

Globalization and related issues

1. **The standing ovation problem.** Example that involves thoughtful and interacting agents in time and space and thereby captures basic features of complex adaptive social systems: learning, heterogeneity, incentives, networks... A public event has taken place before an audience: a university lecture, a musical concert, a play in a theatre, a basketball game, a political meeting... Then the audience starts applauding. The question is: for how long is the ovation to be sustained? At any point during the ovation, will it continue or end? The complexity of the problem comes from the fact that members of the audience in general do not decide to stand and applaud independently of what the other members choose to do: a seated attendant being surrounded by enough standing people is more likely to join the ovation and also stand (for several possible reasons: do justice to a good performance, avoid feeling awkward, accept the majority's opinion, possibly despite your own, that the performance deserves recognition...).
2. **Diffusion processes and S-shaped curves.** The standing ovation problem can be analyzed as a diffusion problem, like the spread of new technologies or commodities. A typical result in diffusion models is that an S-shaped curve fits the number of agents joining others in taking a certain action. Initially, the group of people taking the action is small. The size of the group goes larger. After the group reaches a certain size, the group begins to shrink until it eventually becomes empty. The life cycle of many products also conforms to an S-shaped curve. Is the spread of globalization also S-shaped?

Miller, John H.; Scott E. Page (2004): "The Standing Ovation Problem," Complexity

3. **El Farol bar problem.** 100 people must decide independently whether to go to a bar for entertainment. The stay is enjoyable if fewer than 60 come to the bar. Hence, a possible attendant chooses to go if he expects fewer than 60 to show up and refrains from going if at least 60 are expected to be present at the bar. The problem is that there is no correct model to define expectations; in fact, any such model is self-invalidating. For instance, if all believe that few will go, all will go and that will prove the belief incorrect; if all believe that the bar will be overcrowded, nobody will go, again invalidating the initial belief. All prophecies are self-defeating. This problem illustrates the difficulties of analyzing complex adaptive systems. It is an example of a minority game, where rewards accrue to a minority (political science focuses instead on majority games).

Arthur, W. B. (1994): "Inductive reasoning and bounded rationality," American Economic Review 84(2), 406-411.

4. **The Malthusian law: humanity cannot defeat nature.** Thomas Robert Malthus (1766–1834) put forward the thesis that population growth is (at least eventually) faster than agricultural growth (food production) and that, in fact, population tends to increase beyond the numbers that can be fed. This thesis questioned the sustainability of an increasing population. As a result of the different potential capacity of population and food supplies to expand, a continued population growth will be negatively checked by food shortages, poverty, deprivation and diseases. Hence, if population is not positively checked (measures that reduce fertility), its growth will come to an end through famine (insufficient food supply). Malthus did not see in technological progress an escape from this law: increases in population are always dangerous and stimulated by increasing prosperity, so technological improvements merely increase the size of population checked down by famine. A modern, environmental version of the Malthusian law is that population growth is, by necessity, limited by the natural environment.
5. **The Malthusian view.** By extension, a Malthusian view can be defined according to which population (population growth, specifically) is the source of all problems. A continued population growth will worsen existing problems and generate new ones. According to Robert May (1993), "the continuing growth of human populations (...) is the engine that drives everything."
6. **Kenneth Boulding's theorems on population.** (1) **The Dismal Theorem.** If the only ultimate check on the growth of population is misery, then the population will grow until it is miserable enough to stop its growth. (2) **The Utterly Dismal Theorem.** Technical improvements can only relieve misery temporarily: since, by The Dismal Theorem, misery will ultimately check population, the final result of any technical improvement

is increase the amount of people that will live in misery and, accordingly, the total amount of human misery. (3) **The Moderately Cheerful Form Dismal Theorem.** If misery and starvation is not the only way to keep a prosperous population in check, population does not have to grow until it is miserable and starves, so it can be stably prosperous.

7. **Bartlett's Laws of Sustainability.** (1) "Population growth and/or growth in the rates of consumption of resources cannot be sustained". (2) "The larger the population of a society and/or the larger its rates of consumption of resources, the more difficult it will be to transform the society to a condition of sustainability". These two laws imply that the concept of sustainable growth is an oxymoron.
8. **Law of multiple opinions.** "For every PhD there is an equal and opposite PhD." (Albert A. Bartlett)
9. **Walt Disney's First Law.** "Wishing will make it so." (A. A. Bartlett). A variation, in the form of a Ponzi-type motto, is: "We can grow our way out of the problems." An example: Julian Simon's (1995) claim that "Even if no new knowledge were ever gained (...) we would be able to go on increasing our population forever."

