share a small thought experiment. Imagine you're running a company that designs something, and you've got a manufacturing facility 12 hours away, in a distant time zone with employees who speak a different language. Now imagine that your competitor has their manufacturing in the same city, but their R&D scientists are right in the same building. The team with everything in the same building will, all else being equal, win every time. Because they can debug problems faster, innovate faster, communicate faster, and will generally be better at executing. Real innovation often comes from the interaction between research and the manufacturing floor. So if you have to spend 12 hours on a plane to get from your research facility to your manufacturing floor, you're going to be crippled in actually getting substantive innovation done. It's not impossible, but it's a devastating competitive disadvantage. Having captured manufacturing dominance at the lower-value parts of the supply chain in multiple industries, the PRC is now systematically going after the R&D-heavy, high value portions of the products - the jet engines, the complex molecules and drugs, the advanced computer chips, et cetera.

One other thing: If you control the infrastructure for manufacturing something - and especially if you control the people who design it - then your engineers know what goes into that item, whether it's a piece of hardware or a piece of software. That means you know how to break it, or how to corrupt it - or if not, you've got the people who are best situated to figure it out. Our adversaries should be intensely nervous about the fact that their leaders carry iPhones, whose chips are designed (though not manufactured, in general) in the US, and which run operating systems developed here in the US. Because no matter how secure these phones may be, and how well-intentioned the programmers were who put in place the security, it is certain that the people who designed these devices are in the best position to hack them, if the US ever needs this done. And that's if we didn't deliberately insert backdoors into the hardware or the base layers of the operating system. Conversely, there is very good reason for Westerners to avoid electronics and telecommunications infrastructure built or designed using chips or software from the PRC. Does anyone seriously doubt that such hardware would be laced with backdoors to enable intelligence gathering, hacking, and all manner of disruption?

If we're to remain comparatively rich and the free world is to remain free, we have to stop the PRC, and now is our last chance to do so. Before their economy is larger than any in the free world, and the rest of us are relegated to being an economic sideshow.

What is to be done?

Now that we have some idea of what our adversary is doing and why, we can ask the key question: What should we do about the current, dire situation? The following suggestions will all surely have unintended secondary consequences, and there will be a need for agility as the PRC makes countermoves to any or all of the actions outlined below.

The first step is to recognize that we are, in fact, at war. Our goal is to prevent the PRC from becoming the preeminent world power.

Each of the points below could be the topic of an entire policy study, and many of them probably should be; doing so is beyond the scope of this article, though some of these may be examined in further detail in followup articles. Almost every one of the

suggestions would be more effective if they could be implemented in a coordinated way with our allies from across the free world.

We need to remember that strategic thought and action are not comprised of a linear “plan”; rather it is a plan that must encompass the thought that there is an relationship between two or more adversaries, each seeking some scarce outcome. Goals, means, and capabilities of both sides need to be appreciated as fully as possible, and each will necessarily change over time. Thus it is not enough to prescribe what should happen to the adversary; it is also essential to indicate what must be done to meet the adversary’s challenge. As described by Friedman, strategy has three essential components: diplomacy to create alliances thereby changing the vectors of power, trickery to misdirect the adversary, and deploying military violence and the threat of violence. In the modern world, espionage to learn the true intentions of an adversary and technological innovation are critical fourth and fifth elements. By necessity, any strategy we implement will need to change over time in response to changing circumstances and countermoves; predictable behavior in war, in the absence of overwhelming force, is a prescription for defeat. And the capacity to change our strategy and associated tactics quickly and unpredictably is critical, since surprise is one of the best ways to achieve victory. A static set of tactics in service of a single, non-changing strategy will almost never achieve effective surprise.

We need to understand the PRC strategy, and we need to understand the motivations that are causing them to engage in warfare against us. In the western world, the reasons for war have long been understood through the lens of Thucydides - honor, fear and interest as the primary motivations. Casting the behavior and goals of the PRC regime into this kind of understanding is useful, but we also need to make an attempt to understand the thinking of the decision-makers in the PRC in their own terms. This is a job for China experts. We have an immense asymmetric advantage in doing this; there is an enormous Chinese immigrant population in the US, while no such community of Americans exists in China.

