

Prof. David Passig

Bio-sketch

1995...2000...2005...2015...2020...2025...2035...2045...2050...2055...2060...2065

Prof. David Passig is a **futurist**, **lecturer**, **consultant** and best-selling author who specializes in technological, social and educational futures.

Prof. Passig is a **Professor** at Bar-Ilan University (BIU), Ramat-Gan, Israel, where he teaches at the Graduate Faculty of Education.

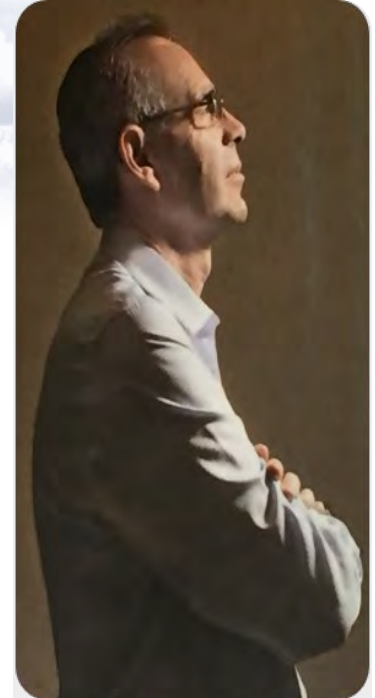
His courses include: Systems Theories, Future Methodologies, and Technological, Social and Educational Futures. He **heads BIU's Virtual Reality Laboratory**.

Prof. Passig has consulted for many corporations as well as public and private sector institutes. He is the chair in one of his own FutureCode Ltd., which **develops** and **employs** tool kits of computerized **Futures methods** in decision making processes. He has consulted in Israel, Asia, Europe and North America. He has served as the **chief advisor** to the Commissioner for Future Generations in the Israeli Knesset. Among his many activities, he is a **member** of the **Israeli National Council for R&D**.

A co-Founder of **Thinkz**. Ltd that develops platforms for autonomous devices.

Prof. Passig's **bestseller** books are “**The Future Code**”, “**2048**”, “**Forcognito: The Future Mind**” and “**The Fifth Fiasco**”. They received Israel's coveted **Gold Book Award**.

Prof. Passig holds a **Ph.D.** degree in **Future Studies** from the University of Minnesota, Twin Cities.



Pandemics and the Future of Humanity

1995...2000...2005...2015...2020...2025...2035...2045...2050...2055...2060...2065

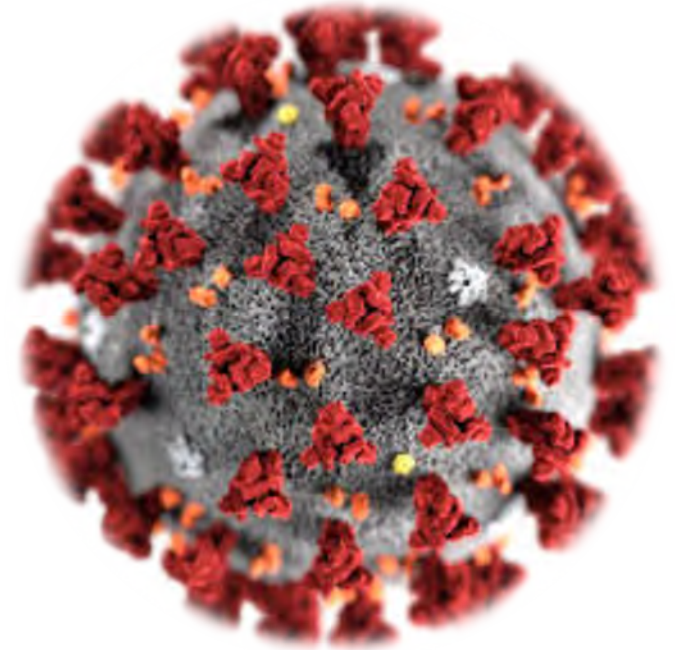


Prof. David Passig

Futurist, Head Virtual Reality Lab

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Two questions

1995...2000...2005...2015...2020...2025...2035...2045...2050...2055...2060...2065



What is the **driving force** (dynamics) behind pandemics?

What are the long-term implications of Covid-19 on human civilization?

Past pandemics

1995...2000...2005...2015...2020...2025...2035...2045...2050...2055...2060...2065



DEATH TOLL

[HIGHEST TO LOWEST]

200M

Black Death (Bubonic Plague)
1347-1351



56M

Smallpox
1520



40-50M

Spanish Flu
1918-1919



30-50M

Plague of Justinian
541-542



The plague originated in rats and spread to humans via infected fleas.

The outbreak wiped out 30-50% of Europe's population. It took more than 200 years for the continent's population to recover.

Smallpox killed an estimated 90% of Native Americans. In Europe during the 1800s, an estimated 400,000 people were being killed by smallpox annually. The first ever vaccine was created to ward off smallpox.

The death toll of this plague is still under debate as new evidence is uncovered, but many think it may have helped hasten the fall of the Roman Empire.

A series of Cholera outbreaks spread around the world in the 1800s killing millions of people. There is no solid consensus on death tolls.