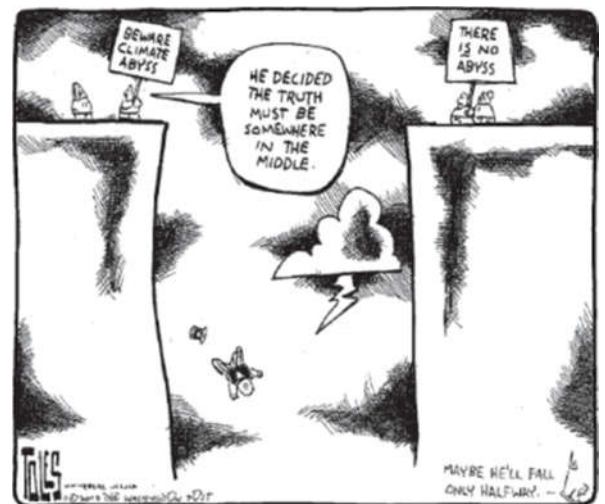
Bartlett, Albert A. (1998): "Malthus marginalized : The massive movement to marginalize the man's message," *The Social Contract*, 239-252

Boulding, Kenneth (1971): "Foreword to T. R. Malthus, *Population, The First Essay*," in *Collected Papers*, Vol. II, Colorado Associated University Press, Boulder, pp. 137-142.

Bartlett, A.A., (1994), "Reflections on sustainability, population growth, and the Environment," *Population & Environment*, Vol. 16, No. 1, September 1994, pp. 5-35.

10. **Global environmental threats: ozone depletion.** The stratospheric ozone layer (acting like a sunscreen) absorbs the portion of the ultraviolet light (UV-B radiation) that is harmful to most life on Earth (UV-B radiation cause damage to eyes, skin, genetic material, the immune system...). Excessive UV-B exposure is likely to compound its effects on the ecosystem with other global environmental threats: global warming, ocean acidification and pollution. The 2008 Antarctic ozone hole was one of the largest and most long-lived. The biggest ozone hole over the Arctic occurred in 2011.

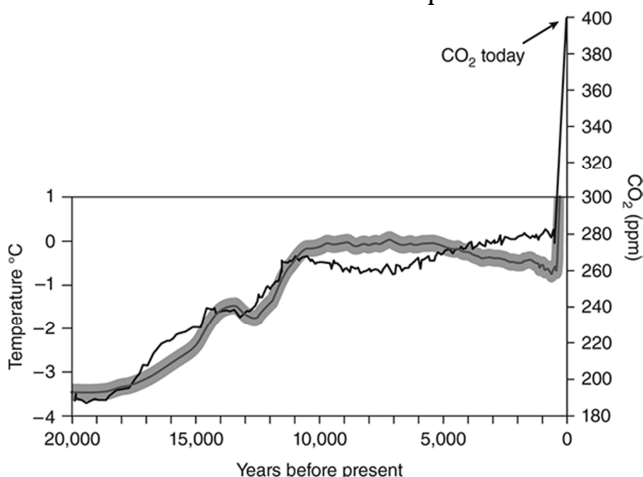
Abbasi, S. A.; Tasneem Abbasi (2017): *Ozone hole: Past, present, future*, Springer, New York.



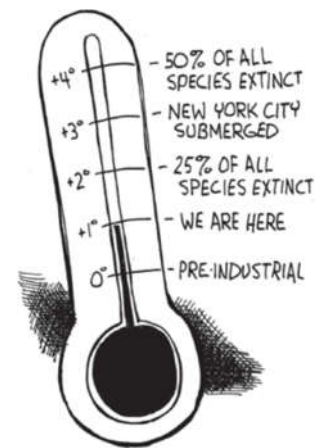
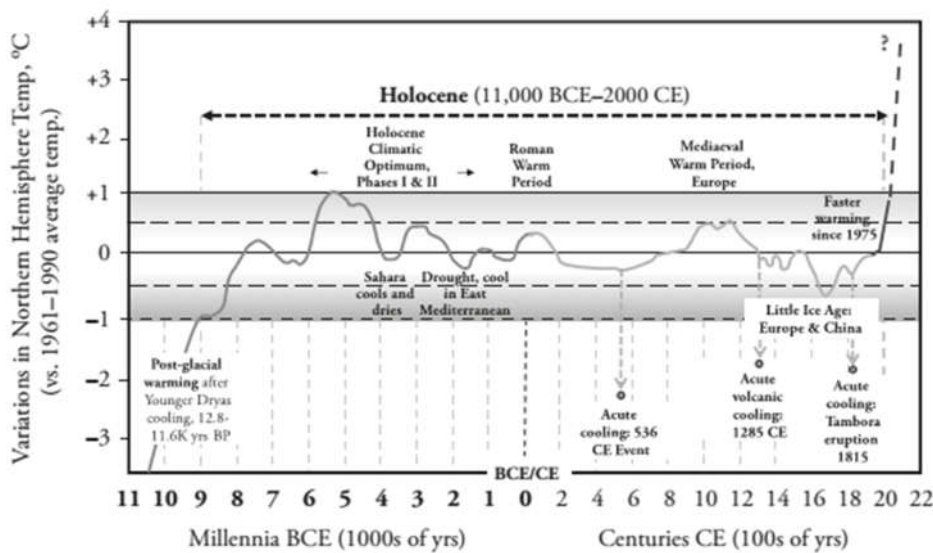
11. **The virtue is not always on the middle ground.** On certain debates that rely on matters of fact and objective information (like climate change) supporting the view that there are two equal sides implicitly justifies bad-faith skepticism (skepticism that does not intend to improve understanding of reality and

that simply claims that it is legitimate to doubt about everything).