Having articulated our goal, now we turn to the question of tactics. These fall into four broad categories:

1. Political initiatives: destabilizing and delegitimizing the PRC

The current trade alliances, into which we have invited our adversaries, no longer make sense. Free trade among competitors and allies, who share fundamental values and



aspirations, is a great idea and an engine for economic growth through national competition and specialization. But we should not be engaged in free trade - or necessarily in trade at all - with political adversaries like the PRC, with whom we do not share values or aspirations. The PRC has decided to be our enemy; they're our *chief* enemy and the greatest threat to the continued success of regimes that value freedom and individual rights.

Painful as it will be in the short term, the PRC needs to be expelled from the free trade agreements in which Western states participate. Short of such expulsion, the United States and our historical allies need to create a new, tighter trade alliance, and then either withdraw from the trade agreements with the PRC, or act to disrupt them to the point where they are no longer relevant. In this new alliance of free states, we can include some less-free client states, as long as their population and economy are small enough that they are unlikely to become a large-scale threat over time. Every economic measure described here will be more effective if it is undertaken by a group of allies, rather than by the US alone - though if allies are not prepared to move in lockstep, we need to lead by example, and then bring them along over time.

The PRC regime has a number of weak points which we need to begin systematically exploiting. One major initiative should be around ethnic divisions within the PRC. There are multiple ethnic groups other than the Han Chinese, and these groups are ruthlessly oppressed. We should be training and arming these groups, and helping them to engage in insurgency. This can be done in ways that are relatively indirect; during the Cold War such initiatives in places like Afghanistan contributed enormously to the destruction of the Soviet Union. By the same token, we should be sponsoring insurgencies in PRC client states like Nepal, in Tibet, and along the One Road One Belt routes. We need to make sure that someone is regularly blowing up the rail lines regularly along the One Belt One Road routes, so that they do not function as a vehicle to export PRC power to their neighbors.

Every regime has their political extremists, though in the PRC such people are often ruthlessly suppressed. We should act to encourage and subsidize the PRC's internal political extremists of all sorts: Traditional communists who hate the market economy and long for the 'old days', pro democracy forces, Hong Kong secessionists, local radical environmentalists, human rights movements, et cetera. The goals of many of these groups will be aligned with the values of the US, but not necessarily all of them. Where these movements don't already exist, we should create them by recruiting and training

leaders from the hundreds of thousands of PRC students studying in the US. Furthermore, in the PRC, religious activity is suppressed, because religious organizations provide a power center that is not controlled by the state; we should act to encourage religious practice and to encourage the spread of both eastern and western religions both among PRC citizens at home and abroad. We should directly leverage local social media to encourage political polarization, and the overt display of religious commitments and practice. Attacks on the credibility of both specific officials and of the regime in general should be launched. Social media, if we are clever, is a way for us to reach out directly to PRC citizens - through western platforms for those living overseas, and through local platforms for those on-shore. Accessing the local platforms will likely involve hacking or other tools of cyber espionage.

The leadership of the PRC now holds huge amounts of wealth in the West, and in the US in particular. This recent development is great for us and should be encouraged, because it gives us huge leverage over relevant individuals. We should emphatically not collaborate with the PRC government in their efforts to root out political corruption and seize overseas assets held by their officials. Such assets can be publicized in order to embarrass key members of the regime, or used for blackmail. False assets should be constructed if needed and then used to harm competent, incorruptible leaders. Creating turnover and chaos at the highest levels of PRC leadership should be a priority, and their hidden overseas assets - and in some cases family assets - should be used for this purpose. Ideally we can generate situations that force key PRC leaders to defect, with the threat of revealing these assets, since the only ways for party officials to capture significant wealth and place it overseas are generally death-penalty offenses in the PRC.

There have been a series of recent 'anti-corruption' campaigns in the PRC recently; in reality these are being used as excuses for the elimination of political rivals to the ruling regime, both at the national and at the state levels. We should act to leverage these anti-corruption activities to create chaos within the ruling cadre through the injection of disinformation. Furthermore, we should invite officials who feel that they might be in danger to defect, and share information with our intelligence agencies.

The PRC regime has prioritized controlling the flow of information into and out of the PRC; we should leverage the deep expertise of US companies to create digital infrastructure to contest PRC control of information access. The PRC has made enormous investments in controlling the flow of information through their "Great Firewall" and through various government agencies which actively police social media. Western

social media companies are generally banned from the PRC today, and have been replaced with on-shore competitors under government control. We should make a deliberate and concerted effort to destroy the information barriers between the PRC and the outside world, or to force the PRC to completely wall themselves off by turning off access to the outside world entirely. Creating direct channels into the PRC - perhaps through the creation of universal satellite based data service that can communicate directly with the ground, outside of any PRC content filters, could be another piece of this kind of initiative.