25-35M

HIV/AIDS
1981-PRESENT



12M

The Third Plague
1855



5M

Antonine Plague
165-180



3M

17th Century Great Plagues
1600



1.1M

Asian Flu
1957-1958



1M

Russian Flu
1889-1890



1M

Hong Kong Flu
1968-1970



1M

Cholera 6 outbreak
1817-1923



1M

Japanese Smallpox Epidemic
735-737



600K

18th Century Great Plagues
1700



200K

Swine Flu
2009-2010



100-150K

Yellow Fever
LATE 1800s



11.3K

Ebola
2014-2016



850

MERS
2012-PRESENT



770

SARS
2002-2003



2019-8:32AM PT, MAY 7, 2020 [ONGOING]
*Johns Hopkins University estimates

Sources:
CDC, WHO, BBC,
Wikipedia,
Historical records,
Encyclopedia Britannica
Johns Hopkins University



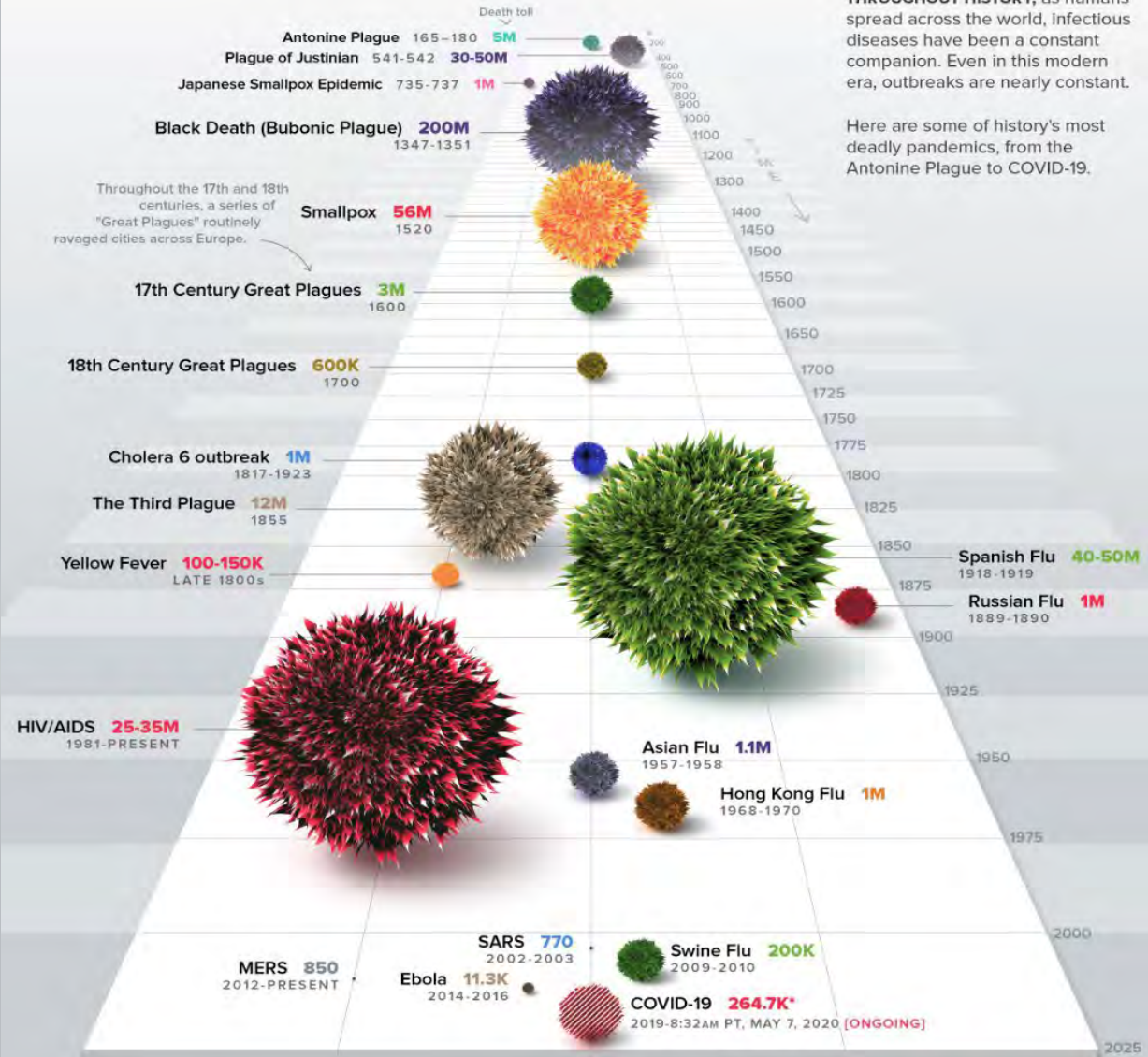
/visualcapitalist @visualcap visualcapitalist.com

HISTORY OF PANDEMICS

PAN-DEM-IC (of a disease) prevalent over a whole country or the world.

THROUGHOUT HISTORY, as humans spread across the world, infectious diseases have been a constant companion. Even in this modern era, outbreaks are nearly constant.

Here are some of history's most deadly pandemics, from the Antonine Plague to COVID-19.



WHO officially declared COVID-19 a pandemic on Mar 11, 2020.

It is hard to calculate and forecast the impact of COVID-19 because the disease is new to medicine, and data is still coming in.