Regarding the issue of whether climate change is human-caused, the weight of the sides (publishing scientists) is something like 97% against 3%.

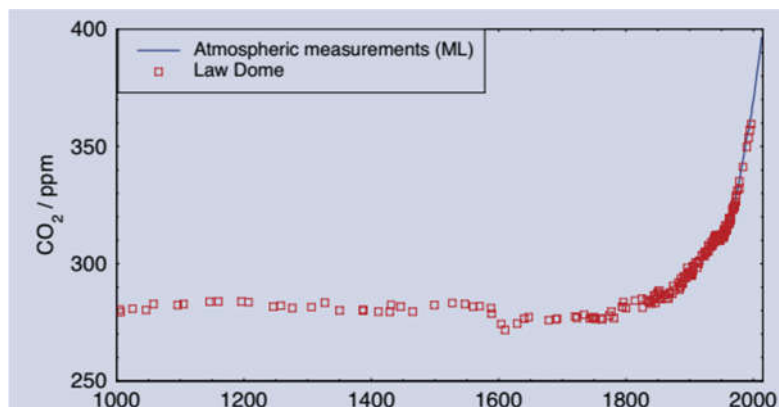


12. **The hockey stick curve.** It is a graph depicting temperature trends in the last millennium. It shows the unprecedented nature of modern global warming. The scientific community has reached a general consensus that climate change is real (it is actually occurring), caused by the activity of human beings and already a problem.



13. **CO₂ emissions.** Human activity generates more than 30 billion tons of CO₂ pollution per year. Averaging the weight of a human being at 70 kg, these 30 gigatons are equivalent to the weight of 428,5 billion people. So the annual weight of CO₂ emissions is some 60 times the total number of people on the Earth.

14. **Ecological footprint.** The ecological footprint is an estimate of the amount of resources, production, consumption and waste used by an individual. Its units are planet units: the number of planet Earths needed if every individual lived the way the individual lives. This footprint is growing. Total human demands exceeded Earth's biocapacity around 1980. Currently the demand requires the equivalent biocapacity of 1.5 Earths to

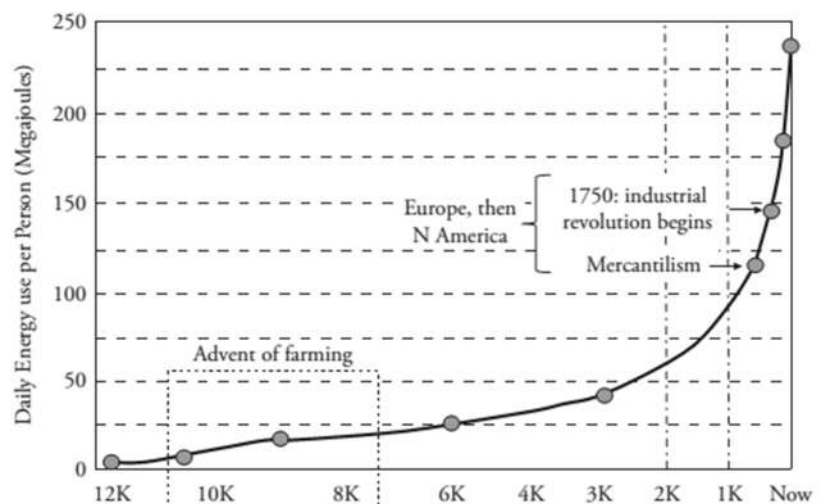


every individual lived the way the individual lives. This footprint is growing. Total human demands exceeded Earth's biocapacity around 1980. Currently the demand requires the equivalent biocapacity of 1.5 Earths to feed, provide materials, regenerate, self-replenish and absorb wastes.

15. **Energy use.** At the onset of the agricultural revolution (some 10,000 years ago) farmers used 20 megajoules of energy (physical labor) daily. The average North American now operates daily on at least 1,000 megajoules. The current global average is around 250 megajoules.

16. **Has humanity been climately fortunate?**

During the Holocene, the last 12,000 years, the global climate has been relatively constant. Average global surface temperature: 15 C. Regional decadal- average temperatures rarely have exceeded 2 C. In Europe, temperatures between the peak Medieval Warm and the Little Ice Age nadir differed by some 1.5 C. So the trajectory of the world economy since the agricultural revolution has been blessed by a (extraordinary?) stable global climate. How much could this lucky conditions last? Now, humanity faces changes in the global climate greater and faster than anything in recorded human history. The world may be heading towards an average global warming of up to 4 C during the 21st century.



17. **Message on Climate Change to World Leaders.** "Human-induced climate change is an issue beyond politics. It transcends parties, nations, and even generations. For the first time in human history, the very health of the planet, and therefore the bases for future economic development, the end of poverty, and human wellbeing, are in the balance. If we were facing an imminent threat from beyond Earth, there is no doubt that humanity

would immediately unite in common cause. The fact that the threat comes from within —indeed from ourselves— and that it develops over an extended period of time does not alter the urgency of cooperation and decisive action.” Signed by over 4,000 scientists worldwide, July-August 2014.