The PRC has invested enormous resources in their digital 'social credit' system, which, as discussed above, allows the government to comprehensively monitor and repress 'untrustworthy' individuals and groups, while leaving 'trustworthy' individuals largely alone. This system needs to be broken, hacked, and compromised in order to create perverse outcomes, and to embarrass the state. Furthermore, the digital tools of repression that the PRC has begun to deploy very widely - facial recognition, mass monitoring of people's every-day digital activities, etc. - need to be hacked and corrupted. We should in particular act to disable the internal security services' C4ISR capabilities, so that when there are riots or other social disruptions, we or our local allies can shut off their ability to respond quickly and effectively. Breaking into the social credit databases and making their contents public would be an excellent step for the United States to take - especially since it will surely reveal embarrassing personal information on many members of the PRC ruling elite.

More broadly, we need to systematically target the basic functions of the PRC state apparatus - physical and digital border protection, banking, currency controls, etc, and act to increase the cost and decrease the effectiveness of each in turn. Just as our adversaries have recently acted to undermine the legitimacy of the US government by disrupting our election, we should attack and disrupt the most fundamental functions of the PRC government. One particularly promising area for such attacks would be on the credibility, fairness and administrative competence of the national school entrance exams. These exams determine the entire course of people's lives in a way that is generally unimaginable in the west, and are widely believed to be extremely meritocratic and impartial. If they can be corrupted, it will undermine a major vehicle of social mobility, and will produce enormous anger in the PRC; people spend years of their lives preparing for these exams, and if they're perceived to be 'rigged' or administered incompetently, it will create massive scandal.

One area where economic and political initiatives will overlap is in creating and exploiting demographic and generational conflicts. The one-child policy has created a significant demographic overhang, and it has been widely reported that PRC military veterans have engaged in a number of protests over inadequate pension benefits. Veterans' rights movements should be strongly encouraged and subsidized. Movements demanding pensions and social welfare programs for the elderly should be encouraged to the extent possible, because they will prove to be profoundly unaffordable given the peculiar demographics of the PRC in the wake of the one-child policy.

Lastly, the PRC produces less food than it consumes. As vicious and unfortunate as such actions may be, we need to act to exacerbate food insecurity issues, by encouraging instability, land confiscation, etc in the places where the PRC either buys food or has made significant investments in land, particularly in Africa and South America. For food purchases from western allied states, we can act in concert to create disruptions and unpredictable price spikes in the PRC. Digital attacks on the infrastructure for food transfer and distribution should be prioritized; creating local shortages and disruptions will make an enormous impact on the credibility of the PRC regime among their own citizens. The elite in the PRC already pays a premium for offshore-sourced food due to profound quality issues with on-shore sources. Cutting off access to such imports will have a profound effect on the elites whose backing the regime must maintain.

## 2. Economic initiatives: defensive and offensive

All of our economic policies need to be reexamined in view of our ongoing war with the PRC. One area where we retain significant strength is in the manufacture of very high-complexity, high-value technological goods, though this advantage is under active attack on multiple fronts from the PRC. This is an area where we can create enormous asymmetric damage and disruption to the PRC economy, because these goods are often irreplaceable, sole-sourced lynchpins to much more complex products assembled in the PRC. A microchip shipped from Intel to the PRC may cost hundreds of dollars, but without that microchip, the manufacture of a multi-million-dollar supercomputer or generator or airplane comes to an immediate halt, while a design effort to incorporate different and inferior microchip has to be undertaken. And in some cases, like jet engines, there is no plausible alternative to items sourced in the US and Europe.

We need to identify such products and begin systematically and unpredictably banning their export. This must be done without warning, so that the PRC cannot adjust and maneuver. This will harm US and other western companies, and our government absolutely must compensate these companies for their lost revenues and profits, if we are not to drive these companies either offshore or out of business. However, the damage that will be done to the PRC economy will be amplified 100 or 1,000-fold, as their national champion companies implode for lack of key foreign-sourced parts. This is precisely what was happening recently to ZTE, when our administration backed off on the penalties and turned them into a fine. Their downstream value chain from these key technological goods employs huge numbers of people, and generates great wealth; pulling the rug out from under their high-tech manufacturing sector will harm the economy in the PRC in substantial ways, and will embarrass the regime.

