

SCENARIO 2 – Imperialism

The 2008 Beijing Olympics sent a shockwave through the world. Visitors and watchers expected a post-communist developing country and discovered huge, clean, modern and secure cities, top-notch facilities and organization, international brands of everything in huge shopping malls, Chinese brands producing world-level quality tech products, and (perhaps doped, but undetectably so) sportsman able to reap medals in almost any discipline... The new superpower was proudly showing its muscles. It even took advantage of the event's dynamics to announce it was abandoning its 1-Child per family policy, in order to stimulate long-term growth and limit its future aging problem.

This huge success made China feared rather than loved. People were impressed, but also stunned by seeing how little of old Beijing remained standing. The death of two marathon runners was attributed to the capital's foul air, whereas tourists and journalists who travelled within the country reported far worse situations in inland cities. The violent squashing of social protests before or during the Olympics, reported despite the police's best efforts at Internet censorship, incensed global public opinion.

Wake-up call

In a way, the surprise election of a Republican as President of the United States in November, 2008, was part of the aftershock. The successful candidate won by defending the American Way of Life against the threatening giant from the East, although how he would do so remained unclear.

More unexpectedly (for a Republican), the president-to-be also played the sustainability card. More and more erratic and extreme climate events were making climate change a palpable reality in the voters' minds; But the candidate made it clear that whatever (unspecified) efforts the U.S. made, if 2.5 billion Chinese and Indians had it into their minds to build coal plants, manufacture chemicals without environmental protections and buy big cars, it would make no difference for the planet.

With that agenda, the Kyoto II discussions soon ground to a halt, boycotted not by the U.S., but by all major emerging economies who felt they were being asked to slow down their path to wealth in order to allow post-industrial countries to preserve their living standards.

Environmentalists and scientists were disheartened. There seemed little hope, at least on the political front, to do anything at all against global warming, nor to prepare a smooth transition away from exhaustible and pollutant energy sources.

The answer came from the economic front. Confronted with ever-growing demand, oil producers let prices rise to \$150 a barrel, sometimes peaking up to \$200, all the while using their economic power to bargain for other political or symbolic gains such as hosting UN meetings, or guaranteeing the stability of their current rulers.

Industrialized countries did not respond as expected. It seemed the high cost of oil hurt them somewhat less than it did emerging economies, whose competitiveness was reduced. They let inflation rise somewhat. They passed some energy-saving laws, boosted alternative sources of energy – renewables, but above all current and future-generation nuclear power -, and increased funding for all research related to energy (and other resources) production, distribution or efficiency. And they did not (to say the least) discourage the growing number of consumer campaigns against goods coming from countries with little or no safety or environmental controls (such as China or India...), resulting in several environmentally-motivated trade tariffs or outright bans.

The first countries to be hurt were the poorest of all, but all third-world and emerging economies felt the pressure. It was not like a sudden crisis, although several Asian stock-markets slumped rather rapidly, but more like if a much lower cap had been imposed on growth rates that had previously been close to double digits. Countries who had been building up their infrastructure based on high long-term growth assumptions began to worry.

In this context, the horrible bombings that took place during the 2012 London Olympics, killing 4,000 people despite the stringent security measures that had made people joke about it being «the most watched event in the history of the world» did not come as a huge surprise – except, perhaps, for the intelligence community. The groups that claimed the attacks was of unknown origin, the technology was clearly more advanced than in other recent events («low-intensity» terrorism having become a fact of life in much of the world), and they were never heard of again afterwards...

Tension

By 2015, tension ran high throughout the world, although you wouldn't notice it if you lived in Amsterdam, Sidney or NYC. These cities, as well as other metropolises in the developed and event, sometimes, the developing world (Delhi, Sao Paulo...), were thriving. They were the centres of corporate power, they networked with the world to move goods, people and money, and they were the places whence new ideas came and were tested. Technology infused cities, allowing them and their entrepreneurs to invent innovative services, new public spaces, original art forms and new kinds of real-virtual relationships – while closely monitoring all spaces for security.

Since these cities' activity was mostly based on services, they could easily afford to become environmentally conscious. Cars remained the dominant means of transportation, but urban cars became smaller and smarter. New means of public transportation, like shared cars, on-demand minibuses, corporate pickups, emerged.

Even the major restrictions on international travel that followed the London Olympics bombing did not hurt major cities very much. These metropolises already formed a tight network, using many means of communication. Corporations were learning to use teleconferencing and virtual spaces much more and could always reserve a seat in small, on-demand, highly exclusive business travel airlines when they really needed it.

Corporations neither really minded the general move towards ever-tighter control of the Internet that the London bombings finally made possible, since loud opposition by greying netheads was no longer considered legitimate.