Mann, Michael E.; Tom Holes (2016): *The madhouse effect: How climate change denial is threatening our planet*, Columbia University Press, New York

Maslin, Mark (2014): *Climate change: A very short introduction*, Oxford University Press, Oxford, UK.

McMichael, Anthony J.; Alistair Woodward; Cameron Muir (2017): *Climate change and the health of nations: Famines, fevers, and the fate of populations*, Oxford University Press, New York.

National Academy of Sciences; The Royal Society (non-dated): *Climate change: Evidence and causes*.

Westergård, Rune (2018): *One planet is enough: Tackling climate change and environmental threats through technology*, Cham, Switzerland.

18. **The Shock Doctrine.** How do societies respond to extreme shocks, like wars, natural disasters, economic crises, epidemics, terrorism? Naomi Klein contends that, in the last decades, corporate interests have exploited episodes of crisis to the advantage of a small elite. This has been achieved by promoting and supporting policies beneficial to the elite (privatization, deregulation, social spending cuts...) and by restraining civil liberties and rights. Klein claims that climate change is another opportunity to apply the shock doctrine: instead of seeing the implementation of measures to address the cause of the problem, we should expect the climate change crisis to be exploited to transfer more benefits and privileges to the top 1%. For instance, financial investors will use this opportunity to gamble on possible futures; insurance companies will devise and sell new protection schemes to the potential victims of the crisis; commons privatized; new markets will arise (markets for carbon credits) to exploit lucratively a potentially disastrous situation... No opportunity to profiting from disaster will be missed.

Klein, Naomi (2014): *This changes everything: Capitalism vs. the climate*, Simon & Schuster, New York.

Klein, Naomi (2007): *The shock doctrine: The rise of disaster capitalism*, Metropolitan Books, New York.

19. **The Tragedy of the Commons: “freedom in a commons brings ruin to all”.** It is parable questioning the idea that unregulated markets yield socially good outcomes: self-interest is eventually inconsistent with social stability. The tragedy applies to the exploitation of a free resource (a common), like a pasture. Self-interest compels every herdsman to maximize the cattle on the pasture. But if a sufficiently large number of herdsmen develop the same strategy of increasing the herd without restrictions, the pasture will be exhausted and all the herdsmen will be ruined for trying to take too much from the pasture. Hence, a commonly owned and freely accessible resource tends to be depleted when it is exploited by a sufficiently large number of people. Infinite demands are not consistent with a finite and fragile supply. The logic of the tragedy of the commons seems to explain resource depletion and environmental degradation: taking without concern for preservation (the present matters more than the future).

Hardin, Garrett (1968): “The tragedy of the commons,” *Science* 162(3859), 1243-1248.

Machan, Tibor R. (ed) (2001): *The commons: Its tragedies and other follies*, Hoover Institution Press, Stanford, CA.

20. **The Marshmallow Test.** In the test children are given a choice between one immediate gratification (a marshmallow) or a larger reward (two marshmallows) that requires having to wait, alone, with the smaller reward freely available, for up to 20 minutes. Researchers have observed how children struggled to restrain themselves trying to avoid taking the immediate gratification. They have discovered that the ability to resist temptation and persevere for a larger delayed gratification is a good predictor for faring better in life: those exhibiting high delay (more self-control) tended to be more able to achieve long-term goals, consume less drugs, attain higher education levels, have a lower body mass index, be more resilient and adaptive, cope better with frustration and stress, and be better at maintaining close relationships.

Mischel, Walter (2014): *The Marshmallow Test: Mastering self-control*, Little, Brown and Company, New York.

21. **The bottom billion.** “The real challenge of development is that there is a group of countries at the bottom that are falling behind, and often falling apart. The countries at the bottom coexist with the twenty-first century, but their reality is the fourteenth century: civil war, plague, ignorance. They are concentrated in Africa and Central Asia, with a scattering elsewhere”.

22. **Development traps.** The existence of development traps is denied by the right: good policies allow any country to escape poverty. The left consider these traps a by-product of global capitalism. Collier (2007) identifies four such traps: the conflict trap (civil war and coups), the natural resources trap, the trap of being landlocked with bad neighbors, and the trap of bad governance in a small country. No trap is inescapable but globalization has made it more difficult to use the global market to escape from them: to take advantage of globalization, an economy should be sufficiently developed (“strong”) and the problem of the economies trapped is that they are insufficiently developed (“weak”). There is then a vicious circle: a country is underdeveloped by some trap because it cannot join properly the globalization process, and it cannot join the process because of the country is underdeveloped. In 2006, according to Collier (2007), there were 58 trapped countries, with around 980 million people living there. The typical feature of these countries is being small.

Collier, Paul (2007): *The bottom billion: Why the poorest countries are failing and what can be done about it*, Oxford University Press, New York.

Reinert, Erik S. (2011): “Review of The bottom billion by Paul Collier,” *Journal of Global History* 6(1), 156-158.

23. **Why is not all the world developed?** Easterlin (1981) views the spread of modern economic growth as depending on the diffusion of knowledge of new production techniques, whose acquisition and application of this knowledge has depended on the extent to which the population has acquired the traits and motivations that formal schooling provides. In turn, political conditions and ideological influences seem to have determined in the past the implementation of modern education systems. Easterlin (1988) attributes the insufficient diffusion of technology to the lack of appropriate institutions (social capabilities).