At the same time, we must invest in creating new industries where the technology is not easily replicated in the PRC, and where we can create more of these kinds of dependency relationships. And we need to make it clear that any action to pressure US or western companies or citizens to move manufacturing or IP in these key industries to the PRC will be met with drastic and immediate economic and political retaliation. In general, we should act to maximize the PRC dependence on items produced only in the US (or our close allies') territory, while acting to minimize our dependence on goods produced solely or largely in the PRC.

There are several very aggressive measures which we should carefully consider, which have the potential of creating such extensive economic disruption in the PRC as to potentially cause the fall of the government; certainly any of these measures will do huge and asymmetric harm to the PRC. We need to keep in mind, as we consider these options, a fundamental fact: The legitimacy of the PRC regime is based not on providing freedoms and rights for their citizens, but on the delivery of extraordinary and steady economic growth. The citizens of the PRC have made a choice, en masse, to trade rights for wealth.

If we disrupt the generation of wealth in the PRC, we de-legitimize their regime; in the United States there is no such tradeoff being made, and our government has weathered recessions and depressions before. To defeat the PRC, we may have to do so again, but as Adam Smith so eloquently put it, "defense, however, is of much more importance than opulence...".

The creation of an economic crisis, where the very large debts which many PRC 'companies' have incurred are called due, may well be to the net benefit of the West. Numerous reports indicate that the magnitude of corporate and local government debt in the PRC is truly enormous, and a major economic crash will, if nothing else, require the PRC national government to invest attention and economic resources into shoring up their local governments, banks and companies.

One option which the US administration should seriously consider is to declare all of the PRC national champion companies to be branches of the PRC government and to be export violators. The extensive export control violations of ZTE certainly justify such a decision, and doing so would be, in effect, a 'death sentence' for all or nearly all of the PRC national champion companies. This would, again, need to be coupled to a program to support the on-shore suppliers to these organizations, so as not to harm our own technological-industrial base.

If PRC companies want to access the US market, they need to be forced to accept not only the possibility of foreign ownership but also foreign control and voting rights, associated with that ownership. Though in reality any assets which remain on-shore in the PRC are subject to confiscation by caveat, and this will not change in the absence of a change of regime in the PRC. Any 'company' controlled by citizens of the PRC has to be treated as a PRC government agency, and banned from participating in US or allied economies.

In the same vein, another option open to the US is to cancel or confiscate the value of all of the US debt held in the PRC. This would have an enormous effect on the credit-worthiness of the PRC government; of course, it would have significant ramifications in terms of the US as a debtor nation to other places, and potentially on the dollar as the international reserve currency. Were this coupled to some form of declaration of war or similar resolution from Congress, it would certainly be within historical precedent; no country pays debts to their adversaries. This confiscation could be phrased as an outside penalty for treaty violations, for instance, as a way of making it clear that this is not, in fact, a repudiation of the principle of sovereign debts.

One tactic that is already being implemented, to some extent, is the introduction of tariffs on technological goods from the PRC. But this needs to go much further - we need to erect very high tariffs which target all of the downstream products of high-technology development in the PRC, whether manufactured there or whether final assembly

happens elsewhere. For instance, anything incorporating a microchip manufactured onshore in the PRC should be targeted for very heavy tariffs; it's comparatively easy to set up a supply chain to obscure where most of the value is added to a finished good, by doing final assembly somewhere neutral. But it's much harder to maneuver around regulations phrased in terms of the contents of the finished good.

Just as the PRC regime has acted to destabilize the price (for instance) and availability of rare earth minerals, which are essential for a number of high-tech products around the world, we need to identify key raw materials which are not produced within the PRC, and act to destabilize their access to these raw materials.

There are a number of defensive measures which we must undertake, in order to protect our economy from further targeted harm by the PRC government. Many of these revolve around the prevention of further intellectual property expropriation. Though, it is important to note, so much has already been stolen that we are now in the regime of not protecting everything - we are now at the point where we must protect the most critical remaining items - our economic and technological 'crown jewels'. As new policies take hold that prevent more pedestrian items from being expropriated, the areas meriting protection will spread to cover much of the economy. But for now, there's not much point in protecting industries where the PRC has already managed to steal everything of value in terms of IP; in such areas it's critical to spur and then protect new innovations, rather than the things that have already been lost.

