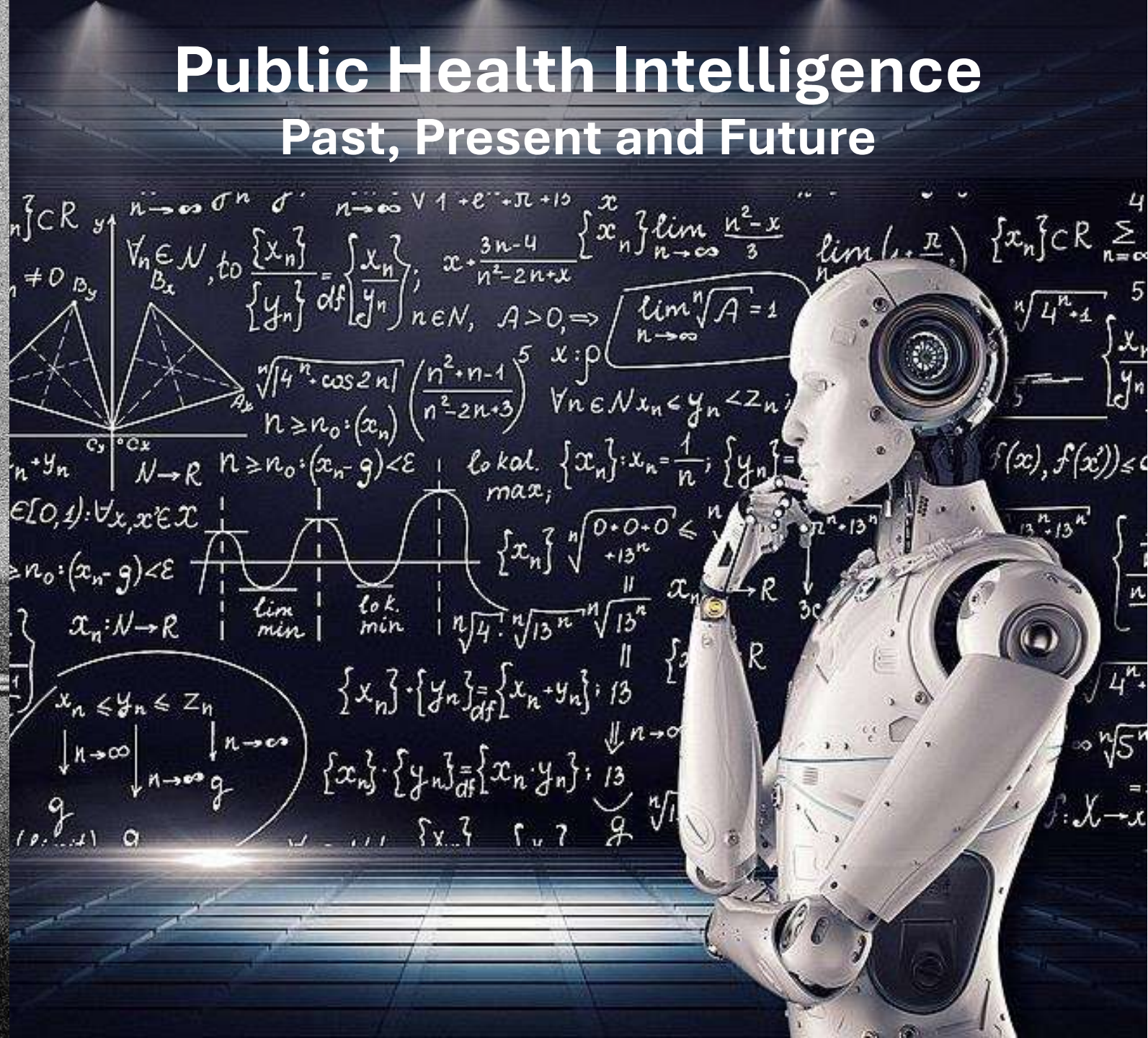
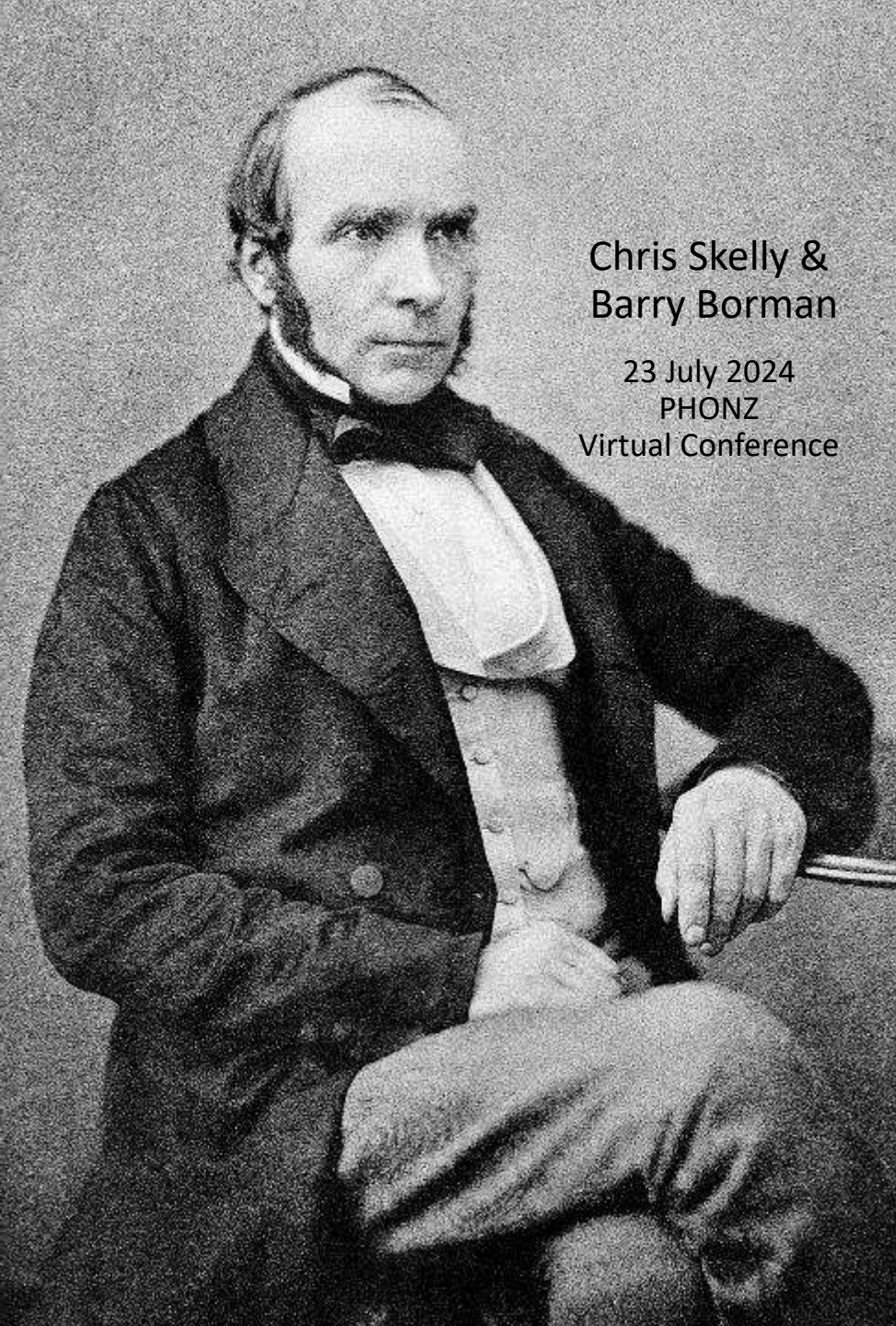