24. **Will all the world become developed?** “This, then, is the future to which the epoch of modern economic growth is leading us: a world in which ever-growing abundance is always outpaced by material aspirations, a world of increasing cultural uniformity. (...) The proximate roots of the epoch of modern economic growth lie in the growth of science and diffusion of modern education”.

25. **The Easterlin (happiness-income) paradox.** The paradox is that empirical studies indicate that happiness (subjective well-being) increases with income at a point in time but, over time, this relationship disappears: the average level of happiness is unrelated to economic development. Easterlin’s (1998) explanation is that happiness is positively related to one’s income but negatively related to the income of the rest: you feel better off if your income rises when, for the rest, income remains constant; and you feel worse off if it is your income that remains constant while that of the rest goes up.

Easterlin, Richard A. (1981): “Why isn’t the whole world developed?,” *Journal of Economic History* 41(1), 1-19.

Easterlin, Richard A. (1988): *Growth triumphant: The twenty-first century in historical perspective*, The University of Michigan Press, Michigan, IL.

Stevenson, Betsey; Justin Wolfers (2008): “Economic growth and subjective well-being: Reassessing the Easterlin paradox,” *Brookings Papers on Economic Activity* 2008, 1-87

26. **Why is not all the world developed?** The prevalent view seems to be that poor countries do not escape poverty because they fail to absorb the technologies of rich countries (by lack of education, management skill, entrepreneurial tradition, appropriate institution, economies of scale necessary to implement advanced technologies...). Clark (1987) attributes poverty to the “inefficiency of low-wage labour” in poor countries. He explains that labour be comparatively less efficient in poor than in rich countries in terms of local culture and environment (sociological factors). This view would question the importance of technological change to explain development and high incomes.

Clark, Gregory (1987): "Why isn't the whole world developed? Lessons from the Cotton Mills," *Journal of Economic History* 47(1), 141-173.

Hanson II, John R. (1988): "Why isn't the whole world developed? A traditional view," *Journal of Economic History* 48(3), 668-672.

27. **Moore's law.** Expression that captures a technical observation regarding the development of digital electronics and computing. In 1965 Gordon E. Moore predicted that the number of circuit elements on a one square centimetre chip would double every 1.5 years: he prophesized that new methods would make microchips smaller, more reliable, less power hungry and cheaper. His prediction seems to have hold for more than fifty years: in effect, by shrinking transistors and putting more into a microchip, chips have become better, faster, less expensive and their use has spread. A general formulation of the law is that "the level of chip complexity that can be manufactured for minimal cost is an exponential function that doubles in a period of time". Economically speaking, the law states that technological evolution increases the number of components (hence, provides greater functionality) for the same cost. The exponential improvement of technology has not been limited to microchips, but also to the capacity of computer memories, the speed of data transmission and the number of pixels in digital photography. The question is for how long Moore's observation is going to hold: he himself said that "All good exponentials come to an end".

Thackray, Arnold; David C. Brock; Rachel Jones (2015): *Moore's Law: The life of Gordon Moore, Silicon Valley's quiet revolutionary*, Basic Books, New York.

Huff, Howard (ed) (2009): *Into the nano era: Moore's Law beyond planar silicon CMOS*, Springer, Berlin.

28. **Gaia theory.** It is the view that planet Earth is a self-regulating system consisting of the totality of living organisms, surface rocks, ocean and atmosphere theory. All these elements interact as an evolving system. The theory ascribes a goal to the system: the surface conditions on Earth are self-regulated to be favourable to preserve existing life. Earth system science developed from Gaia theory by retaining the view of Earth as a dynamic entity whose material and living parts are coupled and that self-regulates its climate and chemistry, but by rejecting the claim that self-regulation has the goal of habitability.

Lovelock, James (2000): *Gaia: A new look at life on Earth*, Oxford University Press, Oxford, UK.

Lovelock, James (2009): *The vanishing face of Gaia: A final warning*, Basic Books, New York.

Dawson, Jonathan; Ross Jackson; Helena Norberg-Hodge (2010): *Gaian economics: Living well within planetary limits*, Permanent Publications, Hampshire, UK.

29. **Thomas Friedman's flat world.** In Friedman's view, flatness of the world means that "more people can plug, play, compete, connect, and collaborate with more equal power than ever before". The flattening of the world is interpreted as an equalizing force: it empowers more people to "reach farther, faster, deeper, and cheaper than ever before". In a flatter world, power and opportunities are equalized, as people have more and better tools to exchange, compete and cooperate. In his opinion, "this flattening of the playing field is the most important thing happening in the world today".

30. **Thomas Friedman's triple convergence.** According to Friedman, the most important force shaping the world economically and politically in the 21st century is the triple convergence "of new players, on a new playing field (the flat world), developing new processes and habits for horizontal collaboration", the new players coming from outside the West and the new playing field being the flat world.

Friedman, Thomas L. (2007): *The world is flat: A brief history of the twenty-first century*, Picador, New York.

