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

Prof. David Passig
Futurist, Head Virtual Reality Lab
Bar-Ilan University, Israel
www.passig.com
Two questions

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

What are the long-term implications of Covid-19 on human civilization?
Past pandemics
DEATH TOLL
[HIGHEST TO LOWEST]

200M
Black Death (Bubonic Plague)
1347-1351

56M
Smallpox
1920

40-50M
Spanish Flu
1918-1919

30-50M
Plague of Justinian
541-542

26.35M
HIV/AIDS
1981-PRESENT

13M
The Third Plague
1855

5M
Antonine Plague
165-180

3M
17th Century Great Plagues
1600

1.9M
Spanish Flu
1918-1919

1M
Russian Flu
1889-1890

1M
HIV/AIDS
1981-PRESENT

770
MERS
2012-PRESENT

590
Ebola
2014-2016

113K
Yellow Fever
LATE 1800s

100-150K
Swine Flu
2009-2010

735-737
Japanese Smallpox Epidemic
1720-1722

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.

264.7% COVID-19
2019-2020 [ONGOING]


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.
Domestication of animals = transportation = currencies
= Urbanization + Industrialization + Globalization = Mega cities
From skins’ shelters to high-rise overloaded buildings
The more people gathered the more viruses spread

<table>
<thead>
<tr>
<th>Pandemic</th>
<th>Years</th>
<th>Death % of infected</th>
<th>Death toll</th>
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<tbody>
<tr>
<td>Bubonic Plague (Pneumonic, Septicaemic)</td>
<td>541-2 (CE)</td>
<td>95%</td>
<td>25-50 millions + (\frac{1}{4}) of world population</td>
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<tr>
<td>Black Plague</td>
<td>1347-1351</td>
<td>30%</td>
<td>50-100 m in Europe + half the population</td>
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<td>100-200 m worldwide = (\frac{1}{3}) of w/p</td>
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<tr>
<td>Ebola</td>
<td>1976</td>
<td>50%</td>
<td>12,000 in Africa</td>
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<tr>
<td>SARS</td>
<td>2002-4</td>
<td>15%</td>
<td>800 in Asia</td>
</tr>
<tr>
<td>Spanish Flu</td>
<td>1816-1920</td>
<td>0.5-1%</td>
<td>50-100 m = (\frac{1}{3}) of Europe = 4% w/p Infected: 20-40 years old = 10% w/cohort</td>
</tr>
<tr>
<td>Covid-19</td>
<td>2020-?</td>
<td>0.6-1%</td>
<td>2.5 m total in 2020</td>
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<td>5.2 m total in 2021</td>
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<td>6.1 m as of March 24, 2022 = estimate +4m</td>
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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
Short list of driving forces behind urban civilization
First invention: glass – 70 AC

- 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
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.

- 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

- 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”

Blooms of Covid-19 viruses as seen under the electron microscope
Fourth invention: autonomous unmanned aerial vehicle (AUAV) (drones) – 2013

- 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

As of 2021 = 56% live in cities

Projection to 2050 = 68% we live in cities and mega-cities
Present vs Future mega cities
Long-term trends
The TechCast Project Panel (Delphi)

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

<table>
<thead>
<tr>
<th>Prof.</th>
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<tr>
<td>Dennis Bushnell</td>
<td>Chief Scientist, NASA, Langley</td>
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<tr>
<td>Jim Dator</td>
<td>Head, Futures Study Dept., U. of Hawaii</td>
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<tr>
<td>Amy Fletcher</td>
<td>Political Science, U. of Canterbury, Christchurch New Zealand</td>
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<tr>
<td>Sohail Inayatullah</td>
<td>UNESCO Chair in Futures Studies, USIM, Malaysia. Tamkang U.</td>
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<td>Peter King</td>
<td>Environmental Consultant</td>
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<td>Ruben Nelson</td>
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<td>Futurist, Head VR Lab., Bar-Ilan U.</td>
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Towards a new global consciousness

The world is a complex system of interdependent parts that can lead to instability if not managed effectively. Climate change, economic downturns, political conflicts, and disease all represent challenges that require collective intelligence to address.

The concept of collective intelligence involves harnessing the power of distributed knowledge and expertise to solve complex problems. It relies on the idea that the whole is greater than the sum of its parts, and that by combining diverse perspectives and skills, we can create innovative solutions to global challenges.

The advent of the internet and other technologies has made it easier than ever to connect people across the globe and share knowledge. Social media platforms, online forums, and collaboration tools are just a few examples of how technology is facilitating the growth of collective intelligence.

However, there are also challenges to overcome. The sheer volume of information available can be overwhelming, and ensuring that it is accurate and relevant requires a significant effort. Additionally, the potential for miscommunication and misinformation is a concern.

Despite these challenges, the potential benefits of collective intelligence are significant. By working together, we can address some of the world's most pressing issues and create a more sustainable and connected world.

In conclusion, collective intelligence is a critical component of our ability to confront the complex challenges of the 21st century. By leveraging the power of distributed knowledge and expertise, we can create innovative solutions that benefit all.

References:
Quantum global entangled consciousness

Principles

- Sanctifying all living forms on earth
- Governing as an entangled organism
- Diversifying in an entangled pattern
- Business and services entangled with customers
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.
Taking note to unusual creative ideas

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

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.

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