Public Health Intelligence

Past, Present and Future

Chris Skelly &
Barry Borman

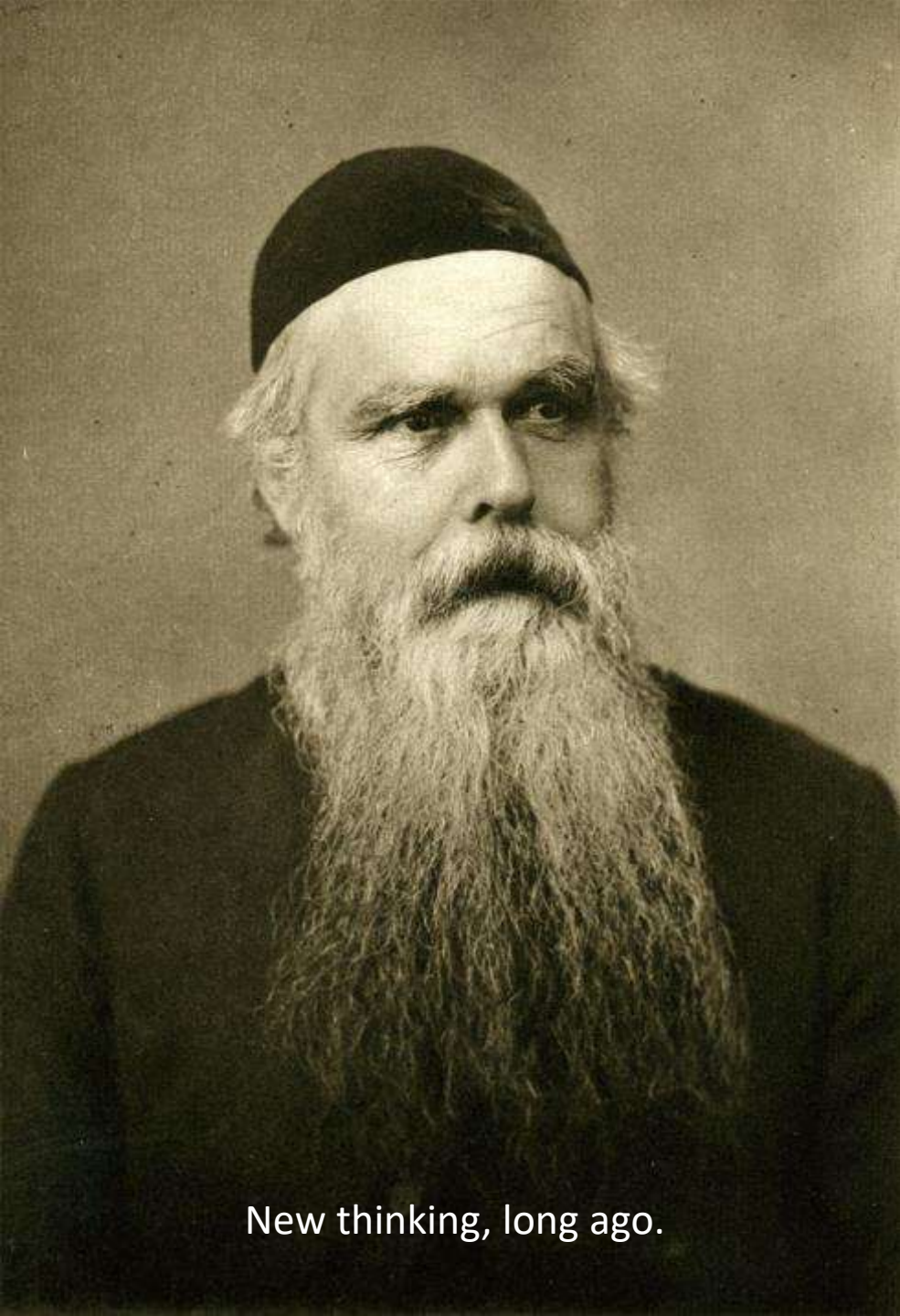
23 July 2024
PHONZ
Virtual Conference



*The future is already here,
it's just not evenly distributed.*

William Gibson



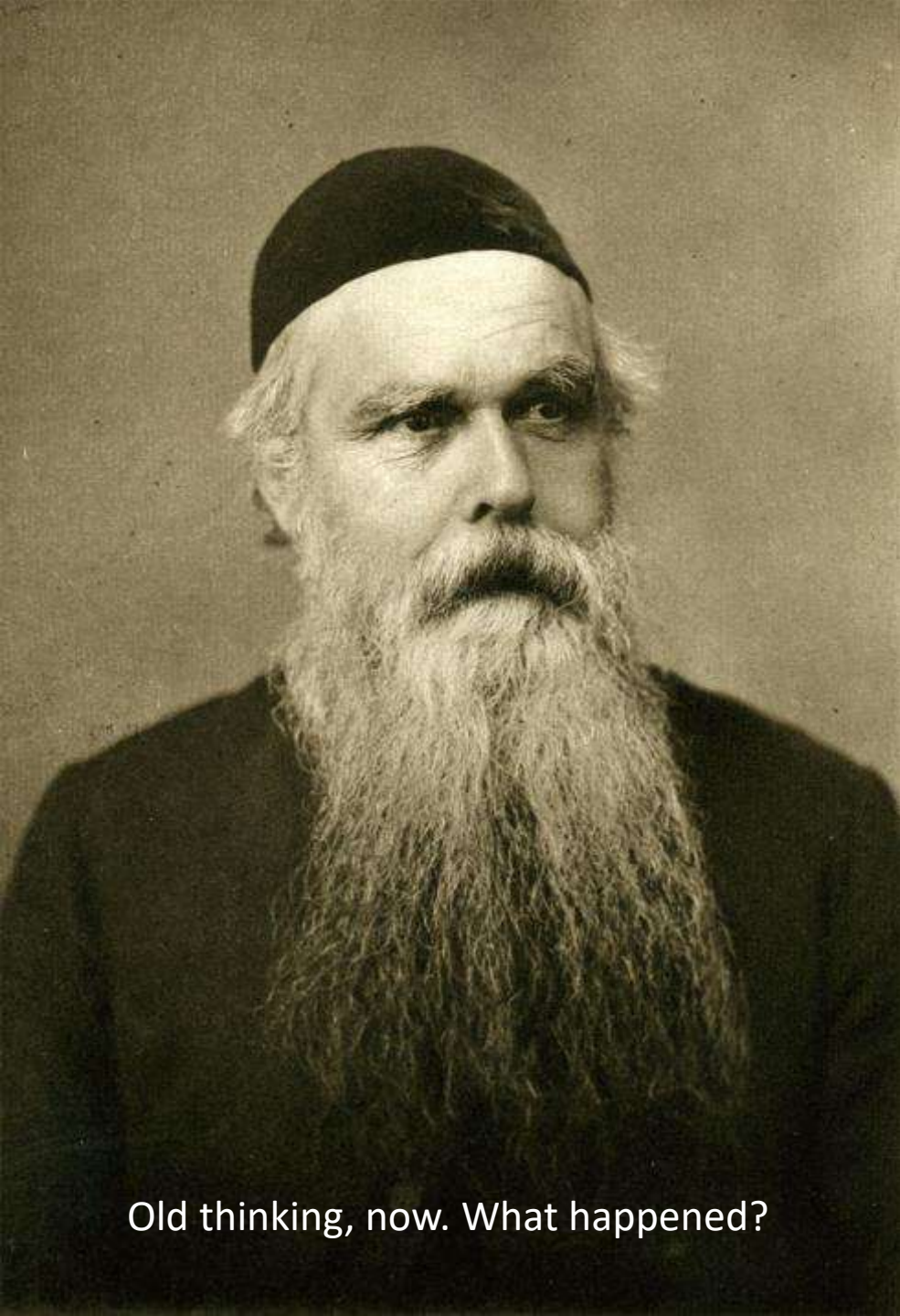


*“Dr. Snow's views on cholera,”
said a medical friend to me in
1855 “are generally regarded in
the profession as very unsound.”*

*“If that be the case,” I replied,
“heresy may be as good a thing
in your profession as some of
you are apt to suppose in mine.”*

Reverend Henry Whitehead

New thinking, long ago.