Domestication of animals = transportation = currencies
= Urbanization + Industrialization + Globalization = Mega cities

1995...2000...2005...2015...2020...2025...2035...2045...2050...2055...2060...2065



From skins' shelters to high-rise overloaded buildings

Roosevelt Island



The more people gathered the more viruses spread

1995...2000...2005...2015...2020...2025...2035...2045...2050...2055...2060...2065

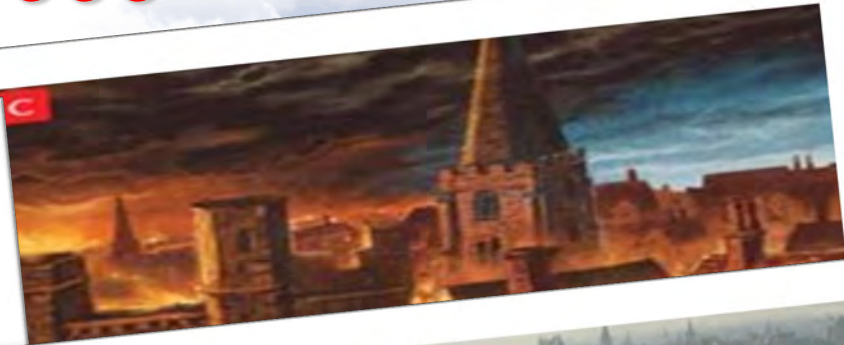
Pandemic	Years	Death % of infected	Death toll
Bubonic Plague (Pneumonic, Septicaemic)	541-2 (CE)	95%	25-50 millions + $\frac{1}{4}$ of world population
Black Plague	1347-1351	30%	50-100 m in Europe + half the population 100-200 m worldwide = $\frac{1}{3}$ of w/p
Ebola	1976	50%	12,000 in Africa
SARS	2002-4	15%	800 in Asia
Spanish Flu	1816-1920	0.5-1%	50-100 m = $\frac{1}{3}$ of Europe = 4% w/p Infected: 20-40 years old = 10% w/cohort
Covid-19	2020-?	0.6-1%	2.5 m total in 2020 5.2 m total in 2021 6.1 m as of March 24, 2022 = estimate +4m

Current phase of mega-urban civilization started in **1666**



The big fire in London – 1666

4/5 of the city was consumed by fire



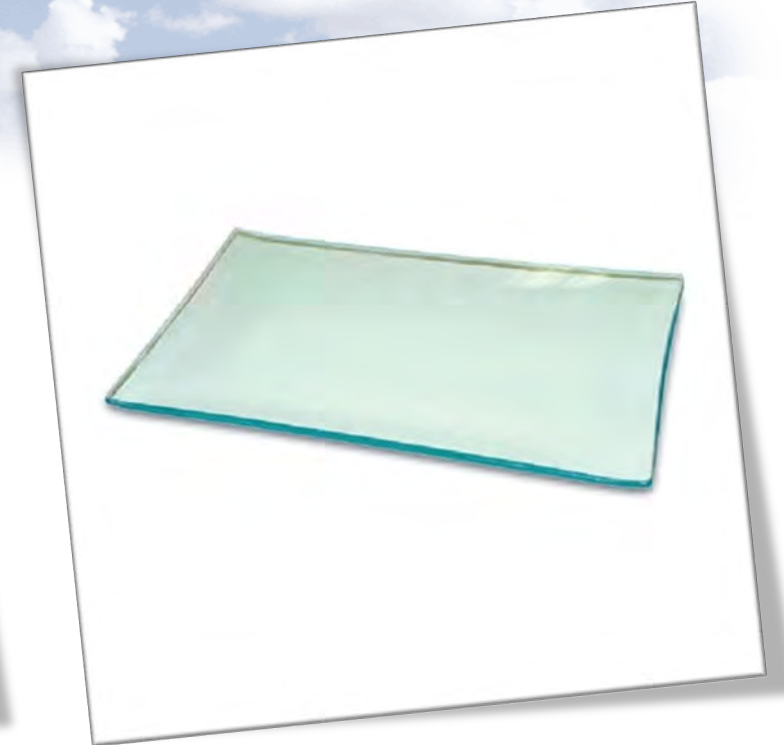
- When we suffer from colossal **disasters**, we think about **new tools** with greater potential to overcome the hurdles and take our civilization to **new levels**

A collage of various objects including a satellite, hot air balloons, a cityscape, a robot, and a soccer field, representing a complex system or environment.

First invention: **glass** – 70 AC

1995...2000...

5...2045...2050...2055...2060...2065



- The Romans of Pompei invented sheets of **glass** to put on openings
- The glass sheets **illuminated** and protected living spaces from wind and rain
- Starting 19th century Electrical light provided **artificial illumination** after dark
- **Cement and iron** strengthened buildings that continued to rise

Second invention: chimney – 1300 AC



- The chimney provided **ventilation** to smoke for living-rooms
- Previously, no **privacy** could have been since everybody was around a bonfire that provided all needs

Chimneys pushed the heights of buildings to **6-7 floors**

1995...2000...2005...2010...

2035...

2065...



- It has made possible **PRIVACY** to many
- People could start retreating to different rooms and speak about things they didn't want others to listen to