Some of the measures required are obvious. We need to provide government support for IT security at US technological businesses in areas targeted by the PRC. This can be in the form of significant tax breaks and rebate programs for spending on digital security, and/or in the form of direct expertise from government agencies. Probably both are required.

The PRC has set up a number of institutes here in the US (including "Confucius Institutes" at US universities, which are used to promote the PRC agenda and monitor their students abroad). Australia has recently released a report showing the extensive influence of CCP and United Front-backed organizations, and recent press has indicated similar influence here in the United States. These types of lobbying and intelligence gathering activities need to be shut down immediately, and their continued operation banned. They need to be treated as the lobbying and intelligence gathering arm of an adversary regime, rather than as independent academic or social organizations.

One option to consider is the creation of special courts for adjudicating IP matters involving PRC companies, with much less expensive litigation and more rapid decisions. Typical patent litigation costs today start in the tens of millions of dollars; reducing this cost specifically for PRC violators would allow US companies to stop PRC entities from operating in the US by making it cheap to enforce patents.

The US government should act to immediately forbid any new product development or movement of design data from the US to the PRC by US citizens or US companies, in a number of broad areas of the economy. This must be coupled with compensation for lost revenues to US companies.

We need to identify allies with inexpensive manufacturing and good infrastructure (Malaysia, Mexico, Thailand, Brazil, the Philippines, for instance) and encourage firms with significant US market exposure to move manufacturing to these places, rather than the PRC. This will also solidify our relations with these countries - to the extent that these can be countries whose political agendas are opposed to that of the PRC, all the better. Moving manufacturing out of the PRC and into allied regimes should be directly subsidized by government funding, as well as being encouraged through favorable tariff treatment.

One thing that the PRC regime does is to provide enormous subsidies to firms who locate high-tech, strategic manufacturing on-shore. This subsidy is often so large as to make it economically infeasible to turn down, since once one firm accepts it, their competitors are at a significant disadvantage. These subsidies, in the semiconductor industry as an example, are sometimes in the billions of dollars.

We need to create similar matching programs, so that international firms can feasibly choose to locate manufacturing here instead of in the PRC. No corporate exec moves key R&D into the PRC voluntarily; they do it under economic pressure from the PRC government. We must create a mechanism where there is simply no reason, other than access to the local market, why anyone would ever move R&D or manufacturing into the PRC; make it cheaper to do R&D here in high technology than anywhere else in the world. This can happen through a combination of tax breaks and direct subsidies. A simple solution would be to create automatic, massive subsidies for on-shore manufacturing in the form of tradeable tax credits. We could even consider creating either real or virtual 'free trade zones' exempt from federal taxation.



Legal measures need to be implemented to require any organization operating in the US or US person to report any suggestion that R&D or manufacturing activity needs to be moved to the PRC. Should this occur, we need to implement swift and severe punishments for such behavior - including immediate loss of access to key technological goods for PRC companies. Again, this will require subsidies to avoid dramatic harm to on-shore companies.

It would be wise for us to consider setting up 'honey pot' technology companies, to lure the PRC to steal secrets which will, in fact, lead them to spend large amounts of money on dead ends and worthless projects.

One final note: PRC companies are notorious for cheating in international technical and engineering standards bodies - packing the house for critical votes, having a single attendee sign for numerous colleagues who aren't physically present so that they can vote, etc. Internal standards within the PRC are set without international input, and are often set in such a way as to exclude foreign competitors. Just as with trade alliances, we need to act to exclude PRC businesses from international standards bodies until such time as international businesses get to vote as equal players on internal PRC standards activities.

### 3. Contain the PRC and roll back their influence

There are a number of muscular foreign policy activities that need to be undertaken to begin containing PRC influence both in Asia and around the world.

One of the most obvious actions is for us to back Taiwan in a spectacular way, and encourage Taiwan to reduce economic and cultural ties to the PRC, which are currently pulling them into the PRC economic orbit. We must create a special trade relationship to make it uniformly more advantageous to work with us than with the PRC; the Taiwan economy is small enough that we can afford to make it far cheaper to trade with us than with the PRC. The PRC strategy with Taiwan is a long term economic engagement, to the point where the Taiwan economy is so dependent on the PRC that the local Taiwan government is no longer sovereign in any meaningful way. We need to stop this process cold. Furthermore, we should be pouring military aid into Taiwan, and should be setting up bases there to ensure their independence.