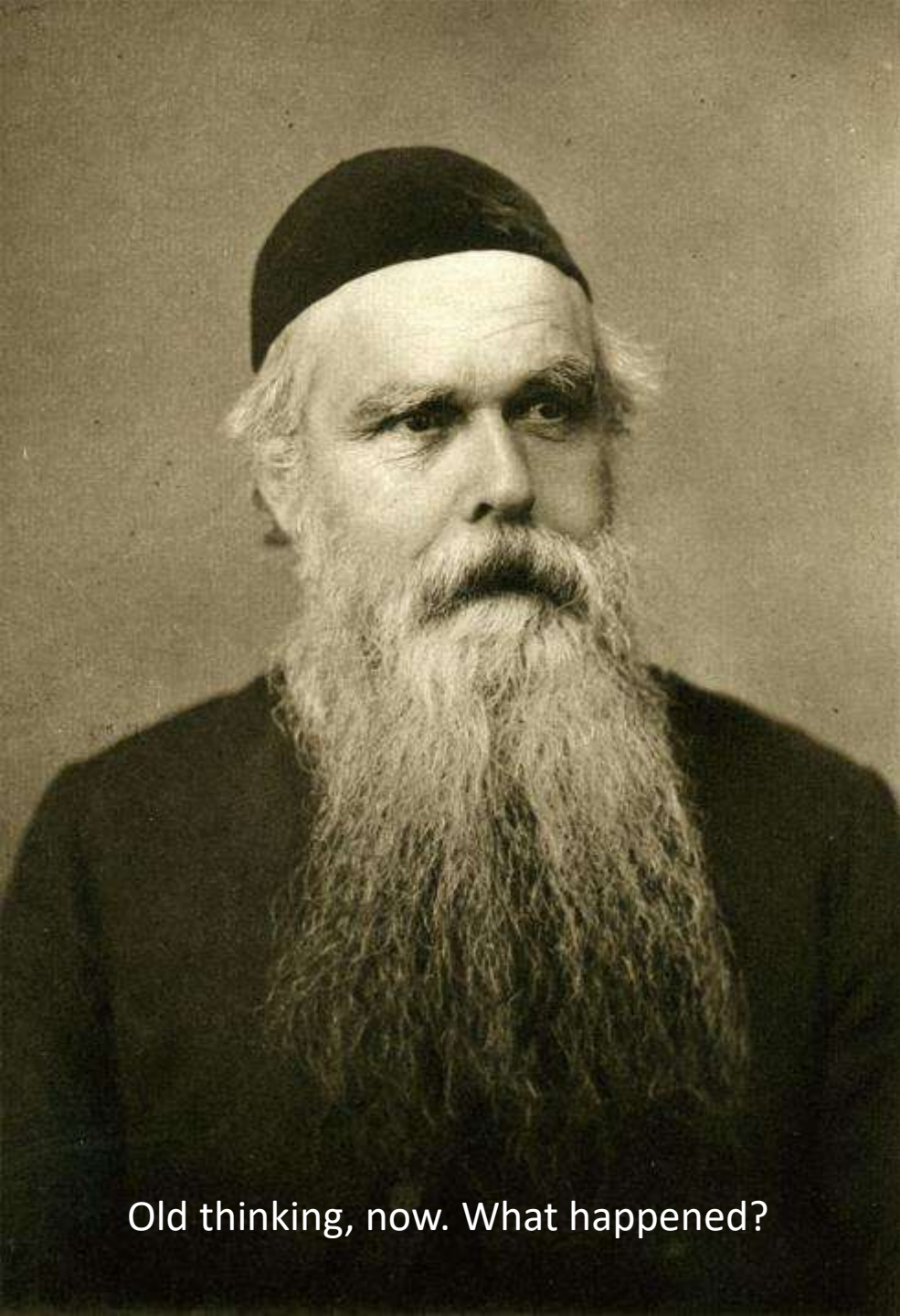
← NHS-NoReply



Monday, 15 Jul 2024 - 08:00

Please note that due to unprecedented levels of staff sickness, there will be a significant delay in answering any calls to the surgery. We therefore kindly ask that you only call if your need is urgent. We appreciate your understanding and patience during this time

Old thinking, now. What happened?