Third invention: **elevator's safety break** – 1853



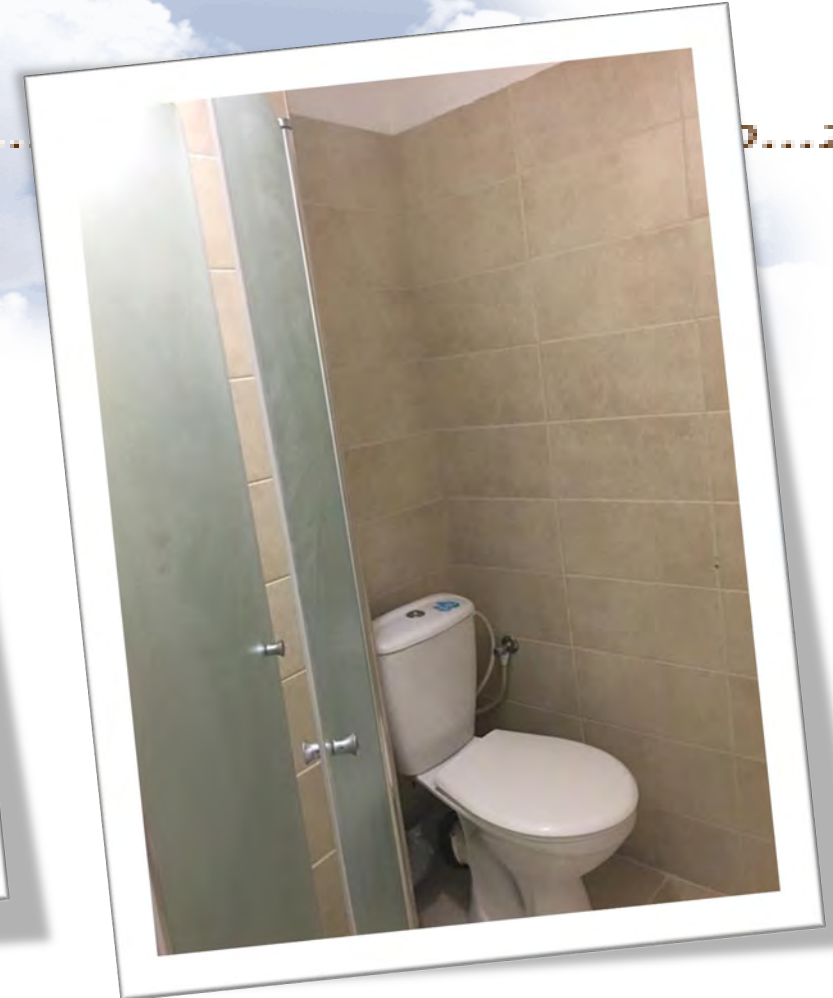
The safety break **convinced** people to live in high-rise buildings

Relationships and values transformed

1995...2000...2005...2015

35...

0...2065

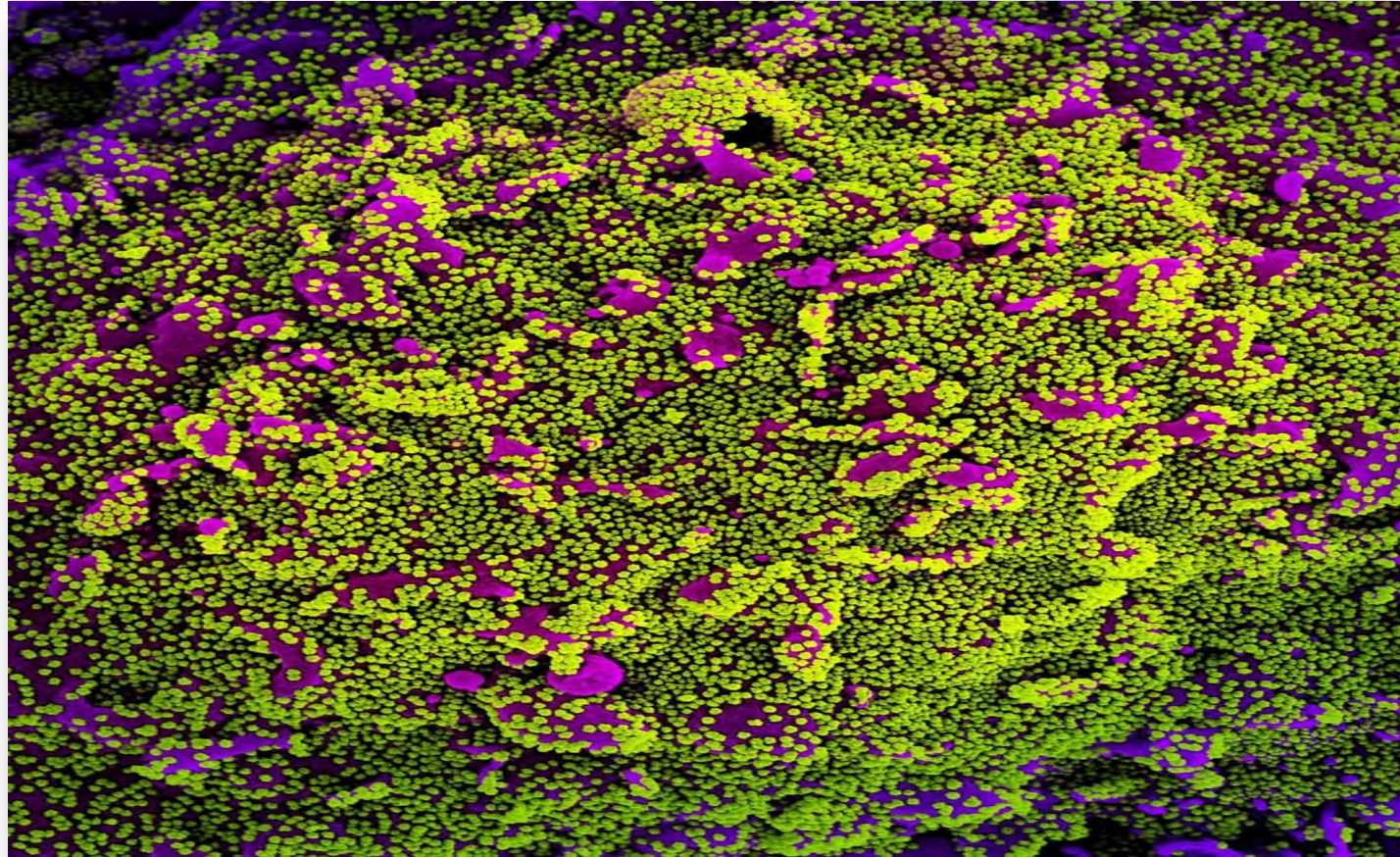


- **Modesty** values developed
- New **social classes** emerged
- Differentiation in **life styles** bloomed
- Thus, people generated different and **unique ideas**