We need to create strong military alliances to contain the PRC threat in their backyard. We should act to systematically offer troops to the countries on their borders in order to guarantee security and prevent further expansion. This may require a Pacific version of something similar to NATO, and in particular close cooperation with India, Japan, Australia, Malaysia, South Korea, Taiwan, the Philippines and Singapore. All of these countries see the threat from the PRC, and we need to exercise some serious leadership. Right now these countries are all trying to keep their options open, because they don't see us intervening to help them in a way that's indicative of a long-term commitment; our recent threats to pull troops from South Korea have furthered the perception that we do not understand the security threat that the PRC represents to both us and our allies.

The PRC has had enormous success in constructing debt traps in order to pull small and poor states, such as Sri Lanka, into their orbit. We must act to subsidize and rescue states that fall into PRC debt traps, pulling them into our orbit instead of the PRC's. We should also act early, to prevent the construction of these debt traps, which are often the product of political corruption sponsored by PRC national champion companies. Lastly, we must act to prevent and reduce PRC influence in the political and geographic backyard of the US (such as in Panama); we simply cannot allow the PRC to exercise significant influence in the Americas. To the extent that the PRC sets up their own alliances, like the the Shanghai Cooperation Organization, we should be acting to undermine them however possible.

In the spirit of creating asymmetric counter-threats, we should seriously consider basing nuclear weapons in Asia, for instance in Taiwan, South Korea or Japan, or helping these countries to develop their own nuclear arsenals.

#### 4. Internal US Reforms to meet the PRC challenge

There are a number of legal and social reforms which need to be undertaken in order to enhance our own competitive position vis a vis the PRC in the wider world.

One of the most obvious actions is to immediately repeal the foreign corrupt practices act, which makes activities by US businesspeople overseas subject to US laws. If the PRC representatives are bribing their way into contracts (and they certainly do), we should be able to do the same. Otherwise we're playing to lose, all over the world.

The US export control regime does not work as currently written; in fact, it serves to drive innovation off shore. This is the subject for a more detailed treatment but, in short, the

current export controls create huge costs for US businesses to comply, while other countries who are part of the same treaties rarely if ever enforce these rules, despite their treaty obligations. We need to act to dramatically simplify the rules, and move to a system where certain countries - including but not limited to the PRC - and organizations are simply banned from operating in the US, interacting with US citizens or those of our allies, or accessing any US goods or technology.

The reality is that we couldn't keep North Korea, the world's most backward regime, from getting atomic bombs and delivery vehicles. So we might as well scrap the current export control system and start afresh; the current system is so complex, and there are so many workarounds, that all it's doing is imposing cost on US businesses without creating much of an inconvenience for our adversaries. If we want to enforce an embargo, the way to do it is with a physical embargo, involving military action, or by creating extremely simple rules - ie "no US citizen may do business with Iran without a license from the Dept. of Commerce". Complex regulations invite workarounds and exceptions, and don't work. Our adversaries love our export controls; they impede US businesses without actually preventing our adversaries from getting access to our knowledge, our technology, and our actual physical products.

We need to dramatically increase the number of fellowships both at the graduate and the undergraduate level for on-shore STEM students. The US government currently offers a few hundred such fellowships at the graduate level per year, and almost none at the undergraduate level. We should be paying for the top 1% - or even 5% - on the basis of competitive merit (meaning objective exams, not inflated grades, community service or athletic prowess!) to go to the school of their choice for free at the undergraduate level, as long as they study a STEM or national-security related topic. We need to do the same thing at the graduate level.

Just like we did during the cold war, we need to pour money into science and engineering projects, in order to raise the prestige of building things and driving innovation. Far too many of our best and brightest are going into moving money around for a living, rather than building and inventing things. Because right now, those industries pay far more than engineering and science. This was not true (or at least much less true) 30 years ago, and it doesn't need to remain true today.

We should fund - most likely through the military - the creation of grandiose national projects, on the scale of the Manhattan Project. These need to be truly challenging

projects, ones that really capture the imagination, and the results of which are beneficial for us as a species. We need to make the US the place where the world's best and brightest come to work on the biggest, most ambitious projects, not to just to make money building the newest version of Tinder, or figuring out how to make options trades in 100 nanoseconds instead of 100 microseconds.

