CFS

CENTRE FOR FORESIGHT STUDIES

Futures Studies Workshop: HDU2050 Scenario Building

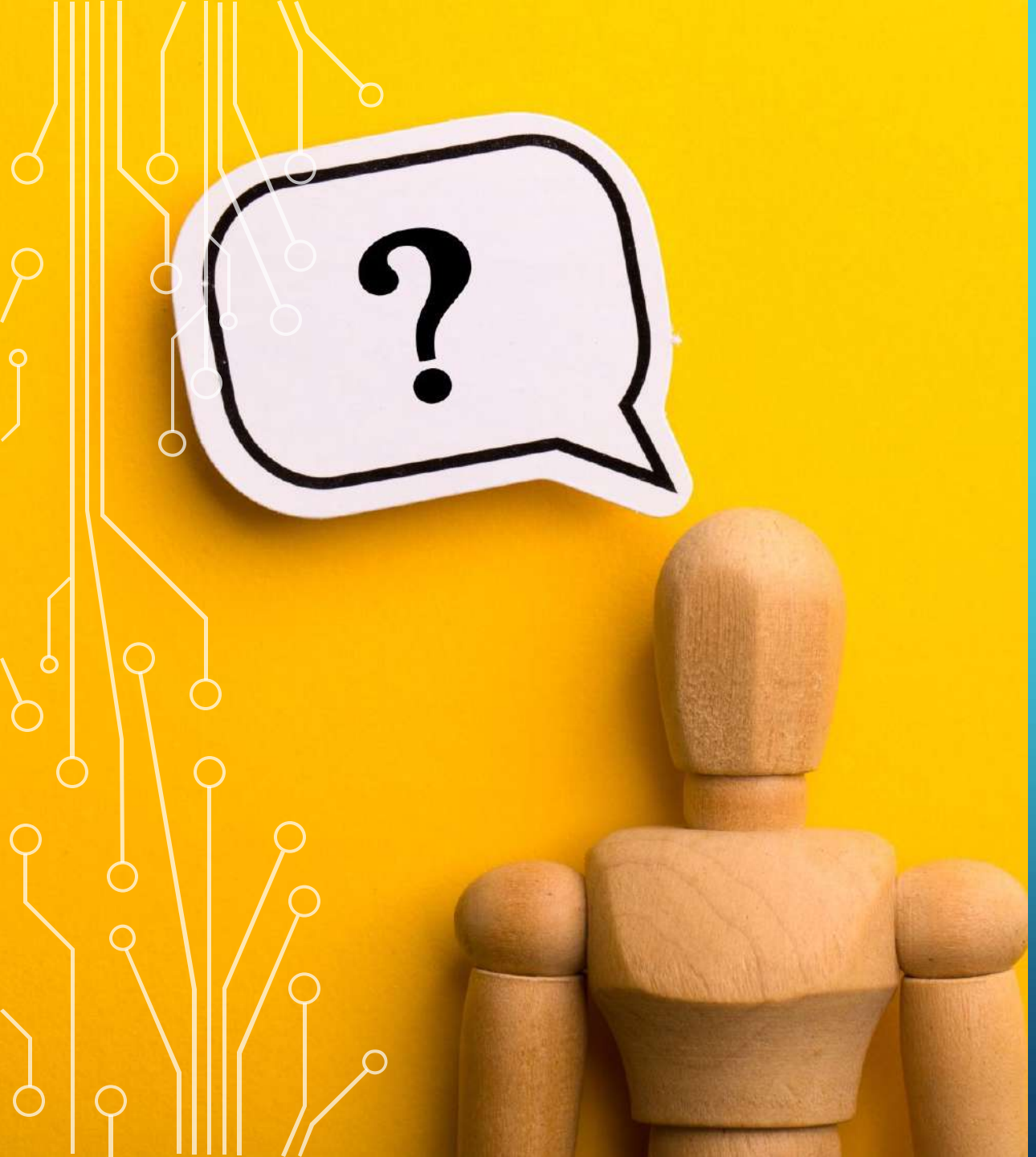
عبدالواحد جلال نوري

3-6/7/2022

WHAT IS THE LIKELY FUTURE FOR UHD IN 2050 IF CURRENT TRENDS CONTINUE?

WHAT ARE THE CRITICAL ASSUMPTIONS BEHIND YOUR FORECASTS?

WHAT IS YOUR PREFERRED FUTURE FOR THE HDU IN 2050 & BEYOND?



HOW DID YOU GET TO THAT PREFERRED FUTURE?

WHAT IS A SUPPORTING METAPHOR – STORY – OF YOUR PREFERRED FUTURE?