And then came Covid-19: a new mega fire

“An outbreak anywhere is an outbreak everywhere”

1995...2000...2005...2015...2020...2025...2035...2045...2050...2055...2060...2065



Blooms of Covid-19 viruses as seen under the electron microscope

Fourth invention: **autonomous unmanned aerial vehicle (AUAV) (drones)** – 2013



1995...2000...2005...2015...2020...2025...2035...2045...2050...2055...2060...2065



- **2006** – UAVs Permitted in US Civilian Airspace for the First Time
- **2013** – Major Companies Look to Start Drone Delivery: **FedEx, UPS, Amazon, Google, Uber**, and countless other delivery companies recognize drone benefits as a delivery platform. Testing of various UAV concepts and work with regulatory agencies around the world begins.
- **2020** – Pandemic Alleviation



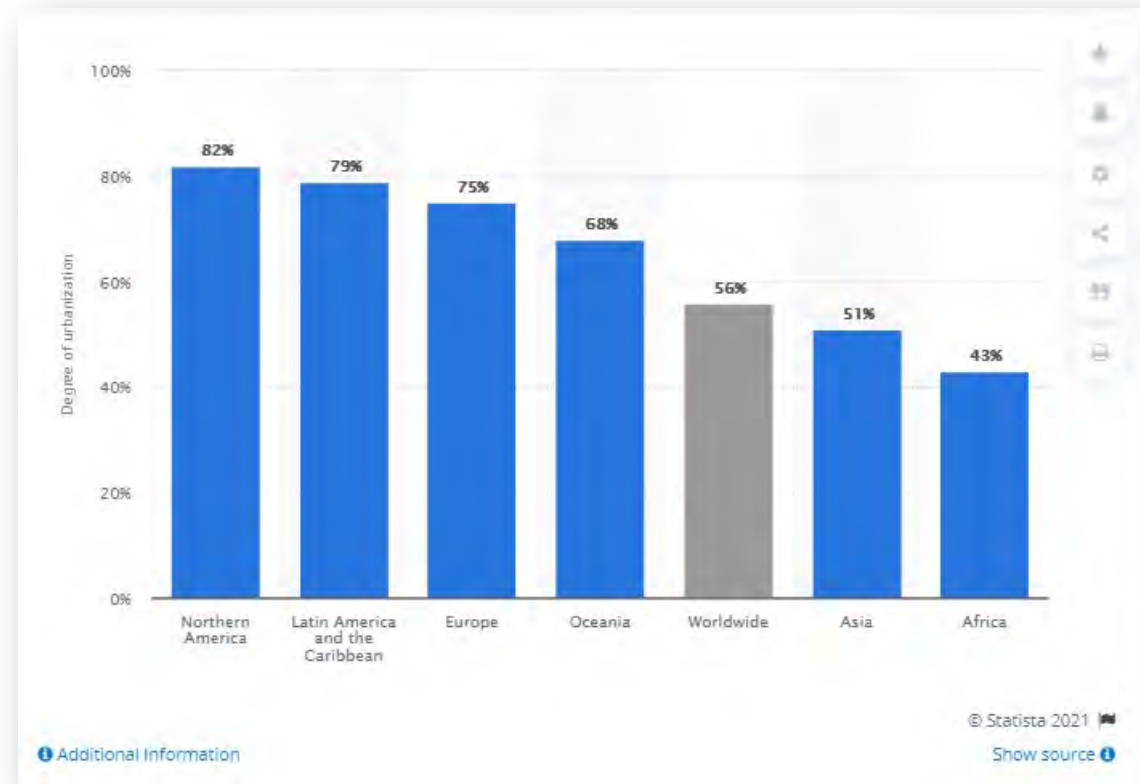
Fully urbanized civilization

1995...2000...2005...2015...2020...2025...2035...2045...2050...2055...2060...2065

