

PATHWAYS TO A MORE RESILIENT ECONOMY

Following The Pandemic, The Redesign Of Economies, Businesses, And Lives Must Begin With Questions About Purpose

When complex systems come to catastrophes, i.e. critical points of instability, they re-emerge in distinctly new forms, according to the science of complex systems. The COVID-19 global pandemic is a catastrophe, both for human lives and for economies. Economists cannot predict in what form the economy will emerge from it.

Machines do not have the capacity for emergence. Once built, their capabilities inevitably reduce with increasing entropy. On the other hand, living systems evolve and acquire new capabilities over time. Fritjof Capra and Pier Luigi Luisi point out in *The Systems View of Life: A Unifying Vision* that among all living species, humans have a special ability. Only humans consciously develop new concepts, new scientific ideas, and new language in their search for new visions. Institutions of governance are human inventions for directing human endeavours and for providing stability. Thomas S. Kuhn explained in *The Structure of Scientific Revolutions* why new ideas are invariably resisted by prevalent power structures in societies. The scientific establishment determines which ideas are worthy of admission. The King's advisers do not want outsiders to dilute their influence in the court. The Establishment resists change. Therefore, fundamental reforms of ideas and institutions in human societies are always difficult, until a crisis.

Challenging principles

The COVID-19 catastrophe has challenged the tenets of economics that have dominated public policy for the past 50 years. Here are seven radical ideas emerging as pathways to build a more resilient economy and a more just society.

- (i) "De-Growth". The obsession with GDP as the supreme goal of progress has been challenged often, but its challengers were dismissed as a loony fringe. Now, Nobel laureates in economics (Joseph Stiglitz, Amartya Sen, Abhijit Banerjee, Esther Duflo and others) are calling upon their profession to rethink the fundamentals of economics, especially the purpose of GDP. A five-point 'de-growth' manifesto by 170 Dutch academics has gone viral amidst the heightened Internet buzz during the lockdown. Goals for human progress must be reset. What should we aspire for? And how will we measure if we are getting there?
- (ii) Boundaries between countries are good. Boundary-lessness is a mantra for hyper-globalizers. Boundaries, they say, impede flows of trade, finance, and people. Therefore, removing boundaries is good for global growth. However, since countries are at different stages of economic development, and have different compositions of resources, they must follow different paths to progress. According to systems' theory, sub-systems within complex systems must have boundaries around them, albeit appropriately permeable ones, so that the sub-systems can maintain their own integrity and evolve. This is the explanation from systems science for the breakdown of the World Trade Organization, in which all countries were expected to open their borders, which caused harm to countries at different stages of development. Now COVID-19 has given another reason to maintain sufficient boundaries.
- (iii) Government is good. Ronald Reagan's dictum, "Government is not the solution... Government is the problem", has been up-ended by COVID-19. Even capitalist corporations who wanted governments out of the way to make it easy for them to do business are lining up for government bailouts.
- (iv) The "market" is not the best solution. Money is a convenient currency for managing markets and for conducting transactions. Whenever goods and services are left to markets, the dice is loaded against those who do not have money to obtain what they need. Moreover, by a process of "cumulative causation", those who have money and power can acquire even more in markets. The "marketization" of economies has contributed to the increasing inequalities in wealth over the last 50 years, which Thomas Piketty and others have documented.

Justice and dignity

- (v) "Citizen" welfare, not "consumer" welfare, must be the objective of progress. In economies, human beings are consumers and producers. In societies, they are citizens. Citizens have a broader set of needs than consumers. Citizens' needs cannot be fulfilled merely by enabling them to consume more goods and services. They value justice, dignity, and societal harmony too. Economists' evaluations of the benefits of free trade, and competition policy too, which are based on consumer welfare alone, fail to account for negative impacts on what citizens value.
- (vi) Competition must be restrained: Collaboration is essential for progress. Faith in "Darwinian competition", with the survival of only the fittest, underlies many pathologies of modern societies and economies. From school onwards, children are taught to compete. Companies must improve their competitive abilities. Nations too. Blind faith in competition misses the reality that human capabilities have advanced more than other species' have, by evolving institutions for collective action. Further progress, to achieve the Sustainable Development Goals for example, will require collaboration among scientists in different disciplines, and among diverse stakeholders, and collaboration among sovereign countries. Improvement in abilities to share and govern common resources have become essential for human survival in the 21st century.
- (vii) Intellectual property belongs to the public. The earth's resources must be conserved. We are living in an era of knowledge. Just as those who owned more land used to have more power before, now those who own knowledge have more power and wealth than the rest. Intellectual property monopolies are producing enormous wealth for their owners, though many were developed on the back of huge public investments. Moreover, powerful technologies can be used for benign or malign purposes. It is imperative to evolve new institutions for public ownership of technologies and for the regulation of their use.