Elsewhere, outside the confines of the world's 200 richest conurbations, things did not go as smoothly. Shortly after an explicitly US-staged coup replaced Venezuela's Hugo Chavez by a friendlier, Harvard-educated ruler in 2016, Russia took armed control of Azerbaijan's oilfields; while the EU, more carefully but just as decisively, provided the necessary help to the groups who finally toppled the waning mullah power in Iran. OPEC's power was more or less destroyed. Two markets for oil coexisted: bilateral secured long-term agreements provided major economies with reasonably priced oil, while international markets for fossil fuels remained outrageously expensive.

Climate change was also beginning to produce devastating consequences. In 2016, after the Philippines was devastated by its third level 5 typhoon in 3 years, the EU and a group of corporations jointly organized a major recovery effort which made history for two reasons. First, it was the first time a governmental entity officially mounted a major operation of this kind in conjunction with private corporations. Second, there were counterparts of the Philippine side: Its government had to commit to investing on preventive measures (and European technology) against future catastrophes, but also to open its markets wider to European products, to commit to cleaner and softer growth and to enforce intellectual property treaties.

Having invested heavily in energy technologies as well as in climate-related catastrophe detection and recovery, the West began using its technology as a bargaining tool for those countries who suffered most from climate changes.

High energy costs, consumer defiance and boycott campaigns, pollution and climate problems, began to weigh ever more heavily on emerging economies. Some of them continued to grow in a hectic and altogether much slower way; others went into decline amidst social unrest and political instability, which in turn deepened the problems. Foreign investment into these economies became scarcer and came with conditions. The largest third world metropolises plunged into anarchy, while their population kept growing. Several of China's new industrial cities built at the turn of the XX1st century fell into disrepair and, due to the low quality of construction, quickly degraded.

Powerplay

As a consequence, in 2019, Brazil, China and India, soon followed by most of the developing world, agreed to sign the «Kyoto IIB» (K2B) agreement, which had been largely prepared by experts from the post-industrial world. According to K2B, all countries committed to sharp reductions in energy consumption and CO2/particle emissions. But there was more to K2B. Western countries and corporations, several of which were actually signatories, agreed to share their technology and resources to help developing countries reach their goals and protect themselves against the consequences of climate changes (and related social unrest), provided these countries signed on to a sweeping reform agenda: market openness, foreign investment deregulation, intellectual property protection, emigration reduction, police and judicial cooperation... Several countries also traded higher western help against the enactment of a «One-child per family» policy.

The (rather leonine) new rules of the game were also strongly enforced, by whatever means made sense. In 2022, an armed commando funded by 7 IT and biotech firms raided Kinshasa (Kenya), destroying three patent-infringing industrial complex and holding the government hostage until it formally committed to the K2B agenda. A UN special force, funded by America, the EU and Japan, with the help of several multinational corporations, was also tasked with settling the growing number of border conflicts that took place over access to resources, especially water. Borders, public spaces, networks, transports, were all under strict surveillance.

Under K2B, the major industrial countries began to organize their spheres of influence. Saudi Arabia and other Gulf countries became de facto US protectorates. So did Maghreb in relation with the EU, while Russia reasserted not-so-light handed control over a large number of former USSR republics.

The birth of this new, de facto world order of course met with strong resistance. While the World Economic Forum supported it, the World Social Forum (after recovering from the crisis that travel costs and restrictions had plunged it into, due to the difficulty of organizing large-scale global events) became a vocal, efficiently networked and educated opponent. It could use the semi-clandestine «free networks» that kept emerging over the Internet, despite all the attempts at control. Choosing alternative forms of opposition, alternative, neo-hippies communities left cities and committed to travelling the world on foot, horse or bike.

Many other political, economic or religious groups refused the new world order, for a variety of reasons and sometimes in very violent ways. This opened the way to all kinds of manipulations and/or suspicions. So when a devastating series of «dirty nuke» attacks on Denver, Frankfurt and the St Petersburg and Wuhan happened in 2023, there were very different speculations as to who was the real perpetrator: who stood to gain from a continuous state of fear? Anyway, the US and Russia, soon followed by most EU countries, declared a state of «limited emergency» which was only (sometimes partially)

lifted around 2027-2030. Surveillance was made even more ubiquitous and permanent. Illegal immigration became a highly punishable crime.

It was harder and harder to migrate from the developing world to post-industrialized world. Those who were given a chance to study or work for some time in the North started forming a new, «globalized class», whose ties with international business and government communities were sometimes stronger than with their fellow countrymen.

Reorganization

During that period, science and technology made huge progress, although mostly in the close confines of laboratories and confidential colloquia, subject to strong security and secrecy rules. The researcher's agenda was mostly defined by four groups: military and law enforcement agencies, energy agencies and corporations, health agencies, and nano-bio-IT multinational corporations.