These projects will cost several percent of GDP, just like the Manhattan project did - but even if they're unsuccessful on their own terms, the technology that they spin off and the talent that they attract will pay for the project many times over. These projects will attract the best and brightest from around the world, if properly funded. Examples could include: Getting fusion power to work as a practical energy source. Building a permanent colony on the moon, followed by one on Mars. Increasing the maximum human lifespan to 200 or more. Figuring out how to use digital tools to directly augment human memory and intelligence. Other such ideas abound. These are all areas where there has been significant progress, and we know that pouring money into them can yield rapid innovation, if the project is freed from burdensome regulation and properly funded.

These will need to be run as a wartime type effort, with some level of safety - particularly the safety of informed volunteers - being sacrificed for speed. These projects and the associated funding will also serve to focus basic research at the universities around tangible goals, which is sorely lacking on university campuses today.

The conflict between the PRC and the United States is fundamentally a conflict over who will lead the world over the coming decades. By making it clear that the United States carries the banner for human progress, we legitimate American institutions and ideals in the eyes of the rest of the world, and in our own. We will also attract the best and brightest engineers and scientists from around the world to work on these projects. We will even attract many of our own best-and-brightest technical personnel away from their careers on wall street, back to working on the kinds of things that attracted them to engineering and science in the first place.

We should act to create brain drain away from PRC. We can do this by issuing green cards, subject to security monitoring and screening, to every graduate of a top university in the PRC, and issuing visas for them to bring their families along. We can even subsidize paying them enough to abandon assets to get here. Once they're here with their family, the leverage of the PRC government to get them back is broken. The PRC

runs national exams to identify their best and brightest; we should do everything we can to grab every single one of these folks.

We must keep in mind that many of our very best engineers, businesspeople and scientists are from the PRC. The key here is for us to retain them, and to reduce any leverage that the PRC might have over them, by granting their families visas so that they can come over as quickly as possible. Driving them out or preventing them from working would be a disaster, because it would cripple US industry, and would drive all the things they've learned back into the open arms of the PRC government.

#### Final thoughts

The PRC leadership has learned from history, and has avoided large provocations like Pearl Harbor, while building up their strength. We need to recognize that we are being subjected to full-spectrum warfare by the PRC, and respond in kind. Once we do, our allies and our citizens will see that defeat by the PRC is not inevitable.

The goals and values of the PRC leadership are fundamentally incompatible with our own. We should remember that their people are not their leadership. The people of China would prefer to be free. Given the choice, they come to the US in droves, and return only under duress. Given the choice, the vast majority of them would prefer to live here, and adopt our values. We are not at war with the Chinese people. We are at war with the state-capitalist, totalitarian regime that is oppressing them. While wrapping itself in the cloak of capitalism and economic liberalization, the PRC has been successful in gaining the benefits of free trade, with few or none of the costs - which is how they've delivered enormous and consistent economic benefits to their people. This regime has delivered unprecedented economic growth through a carefully-thought out (even brilliant) plan, which has had the dual goals of undermining US power, while transferring value and wealth to the PRC. The legitimacy of the communist party, perversely enough, is tied to a bargain whereby the citizenry don't demand political power, but the government delivers consistent growth. We need to act to break that bargain, by both stopping the consistent growth and encouraging demands for political power by the people.

We need to start fighting this like a war. Engagements with the PRC need to move from 'allowed by default' to 'banned by default', just like with the Soviets during the Cold War. When economic engagements are allowed, they need to be set up in a way that clearly benefits the free world - us and our allies. We need to act to increase PRC dependence

on us, while reducing our dependence on them. Victory will certainly also require the measured use of violence, since that's a tool that the PRC does not hesitate to use when it is the right one to achieve their goals. We need to act, in essence, to ensure the destabilization of the current government of the PRC, and to undermine their economy before it becomes too late for us to do so with any effect.

Clausewitz observed that war is politics by other means - that political goals must inform the use of violence in the service of policy. What we have encountered with the PRC is the inverse situation: The PRC is seeking to replace the United States as the world's preeminent power and achieve the destruction of the United States and of the West, not primarily through the use of violence, but by the use of every other aspect of human endeavor: Politics, culture, innovation, diplomacy, culture - all are being used in service of this goal, which prior to the development of nuclear weapons would certainly have been pursued primarily through the deployment of violence. This is politics as war by other means. We must learn to counter in kind.