prairie dwelling → cave → village → city → Mega city

As of **2021** =
56% live in cities

Projection to **2050** =
68% we live in cities and mega-cities



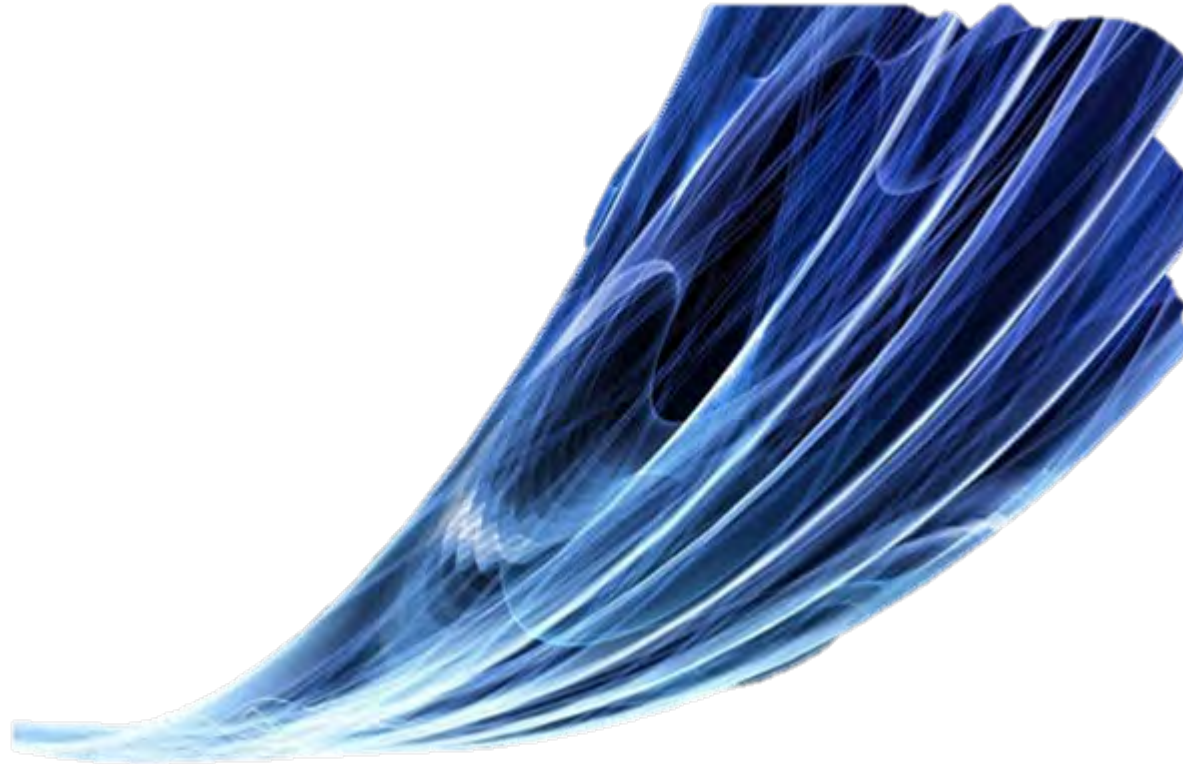
Present vs Future mega cities

1995...2000...2005...2015...2020...2025...2035...2045...2050...2055...2060...2065



Long-term trends

1995...2000...2005...2015...2020...2025...2035...2045...2050...2055...2060...2065



The MegaCrisis TechCast Project

George Washington University, WA, USA

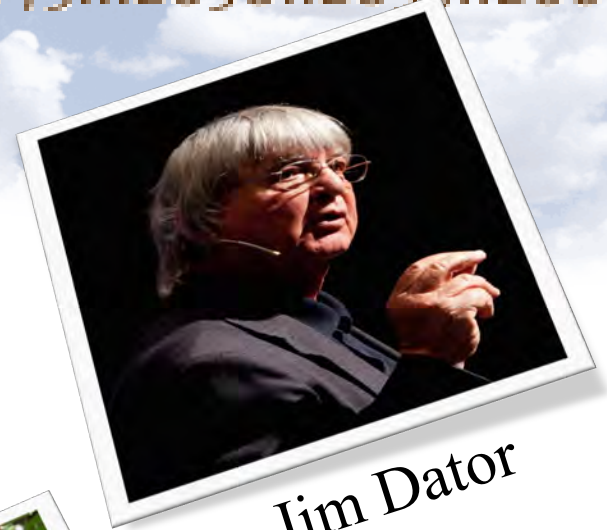
1995...2000...2005...2015...2020...2025...2035...2045...2050...2055...2060...2065



Dennis Bushnell



Amy Fletcher



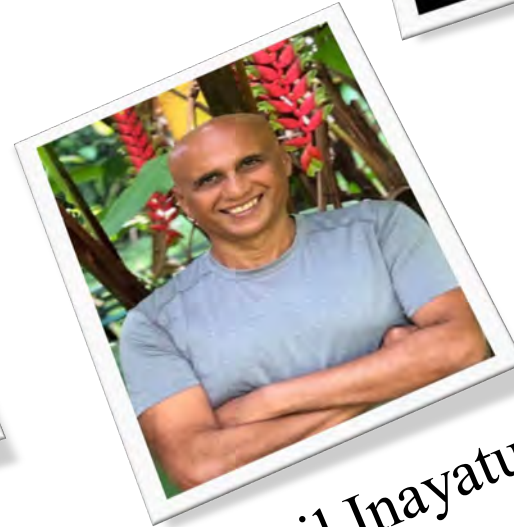
Jim Dator



Peter King



Ruben Nelson



Sohail Inayatullah



David Passig

The TechCast Project Panel (Delphi)

1995...2000...2005...2015...2020...2025...2035...2045...2050...2055...2060...2065

Moderator: Prof. William E. Halal, George Washington U.

Prof. Dennis Bushnell

Chief Scientist, NASA, Langley

Prof. Jim Dator

Head, Futures Study Dept., U. of Hawaii

Prof. Amy Fletcher

Political Science, U. of Canterbury,
Christchurch New Zealand

Prof. Sohail Inayatullah

UNESCO Chair in Futures Studies, USIM,
Malaysia. Tamkang U.

Prof. Peter King

Environmental Consultant

Prof. Ruben Nelson

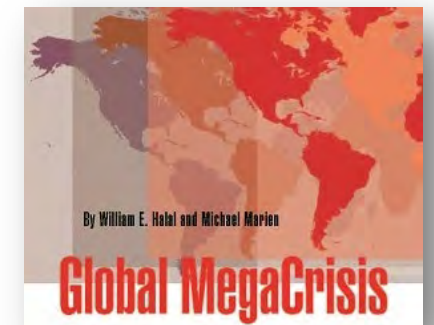
Executive Director, Foresight Canada

Prof. David Passig

Futurist, Head VR Lab., Bar-Ilan U.



William Halal



Towards a new global consciousness

1995...2000...2005...2015...2020...2025...2035...2045...2050...2055...2060...2065



Collective Intelligence to Solve the MegaCrisis



William E. Halal
The TechCast Project
George Washington University



The coronavirus is a stark reminder of the devastating damage that could be inflicted by cyberattacks, superbugs, freak weather and a variety of other threats. These wild cards are in addition to the existential challenge posed by climate change, gross inequality, financial meltdowns, autocratic governments, terrorism and other massive problems collectively called the Global MegaCrisis.