31. **Flat energy world.** A flat energy world is one where the availability and cost of energy does not vary significantly around the world. If energy is concentrated rather than scarce, there is the potential for the energy world to be flat. Since energy is a critical factor in economic growth and economic development, a flat energy world facilitates the world to become flat.

32. **Flatteners.** Forces that (apparently) flatten the energy world (“If you give enough time and money to an engineer, he will find a solution.”): offshore, ultra-deep-water and horizontal drilling; hydraulic fracturing (fracking: injection of water at high pressure to liberate trapped natural gas and oil); the energy broadband (a large network of oil and gas storage, pipelines, liquefaction and regasification plants, shipping, and logistical infrastructure; the energy broadband “wires” the energy world, just like fibre optics and cable wired oceans and continents during the internet revolution); globalization, industrialization and urbanization (these processes create an expectation of demand growth that stimulates a supply response)

Lacalle, Daniel; Diego Parrilla (2015): *The energy world is flat: Opportunities from the end of peak oil*, Wiley, Chichester, UK

33. **The world energy dilemma.** New technology has been so far successful in increasing the extraction of oil and natural gas worldwide. Yet, at the same time, the global crude supply has not been able to match an increasing global demand for oil. In addition, in a transition to renewable sources of energy is to occur, will the new energy methods become available and competitive (without government subsidies) soon or fast enough? The major worldwide energy dilemma we are is that, although the supply of oil currently appears to be sufficient, the margin of stability is small: the balance could be easily and quickly broken by an unexpected event (accident, war, terrorist attack). The world economy does not seem to be set in conservation of energy mode.

34. **Big energy questions.** (1) Since energy demand has been globalized, will there be enough energy to satisfy demand in an expanding world economy? (On average, a person in the developed countries uses 14 barrels of oil per year; in the developing countries, 3.) (2) At what cost? (3) With which technologies? (4) How are these technologies going to affect the environment? (5) What will be impact of the environment, and environmental considerations, on the world energy system? (6) How can the world energy system be protected from security threats, crisis and supply disruption? (7) Will the eventual energy transition smooth? The necessary investment made timely? Policies wisely implemented?

Powers, Louis W. (2012): *The world energy dilemma*, PennWell, Tulsa, Oklahoma.

Yergin, Daniel (2011): *The quest: Energy, security, and the remaking of the modern world*, Penguin, New York.

35. **The resource curse thesis (paradox of plenty).** This thesis is based on the observation that many resource-rich countries have become development-poor. More specifically, the evidence indicates that (i) resource-rich countries fail to benefit from a favourable endowment and (ii) that they may actually perform worse than less well-endowed countries. The discovery of natural resources (minerals, oil, natural gas) in a developing country is both potentially beneficial and potentially calamitous. The curse is that, for low- and mid-income levels of development, having a rich natural resource endowment may not be beneficial for the country as a whole. The revenue obtained by selling the resources (windfall income) tends to be misused or appropriated by the political or economic elites instead of delivering a better life to the majority. The discovery naturally generates in the general population expectations of improvement; when these expectations are not satisfied, social instability is the most likely outcome. Examples of countries faring well the extraction of minerals and hydrocarbons are Australia, Botswana, Canada, Chile, Norway: high-income countries appear to be less affected by the curse. Examples of the opposite, Bolivia, Chad, Equatorial Guinea, Gabon, Libya, Mongolia, Nigeria and Venezuela.

36. **Empty/uselessness analysis?** The fashionable reply (by economists) to the question of why a poor country does not develop (or why a developing country does not make good use of a sudden windfall) is that “good institutions” are lacked. This analysis is unhelpful: it is like recommending a student that failed to pass an exam that he should get higher marks (the problem is rephrased and presented as its own solution).

Acar, Sevil (2017): *The curse of natural resources: A developmental analysis in a comparative context*, Palgrave Macmillan, New York.

Auty, Richard M. (1993): *Sustaining development in mineral economies: The resource curse*, Routledge, London.

Moss, Todd; Caroline Lambert; Stephanie Majerowicz (2015): *Oil to cash: Fighting the resource curse through cash transfers*, Center for Global Development, Washington DC.

van der Ploeg, Frederick (2011): "Natural resources: Curse or blessing?," *Journal of Economic Literature* 49(2), 366-420.