← NHS-NoReply

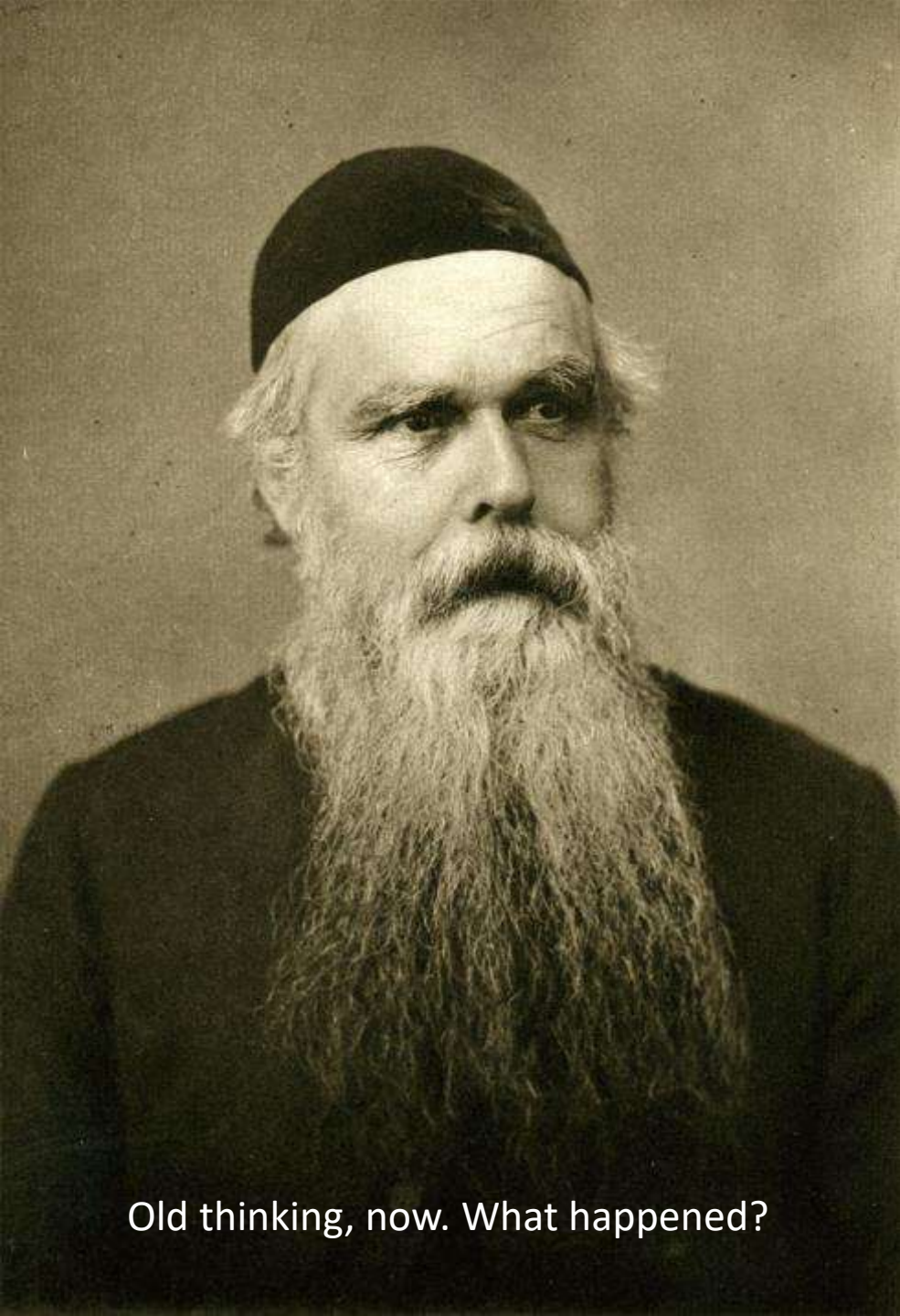


Wednesday, 17 Jul 2024 – 16:29

We continue to be very short staffed at the practice with Covid affecting a number of our reception team. We request that you only call the surgery if urgent. There may also be a longer wait than usual for prescription requests and responding to emails.

Thank you for your ongoing patience and support.

Old thinking, now. What happened?



← NHS-NoReply



Monday, 22 Jul 2024 – 08:12

Unfortunately, we continue to face significant staff shortages due to a Covid outbreak in our reception team. Please call the surgery only for urgent matters. There may also be longer than usual wait times for prescription requests. We thank you for your continued patience.

08:12

Old thinking, now. What happened?

Planet Earth



Current Drivers
*Of Public Health
Intelligence
Futures*

Earth System

Human pollution particularly CO₂ is overwhelming earth systems
Climate crisis and ecosystem collapse
Forever chemicals and microplastics



Planet Earth



Human Society

Current Drivers
*Of Public Health
Intelligence
Futures*

Human Society

Rise of a new Oligarchy and Techno-feudalism and Billionaires,
which is driving global Economic Inequality

Rapidly urbanising populations – collapsing birth rates

Multiple workforce pressures driving immigration policy

Results in political polarisation and declining public trust “in the
system”

Planet Earth



Human Society



Health System

Increasing economic inequality is driving health inequality
Year on year health and longevity improvements since the mid-20th century are slowing or reversing
It's not aging or obese populations – its food systems, poor housing, lack of meaningful employment...
The response is for more preventive and proactive approaches for faster digitalisation – essentially an efficiency drive
The general response has not yet been to fix the broken underlying systems