I sense the world is so frightened by recent disasters that people are searching for new solutions. They seem ready to break from the past that is no longer working. Climate change is starting to bite, for instance, and there is a growing consensus that the status quo is no longer sustainable.

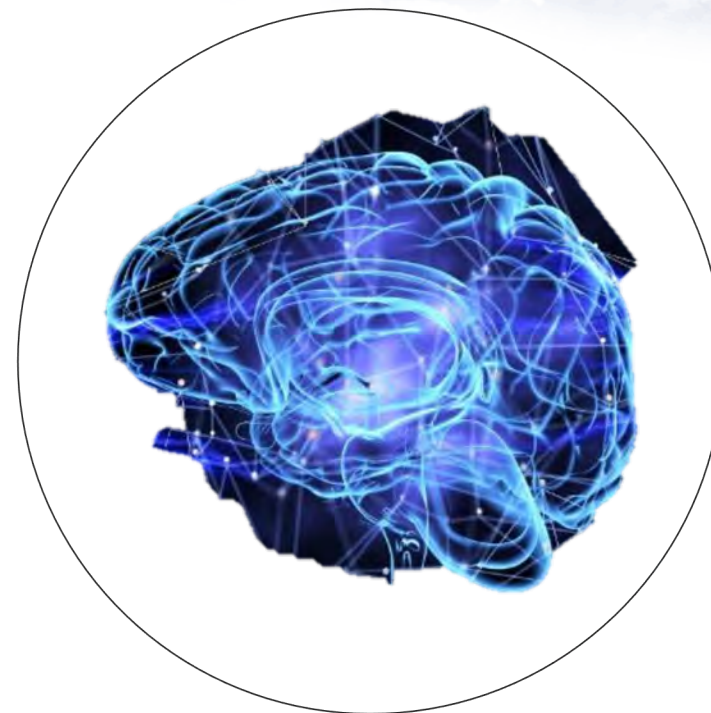
I have studied this dilemma for decades, and I think it can be best understood as a transition to the next stage of social evolution. The Knowledge Age that dominated the last two decades is fading into the past as AI automates knowledge, forcing us to move *beyond knowledge* and develop a global consciousness able to resolve the MegaCrisis.

Yes, I know this is a bold claim, but that is how the shift to a world of knowledge looked 40 years ago. When computers filled rooms, I recall telling people that we were entering a world of personal computers. The typical response was "Why would anyone want a personal computer?"

Just so, today's post-factual era illustrates how the smart phone, social media, and autocrats like Trump have moved public attention *beyond knowledge* and into a world of values, emotions and beliefs. Now the challenge is to use these new powers of social media to shape a global consciousness, or face disaster.

While this may seem impossible, that is always the case before major upheavals. Nobody thought the USSR would collapse up until its very end.

In fact, the Business Roundtable's recent announcement that business should move beyond the bottom line to include the interests of all stakeholders is revolutionary. It has now been promulgated by the World Economic Forum and other influential bodies.

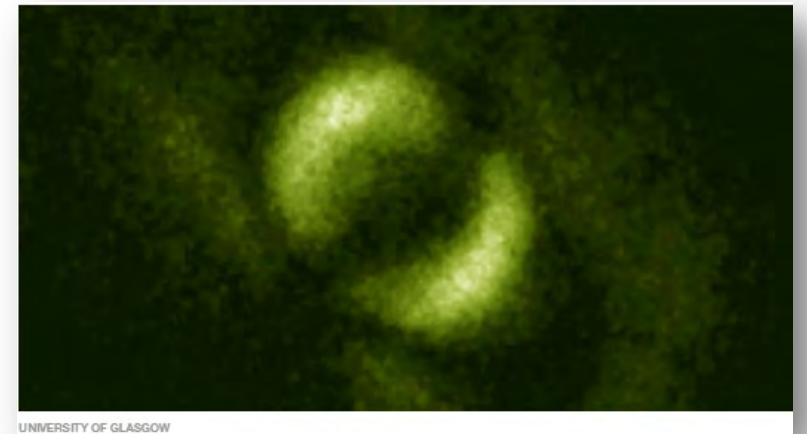


Quantum global entangled consciousness

1995...2000...2005...2015...2020...2025...2035...2045...2050...2055...2060...2065

Principles

- Sanctifying all living forms on earth
- Governing as an entangled organism
- Diversifying in an entangled pattern
- Business and services entangled with customers



2 photons linked by quantum entanglement

Collapse of global capitalism

1995...2000...2005...2015...2020...2025...2035...2045...2050...2055...2060...2065

As with the collapse of **communism** in the 90s, we are at the beginning of the collapse of **capitalism** as we know it.

Communism didn't know how to adjust to a transforming society based on free flow of information and knowledge.

Capitalism too has its flaws. It doesn't know how to address pandemics, automated knowledge, reality check, etc.



Prof. Sohail Inayatullah
UNESCO Chair in Futures Studies

Taking note to unusual creative ideas

1995...2000...2005...2015...2020...2025...2035...2045...2050...2055...2060...2065

During most of the past **challenging** epochs, the issues that caused turmoil were due to **concentrated political and economical power** in the hands of “**acknowledged**” and “**movers**”.

After a crisis period, leaders start **listening** to new and **creative ideas** that are circulating in the **fringe** of the mainstream paradigms, which many times turn to be **springboards** to new levels of social order.