37. **A conflictual view of globalization.** Globalization is the expression of the global war for wealth and its associated struggle for political and ideological dominance. Globalization is not a win-win situation but a zero-sum game. That is why the rise of India and China is seen with fear rather than welcomed.
38. **The (relative) decline of the West.** The rise of India and China signals the end of Western dominance, heralded in the recent past by the rise of Japan and the subsequent success of the Four Dragons (Singapore, Hong Kong, Taiwan, and South Korea) and consolidated by the most recent wave of industrializing Asian economies (the Four Tigers: Thailand, Philippines, Indonesia and Malaysia). Globalization is displacing the economic and political focus from the West to the East: Asia's rise is the West's descent. Indicators of this descent are the increasing unemployment and the growing public debt in Europe and, in the US, trade deficits, government debt and consumer debt levels together with bigger risks of an unstable dollar.
39. **The world created by globalization is not flat.** Two versions of global capitalism coexist anarchically. One is exploitative, dominated by low wages, lack of workers' rights and no concern for the environment. The other, characterized by higher wages and protection to workers and the environment.
40. **Seven fallacies of the globalization debate (Steingart, 2008).** (1) The natural progression for a developed economy is to move from an industry-based to a service-based economy. In fact, industrial work is merely shifting to Asia. (2) Economics and morals have nothing in common. The way commodities are produced and services provided is not a merely technical question, but is subject to moral judgment. (3) The new world is flat. There is a dark side in free trade: when the West imports goods from Asian economies, their labour and environmental unfair practices are imported as well and this endangers jobs in the West. Trade is politics and the political world is not flat. (4) Globalization is a tide that lifts all boats. Even if this is the long run outcome, globalization is so far delivering asymmetric results: upper classes benefit comparatively more than the rest. (5) Globalization creates peace. Conflict persists but now the struggle is conducted on the economic field (it can be interpreted that the US won thus the Cold War). Increasing economic interdependence does not prevent military conflict (as the First World War illustrates). (6) Governments can no longer take care of their people. Politicians tell that globalization is omnipotent, a force of nature that has weakened the power of states, when it is them who have chosen to relinquish or not make use of that power ("Arguing against globalization is like arguing against the laws of gravity." Kofi Annan). The rise of China was a political not a market project: it was the achievement of politicians, not market forces. It is not Big but Smart Government what is needed. (7) Globalization is a hot issue. Globalization should be subject to anyone's scrutiny, not something outside our comprehension or control. Democracy means taking control of, or at least shaping, history. "The challenge is to figure out how to ensure that globalization serves the people," not the other way round.
41. **The world is broken.** Globalization is not flattening the world, but mismanaging it. (1) The world is for sure not flat for workers. Globalization has created a global labour market dominated by a race to the bottom in salaries and a loss of power of the workers' associations. Jobs migrate to the lowest bidder. Current globalization has for the first globalized the markets for all the factors of production: capital, labour, energy and raw materials. Many of the unpleasant features of globalization stem from connecting economies which are significantly different (the West and the Rest). Globalization avoided those features when it involved more similar economies (Europe and North America during the Golden Age, 1945-1975). (2) The national welfare state is in retreat, leaving people more vulnerable to the adverse effects of globalization and benefiting a few (or a larger part of the population but insufficiently). (3) The great knowledge transfer. This transfer is allowing developing countries to move from agriculture to services without going through industry. That means that the rich countries cannot rely on the presumption that only low-paid, unskilled, routine (blue-collar) jobs could go abroad: white-collar workers will be the victims of the next great wave of offshoring. (4) Capitalism is not just exploitative of labour, but also the natural resources. "China, the country

with the most impressive growth rates in recent years, also tops the list of countries with little respect for their people and environment". (5) Benefits are asymmetrically distributed: "It's like being in a crowded lifeboat. Only if one of the passengers jumps into the water can the other nine survive." (Jagdish Bhagwati)

Steingart, Gabor (2008): *The war for wealth: The true story of globalization, or why the flat world is broken*, McGraw-Hill, New York.

42. Success in development seems to require a convergence of interests between economic and political elites. The economic elite (top class of entrepreneurs, financial technocrats, owners of top firms) contributes to the alliance economic prosperity, which helps the political elite gain enough support among the population. The political elite creates the institutional and legal framework allowing the economic elite to exploit their economic privileges. As long as both elites perform their assigned tasks with sufficient competence, the pact between them will remain robust and last. Success follows from the imbrication between private and public sectors/interests.

43. The alliance/convergence between political and economic elites favours the political status quo. (1) Economic elites may not be interested in political change if they are already the main beneficiaries of economic policy or policy reforms. (2) The economic elite may be satisfied with the achievements of the existing political elite (safe and stable political and social environment). (3) The form the political system takes (autocracy, democracy) is not an end in itself but a means to obtain certain goals (internal unity and stability, external power and influence). If they are achieved with a specific political system, why change it?

44. Negative consequences of economic development. (1) Some regions, provinces, municipalities, individuals... profit more than others from the development and disparities/divergences arise (and perhaps consolidate). (2) Negative externalities (environmental deterioration, water shortages, air pollution, soil erosion, desertification). (3) Layoffs forced by competition, that increase unemployment, poverty and petty crimes. (4) Social services previously provided by public institutions may pass to the hands of private institutions (loss or deterioration of the social safety net).

Urio, Paolo (2010): *Reconciling state, market and society in China: The long march toward prosperity*,

45. Chimerica: are the US and China a unique economy that is reshaping the world economy? Over the last two decades, China and the US have become one integrated hypereconomy: Chimerica. China is the largest creditor of the US. The US runs a massive foreign deficit (trade imbalance), in part due to its big spending on Chinese products. But demand by Chinese consumers also make US factories thrive: US companies have extraordinarily benefited from the growth of China. For the first time it appears that the two most important economies in the world are strongly interdependent. What will occur when that interdependence be broken? Ferguson (2011) argues that it cannot persist in its present form (the Chinese renminbi has to be revaluated).