Purpose of enterprises

The paradigm shift necessary after the crisis will not be easy. There will be resistance to shifts in social, economic, and political power towards those who have less from those who have more within the present paradigm.

The financial crisis of 2008 was a crisis of liquidity in the system. Recovery was achieved by putting more fuel into the system. The system then moved on; in basically the same shape it was before. COVID-19 has revealed structural weaknesses in the global economy. Putting fuel in the tank will not be sufficient. The vehicle must be redesigned too. While global attention understandably is focused on relief and recovery, this is the time to design for resilience.

The economic system cannot be redesigned by domain experts devising solutions within their silos. Such as, trade experts recommending new trade policies, intellectual property experts recommending reforms of intellectual property rights, and industry experts recommending industry policies. All the pieces must fit together. Most of all, they must fit into the new paradigm, which will be very different to the one in which the experts had developed their domain knowledge.

Innovations are required at many levels to create a more resilient and just world. Innovation is essential in the overall design of the economy. Innovations will be required in business models too, not just for business survival but also to move businesses out of the 20th century paradigm that "the business of business must be only business". Changes will also be necessary in our life patterns, our work and consumption habits, and in our personal priorities.

The redesign of economies, of businesses, and our lives, must begin with questions about purpose. What is the purpose of economic growth? What is the purpose of businesses and other institutions? What is the purpose of our lives? What needs, and whose needs, do institutions, and each of us, fulfil by our existence?

Meanings of Difficult Words:

1. **resilient** (adjective) – strong, sturdy, stout/well built, durable.
2. **pandemic** (noun) – the worldwide spread of a new disease; The illness spreads around the world and typically affects a large number of people across a wide area.
3. **catastrophe** (noun) – disaster, calamity, crisis, tragedy, (complete) destruction.
4. **instability** (noun) – uncertainty, unpredictability, lack of stability.
5. **distinctly** (adverb) – clearly, noticeably, emphatically.
6. **inevitably** (adverb) – naturally, automatically, unavoidably, certainly/definitely.
7. **entropy** (noun) – In thermodynamics (per second law), if you convert one energy (heat/thermal) to an another energy (mechanical), only a part of the energy is consumed, the balance is lost. The lost part is called “entropy”. It is the statistical disorder of the system. The second law states that if the physical process is irreversible, the combined entropy of the system and the environment must increase.
8. **evolve** (verb) – develop, progress, advance.
9. **over time** (phrase) – if something happens over time, it happens gradually over a long period of time.
10. **point out** (phrasal verb) – identify, mention, recognize, draw attention to.
11. **species** (noun) – living things (organisms); A group/breed/family of living organisms (animals & plants) with the individual having the same quality & can breed (in nature).
12. **endeavour** (noun) – attempt, effort, try; struggle.
13. **invariably** (adverb) – always, every time/each time; habitually/inevitably.
14. **prevalent** (adjective) – dominant, most powerful, superior, supreme.
15. **establishment** (noun) – bureau, agency, group, syndicate.
16. **worthy** (adjective) – deserve, suitable, good enough, qualify for.
17. **outsider** (noun) – non-member, newcomer, stranger.
18. **dilute** (verb) – diminish, reduce, decrease, weaken, make weaker.
19. **court** (noun) – palace (of a king); a sovereign’s (supreme ruler) place/forum.
20. **the Establishment** (noun) – the powers that be, the authorities, the system, the ruling class.
21. **tenet** (noun) – principle, belief, doctrine/rule.
22. **radical** (adjective) – revolutionary, progressive, reforming; distinctive/out of the ordinary.
23. **just** (adjective) – fair, equitable, impartial.
24. **obsession** (noun) – fixation, craze/addiction, preoccupation, compulsion.
25. **Gross domestic product** (GDP) (noun) – a measure of economic activity in a country. It is the total value of a country’s annual output of goods and service.
26. **loony or lunatic fringe** (noun) – a group of people (usually in a political or social movement) who have very extreme opinions/views.
27. **laureate** (noun) – a person who is honoured with an award for outstanding achievement.
28. **call upon** (phrasal verb) – ask formally, demand (to do something).
29. **manifesto** (noun) – (policy) statement, declaration, pronouncement.
30. **amidst** (preposition) – amid, in the middle of; during.
31. **heightened** (adjective) – increased, amplified, intensified.
32. **buzz** (noun) – rumour, gossip, report, whisper, speculation; speculative attention; feeling of excitement/thrill.
33. **hyper-globalisers** (adjective) – sometimes referred to as global optimists; They believe that globalization is happening and that local cultures are being eroded primarily because of the expansion of international capitalism and the emergence of a homogeneous global culture.
34. **impede** (verb) – hinder, obstruct, slow down.
35. **composition** (noun) – arrangement, formation; mixture/mix, blend.
36. **systems theory** (noun) – The idea behind it is “the whole is greater than the sum of its