IT managed to rather smartly combine increased security with innovative capabilities. Pervasive sensors, actuators and interactive interfaces of all kinds provided a ubiquitous grid of information closely related to physical and relational spaces, allowing the spawn of many innovative commercial services as well as ever tighter surveillance and control. Many of those who felt ill at ease in the world as it was becoming, came to populate these real-virtual social spaces of free expression and behaviour. These spaces were tolerated, sometimes even encouraged by governments, since they were also very easy to monitor.

Nanotech, biotech and neuroscience products slowly trickled down from their initial military, law enforcement or nuclear plants uses, to civilian uses. Corporations would subsidize employees willing to gain new capacities through implants or highly selective drugs. Those who could afford it could make sure their offspring was endowed with as many genetic chances and as little defects as possible; in fact, prenatal detection of several potential problems became compulsory in several countries. New drugs and preventative medicine played a major role in raising life expectancy (or rather, «health expectancy», for these old people were in excellent health) well beyond the century, again, for those who could afford the full treatment. The idea of a fixed retirement age became passé in ruling circles, sometimes to the dismay of the younger generations whose prospects of rising to the top of the social ladder seemed indefinitely delayed.

The biotech industry actually showed its preparedness in two dramatic occasions. One was the first major bioterrorist attack that took place in Shanghai in 2026; the other was the successive outbreak of tropical diseases in southern Europe, whose population was genetically unprepared to fight germs that used to belong several thousand miles southwards. In both cases, pharmaceutical firms were able to finalize, mass-produce and distribute antidotes in a matter of days, probably saving tens of thousands of people. Some observers noted, however, that when poorer populations were decimated by quite similar diseases, the same companies did not show the same kind of diligence.

Taking advantage of superior technologies developed by the corporations they were associated with, Toronto and Stuttgart declared themselves the world's first «100% sustainable cities» in 2022. Using several alternative energy sources combined through decentralized distribution mechanisms, efficient materials, building techniques or engines, new forms of public or semi-public transportation, sequestration and recycling facilities as well as pervasive control networks, they claimed they were able to produce more energy than they used, and that they released no CO₂ and practically no hazardous waste, either in the air or in the ground.

That claim was, however, contested by a group of researchers who showed how such a result was, in part, achieved by outsourcing polluting activities to other parts of the world. In fact, several public universities (usually the poorer ones, in an educational system that had become highly competitive) had become a networked locus of intellectual dissidence. While trying to contribute alternative voices to scientific and political discussions in the North, they also (prudently, since the careless disclosing of

scientific research results could get you into jail) networked with colleagues in the South in order to facilitate the circulation of knowledge.

Openings

Around 2025, these initiatives started to bear fruits. In a visibly coordinated manner, researchers in India, China and Chile produced interesting breakthroughs in renewable energies as well as high-yield, low-input genetically modified crops and livestock. India immediately announced its intention to lead a «3rd Green Revolution» and to share it with other emerging countries. Western corporations did try to contest these discoveries, claiming that they infringed on the thousands of patents that they had been filing over the previous decades, but the move was well prepared in legal and diplomatic terms. And it was difficult to argue that this was not what Kyoto IIb was (at least officially) all about! Meanwhile, the first generation of «enhanced» soldiers, policemen, firemen and top executives of 2025-2025 started showing odd pathological patterns. Biotech and health-oriented nanotech in the North became even more state-controlled and subject to prior testing, and some information was allowed to circulate more freely. Not all countries were ready for that, though: the authorization of private-purpose human gene editing by the US, Japan and Korea in 2027 met with fear and awe in the rest of the world.

The geospheres of influence were becoming larger, more intertwined and therefore, somewhat looser. The US rediscovered its link with South America, the EU – now depleted from some of its eastern member-states, and much more politically unified – with Africa, while Japan renewed its ties with Southeast Asia despite grumblings from a weakened (but still mighty) China.

Faces with the prospect of becoming irrelevant after a period where it had become both the global watchdog and the last forum for cooperation in a conflicting world, the UN decided to reinvent itself. It created an official Corporate Chamber and another for regions and cities. States protested, but they were quickly shut down by the firms and the metropolises who were their real nervous system. Even the hacktivists that had kept the Internet more or less open during all those years were given official UN recognition as members of the «Civil Society». What this new UN would be able to do, no-one really knew; but it certainly reflected what the world had become in a more faithful way.

By 2030, the world economy was closer to sustainability than it had been for a century. It was also slowly moving away from a situation of permanent conflict and major existential risks. But there were still dangers. Sustainability had been achieved first by maintaining billions of people in poverty, and then only, and only partially, by technical and organizational progress. Larger than ever economic and political ensembles were vying for power, with economic and military means larger than those of any individual country except the USA. Corporations had become an almost autonomous power, even able to muster military force. Biotech had generated the means to produce cheap and very lethal weapons. The younger generations in the North and (even more) in the South were growing restless at the sight of a world ruled by a powerful caste of older and older people.

The world had succeeded in wresting itself away from global environmental collapse. It now had to build itself as a pleasant place to be.