46. There's an inherent tension between what is best for markets and what is best for states. Much of modern history illustrates that tension. States have traditionally tried to control markets (commerce) as a way to increase their power. But thriving, successful, expansionary markets undermine state power. The US seems to have relaxed more the control of markets. China's approach has consisted in exerting a tighter control on markets: Chinese growth has been built on a combination of state intervention, big spending on big projects, restricted entrepreneurial activity, insufficient innovation, and limited individual consumption. China's experience indicates that the formula for economic success need not be unique.

47. A conjecture. There is no general, lasting confluence of interests between the general population, the political elite and the economic elite.

Karabell, Zachary (2009): *Superfusion: How China and America became one economy and why the world's prosperity depends on it*, Simon & Schuster, New York.

Ferguson, Niall; Moritz Schularick (2011): "The end of Chimerica," *International Finance* 14(1), 1-26.

48. **Global forces.** There are at least four forces/events that, in the last decades, have been shaping the future. They are listed next in terms of the time involved in their development. (1) **The fall of the Soviet Union.** This left the US without a global challenger to its hegemony. (2) **Globalization.** In part facilitated by (1), global networks of almost everything have been created or expanded: goods, money, people, information, communication. (3) **The rise of China.** China's rise shows that development is a coevolutionary process between state and markets in which each interacts and adapts to the other. Neither growth nor good governance comes first. Markets may/should start operating with weak institutions but, in exchange, adaptability, flexibility, improvisation and experimentation have to be accepted, promoted and rewarded. (4) **A global demographic shift.** Over the last five decades most countries have experienced a baby boom followed by a baby bust. The result is that, for the first time, the average age of population has been rising. There is no past experience of a society consisting of an aging population.

Shapiro, Robert J. (2008): *Futurecast: How superpowers, populations, and globalization will change the way you live and work*, St. Martin's Press, New York.

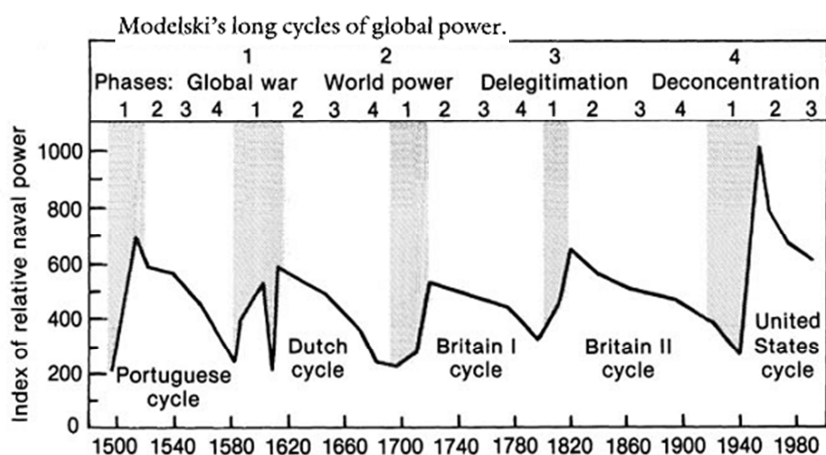
Yuen Yuen Ang (2016): *How China escaped the poverty trap*, Cornell University Press, Ithaca and London.

49. **Do nations have life cycles?** Kindleberger (1996) suggests the notion of a national life cycle, in which a country's 'vitality' waxes and then wanes, at which point its economic primacy is taken by another country. For 'the West', he identifies the succession

Italian city-states (Venice, Genoa...) → Portugal/Spain → Low Countries → Great Britain → US.

50. **Cardwell's law.** No country has been at the forefront of technological progress for more than two or three generations. The diversity and multiplicity of players in Europe since the fall of the Roman empire appears to have defined a favourable environment for the replacement of leading or hegemonic countries. The outcome of renewed leadership has been a continuous growth of technology for at least a couple of centuries.

Kindleberger, Charles P. (1996): *World economic primacy, 1500-1990*, Oxford University Press, New York.



51. **Has Western dominance ended?** After the fall of the Soviet Union it appeared that the Western way (liberal democracy, capitalism and secular nationalism) had no obstacle to become universalized. Kupchan (2012) holds that this is not going to occur, because the Western way is dependent on socio-economic conditions unique to Western countries. He also contends that no other political model or centre is going to displace it. His prediction is that the world will be multipolar (without a clear hegemon) and politically diverse, consisting of major powers with different political conceptions.

52. **Capitalism does not imply democratization.** Political authoritarianism has survived in an age of capitalist globalization in part because it has presented itself as guarantor of domestic and international marketization. It is claimed that an oppressive state is needed to conduct the unpopular policies required to respond to the shock that represents economic liberalization. Globalization appears to strengthen dictatorial regimes and the illiberal policies pursued by democracies. The paradox is that "the more economically liberal a country becomes, the greater its reliance on authoritarianism seems to be across contexts" (Bloom, 2016).

Bloom, Peter (2016): *Authoritarian capitalism in the age of globalization*, Edward Elgar, Cheltenham, UK.

Kupchan, Charles (2012): *No one's world: The West, the Rising Rest, and the coming global turn*, Oxford University Press, New York.