- parts". It is an interdisciplinary field of science concerned with the nature of complex systems. It explores the parts of a system that interconnect and interact to make a complete whole. Every system is bounded by space and time, influenced by its environment, defined by its structure and purpose, and expressed through its functioning.
37. **albeit** (conjunction) – though, even though, however.
 38. **permeable** (adjective) – porous, penetrable, absorbent, absorptive.
 39. **integrity** (noun) – soundness, robustness, strength, stability.
 40. **breakdown** (noun) – failure, collapse, foundering.
 41. **dictum** (noun) – saying, slogan, phrase/quote.
 42. **up-end** (verb) – overturn, reverse/bottom up, flip, turn upside down.
 43. **capitalist** (adjective) – relating to an economic system based on the private ownership.
 44. **capitalist** (noun) – industrialist, private owners.
 45. **out of the way** (phrase) – not likely to cause a problem/hindrance (to someone's plans).
 46. **bailout** (noun) – an act of providing financial help/support by the outside investors to a bank/institution/organisation/corporation which faces serious financial difficulty.
 47. **the dice are loaded against** (phrase) – used to say that someone is not likely to succeed.
 48. **cumulative causation** (noun) – a 'vicious circle' of economic and non-economic factors that led activities to cluster in certain regions and caused regional inequalities. It is the economic principle in that multiple changes are set in motion by a single event. ("vicious circle" is a situation where one problem causes another and that another problem makes the first/original problem to become worst).
 49. **marketization** (noun) – a restructuring process that enables state enterprises to operate as market-oriented firms by changing the legal environment in which they operate.
 50. **inequality** (noun) – Inequality is simply defined as "the state of not being equal, especially in status, rights and opportunities"; imbalance, unevenness, disproportion, disparity.
 51. **objective** (noun) – aim, intention, purpose.
 52. **merely** (adverb) – only, simply, just.
 53. **societal** (adjective) – general, communal, collective, social.
 54. **harmony** (noun) – unity, solidarity, goodwill.
 55. **free trade** (noun) – a policy to eliminate barriers/limits/regulations against imports and exports.
 56. **account for** (phrasal verb) – explain, rationalize, elucidate.
 57. **restrain** (verb) – control, restrict, limit, regulate.
 58. **Darwinian** (adjective) – relating to Darwinism (evolution or progress & advancement). In Darwin's theory on the mechanism of evolution, competition among living things is viewed as a major part of the "struggle for existence" and therefore as a basis for natural selection.
 59. **survival of the fittest** (phrase) – it refer to a situation in which the strongest people will only exist (or be successful), while the others fail/die. (by Darwinian theory of evolution).
 60. **underlie** (verb) – be fundamental, be basic, be essential.
 61. **pathology** (noun) – a branch of medical science that studies the nature, effects, causes and consequences of diseases.
 62. **collective** (adjective) – combined, united/joint, cooperative (by all people as a group).
 63. **stakeholder** (noun) – a person with an interest in something.
 64. **sovereign** (adjective) – independent, self-governing; having independent authority and the right to govern itself.
 65. **intellectual property** (noun) – a category of property that includes intangible creations of the human intellect. The most well-known types are copyrights, patents, trademarks and trade secrets.
 66. **conserve** (verb) – preserve, protect, save.
 67. **monopoly** (noun) – exclusive/complete control of something by a person/organisation.
 68. **on the back of** (phrase) – as a result of, in support of.

69. **benign** (adjective) – favourable, advantageous, beneficial.
70. **malign** (adjective) – harmful, bad, hostile.
71. **imperative** (adjective) – vitally important, crucial/ critical, essential.
72. **paradigm shift** (noun) – a fundamental and important change with new ideas/thinking.
73. **fuel** (noun) – power source; encouragement, incentive, stimulus.
74. **liquidity** (noun) – the availability of liquid assets; liquidity means liquid assets; cash; (liquid asset is an asset which can be easily sold/converted into cash without losing its value); a measure of activity (i.e. the ability to buy or sell easily) in a market.
75. **move on** (phrasal verb) – develop, make progress, advance, get better.
76. **resilience** (noun) – strength, toughness; the capacity to recover quickly from difficulties.
77. **domain expert** (noun) – a person with special knowledge or skills in a particular area of activity.
78. **silo** (noun) – any system/process/department which is unable to operate with others. It functions alone and does not wish to share information with others.