Current Drivers Of Public Health Intelligence Futures



Health System

Intelligence System

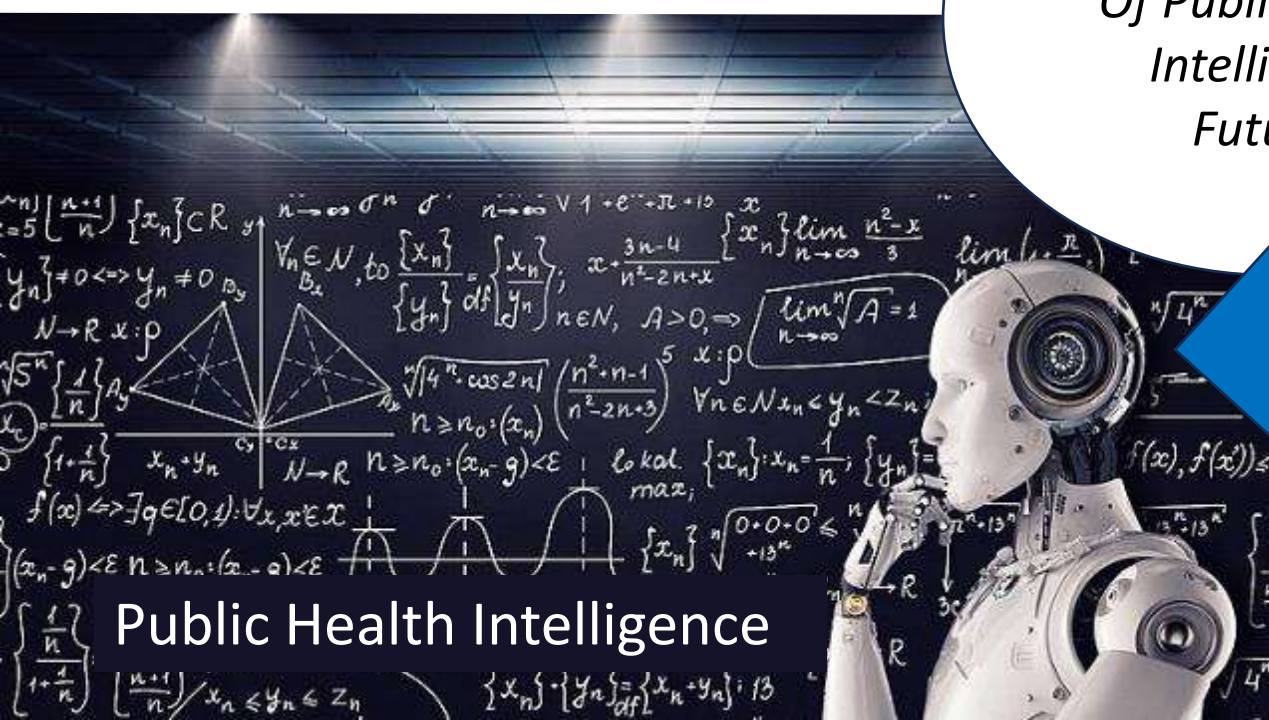
Rapid digitalisation & development of AI is thought to offer solutions to various workforce crises

Centralising and linking data requires new data science skills ability to implement AI tools

Ethical and privacy concerns remain unconvincingly addressed

Current Drivers Of Public Health Intelligence Futures

Human Society



Public Health Intelligence

PREVENTIVE
MEDICINE

Health System



Three Horizons Model

- H1: Past & Present State ———
- H2: Transition to Future - - -
- H3: Desired Future ———

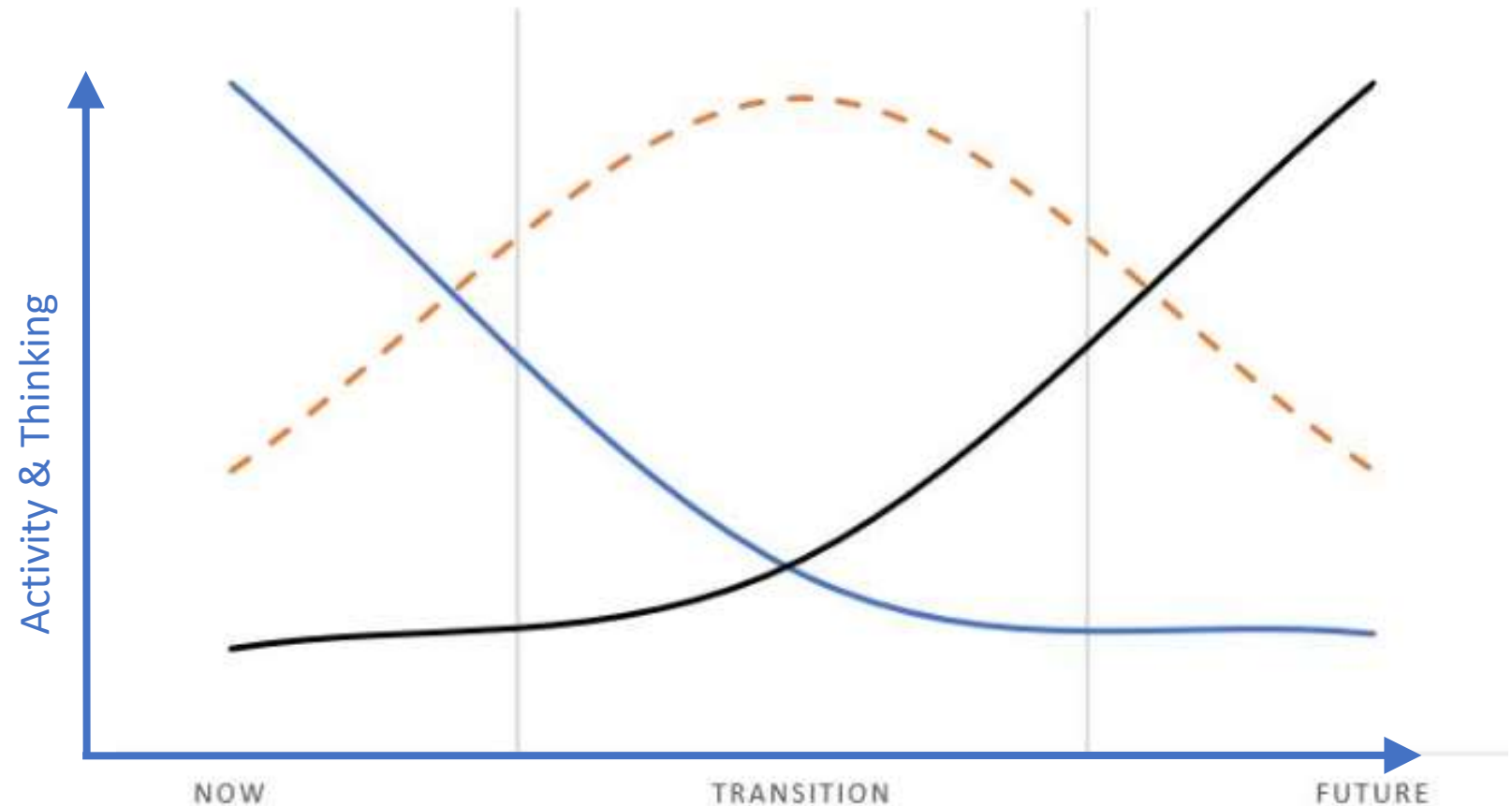
H1: Analyst driven analytics design using ever more sophisticated data science techniques