Prof. Amy Fletcher
Political Science, U. of Canterbury,
Christchurch New Zealand

Awareness to quantum entangled global networks

1995...2000...2005...2015...2020...2025...2035...2045...2050...2055...2060...2065

A new global entangled consciousness is emerging in two stages:

First stage:

The **current globalization's** paradigm will collapse, since its tenet of **mutual cooperation** that is based on common interests is **voluntary** driven. It will **fade away** as it is already happening.

Second stage:

A new paradigm of cooperation will emerge. The idea of "**entanglement**" will become dominant in economic, political, geo-political, and social relations.

No more cooperation based on interests, but cooperation based on an understanding of **symbiosis** and **inextricable** ties.

Local and International mechanisms will be established to enforce the interdependency.



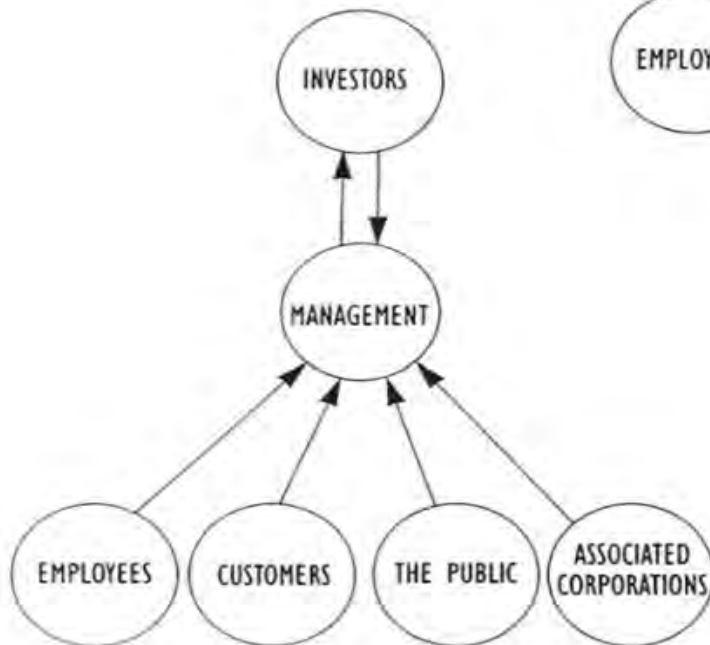
Prof. David Passig
Futurist, Bar Ilan University, Israel

15 trillion atoms entanglement

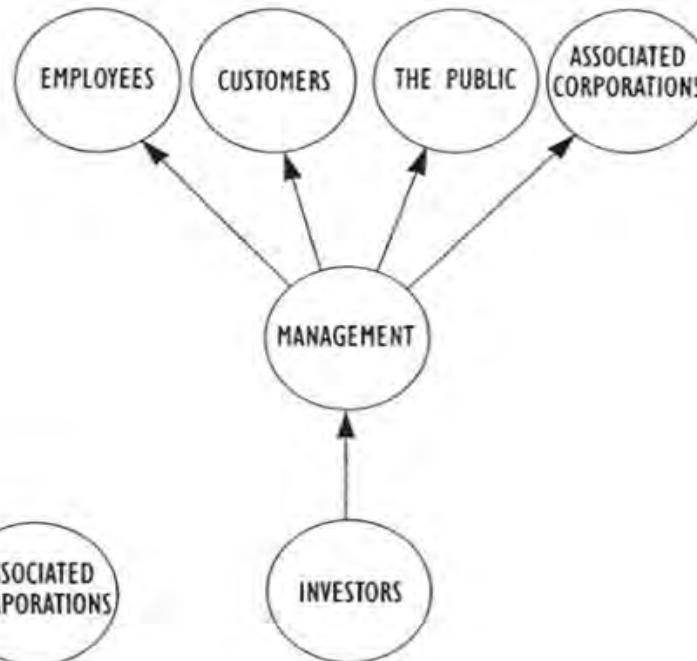
Entangled corporate governance

1995...2000...2005...2015...2020...2025...2035...2045...2050...2055...2060...2065

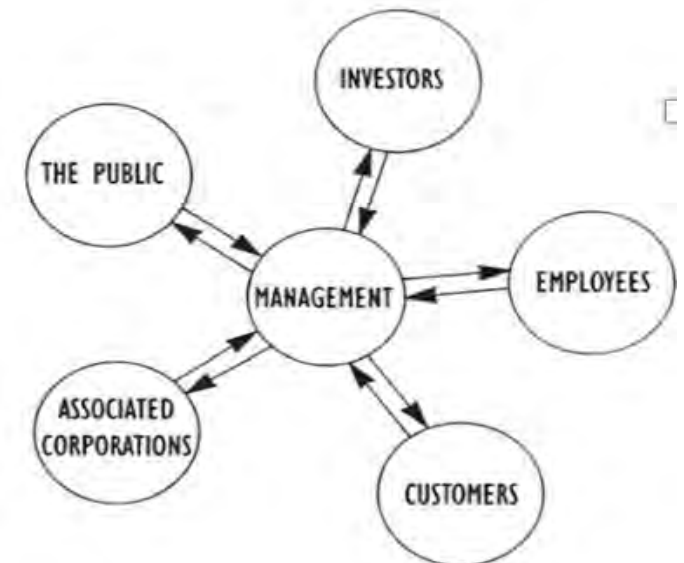
PROFIT-CENTERED MODEL



SOCIAL RESPONSIBILITY MODEL



CORPORATE COMMUNITY MODEL



Contact

1995...2000...2005...2015...2020...2025...2035...2045...2050...2055...2060...2065

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Head Grad Program in Info & Communication Tech
Head Virtual Reality Lab



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