H2: AI driven intelligence, informed by a systems perspective and co-creative ways-of-working

H3: Analyst facilitated problem-'solving' that is human-centred and complexity-informed

Bill Sharpe
UK Futurist

PUBLIC HEALTH INTELLIGENCE (DECISION-SUPPORT FUNCTION)



H1: Our Past & Present

We are trapped in old thinking:

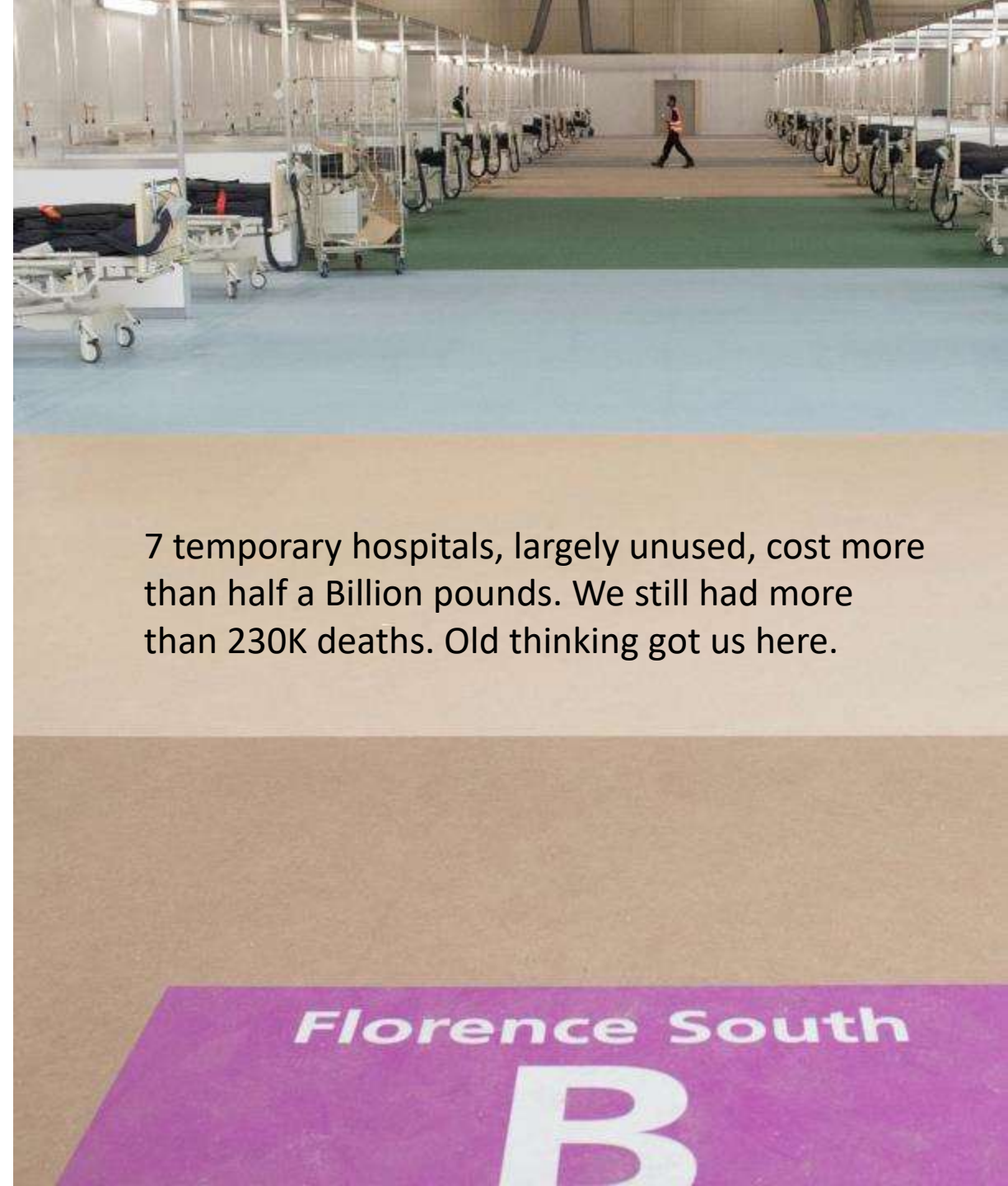
- 19th Century management paradigms

- We focus more on data than on intelligence

- Siloed & fragmented approach to challenges

- We still have organisations that don't learn

230 000



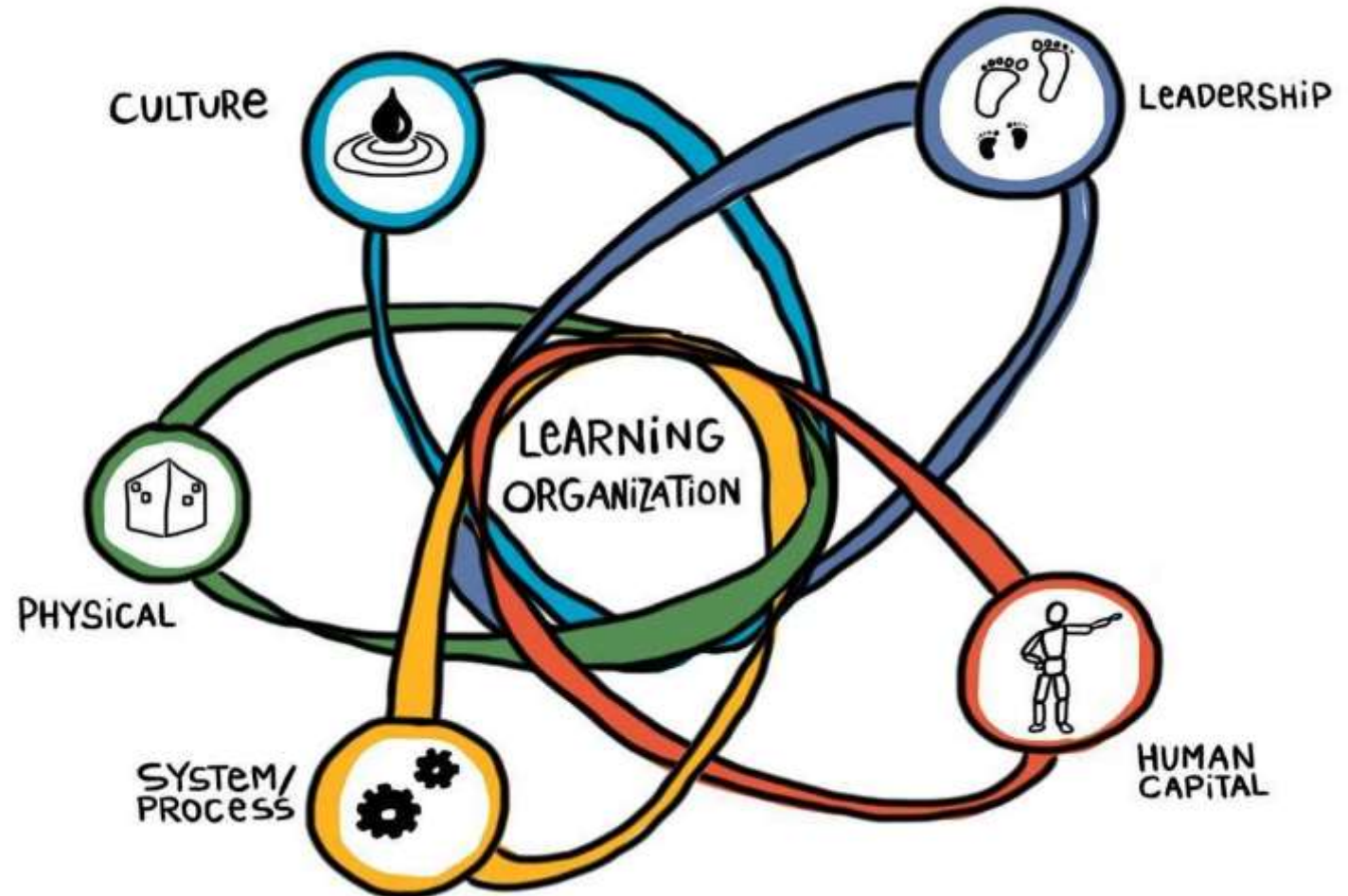
7 temporary hospitals, largely unused, cost more than half a Billion pounds. We still had more than 230K deaths. Old thinking got us here.

H3: Desired Public Health Intelligence Future

Fully integrated &
coherent approaches

System-wide problem-
management

Seamless real-time
intelligence sharing



H2: Our Transition

A gradual shift to:

1. AI powered Open Data
2. Cross-functional teams
3. Co-creation of intelligence
4. Systems-based practice
5. Focus on “inequality”

Increase our effectiveness to
manage problems despite
growing complexity



Photo by Leio McLaren on Unsplash

A full-page background image of a sunset over the ocean. The sun is low on the horizon, creating a bright orange glow that reflects on the water and the wet sand of a beach in the foreground. The sky is filled with large, dark clouds that are illuminated from below by the setting sun, giving them a fiery orange and yellow appearance. The overall mood is dramatic and contemplative.

*Public Health Intelligence has only interpreted the world,
in various ways. The point, however, is to change it.*

after Karl Marx