- Old metaphor
- New metaphor

PROPOSED POLICIES AND STRATEGIES

ما هي الدراسات المستقبلية؟

بعض الدراسات المستقبلية

ما هو موقع الدراسات المستقبلية بين التخصصات ؟

القواعد الأساسية للدراسات المستقبلية

مناهج الدراسات المستقبلية

No Departmentalization

PROCESS

Blue Hat - Process

Thinking about thinking.
What thinking is needed?
Organizing the thinking.
Planning for action.

CREATIVITY

Green Hat - Creativity

Ideas, alternatives, possibilities.
Solutions to black hat problems.

FACTS

White Hat - Facts

Information and data.
Neutral and objective.
What do I know?
What do I need to find out?
How will I get the information I need?

BENEFITS

Yellow Hat - Benefits

Positives, plus points.
Why an idea is useful.
Logical reasons are given.

FEELINGS

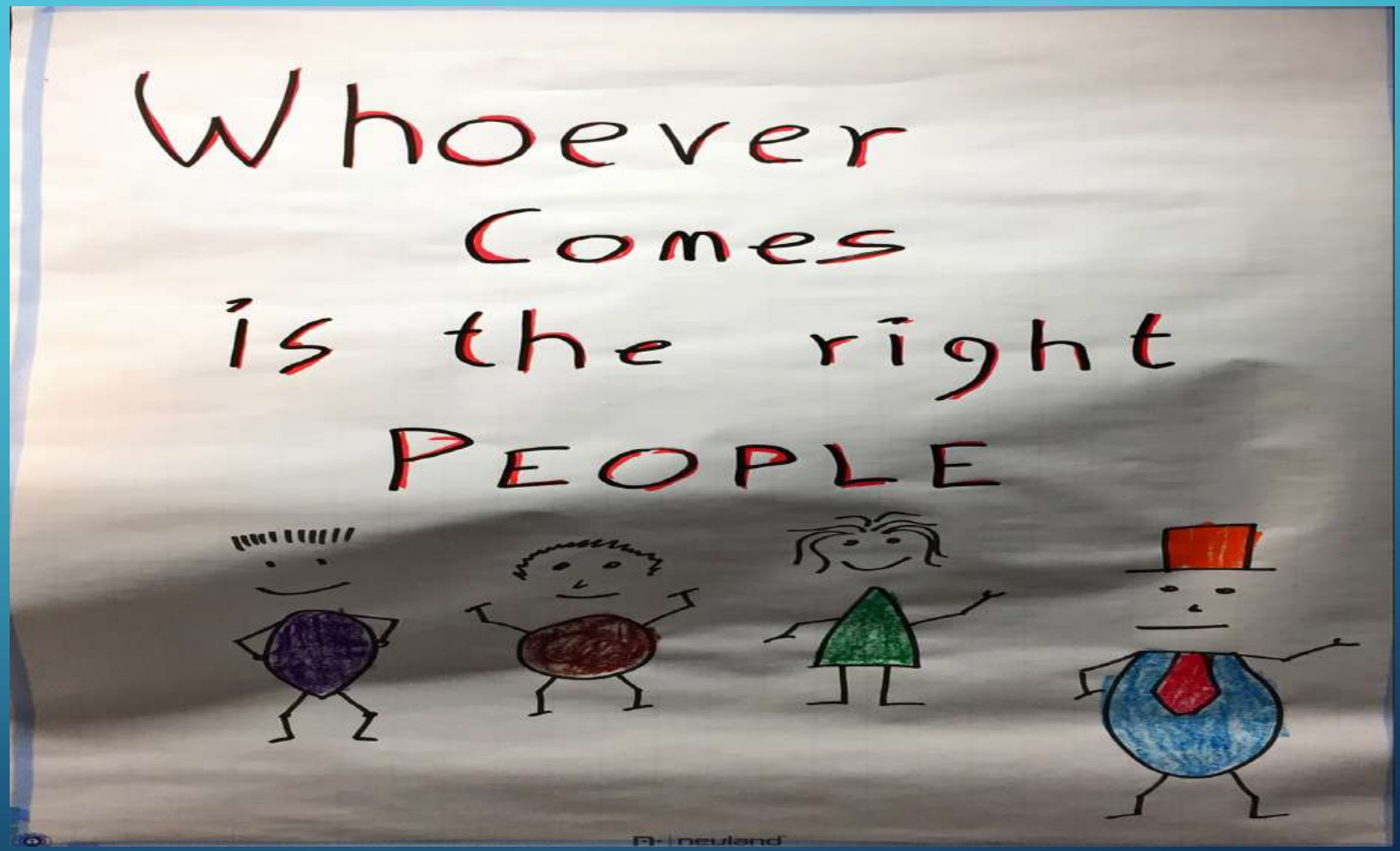
Red Hat - Feelings

Intuition, hunches, gut instinct.
My feelings right now.
Feelings can change.
No reasons are given.

CAUTIONS

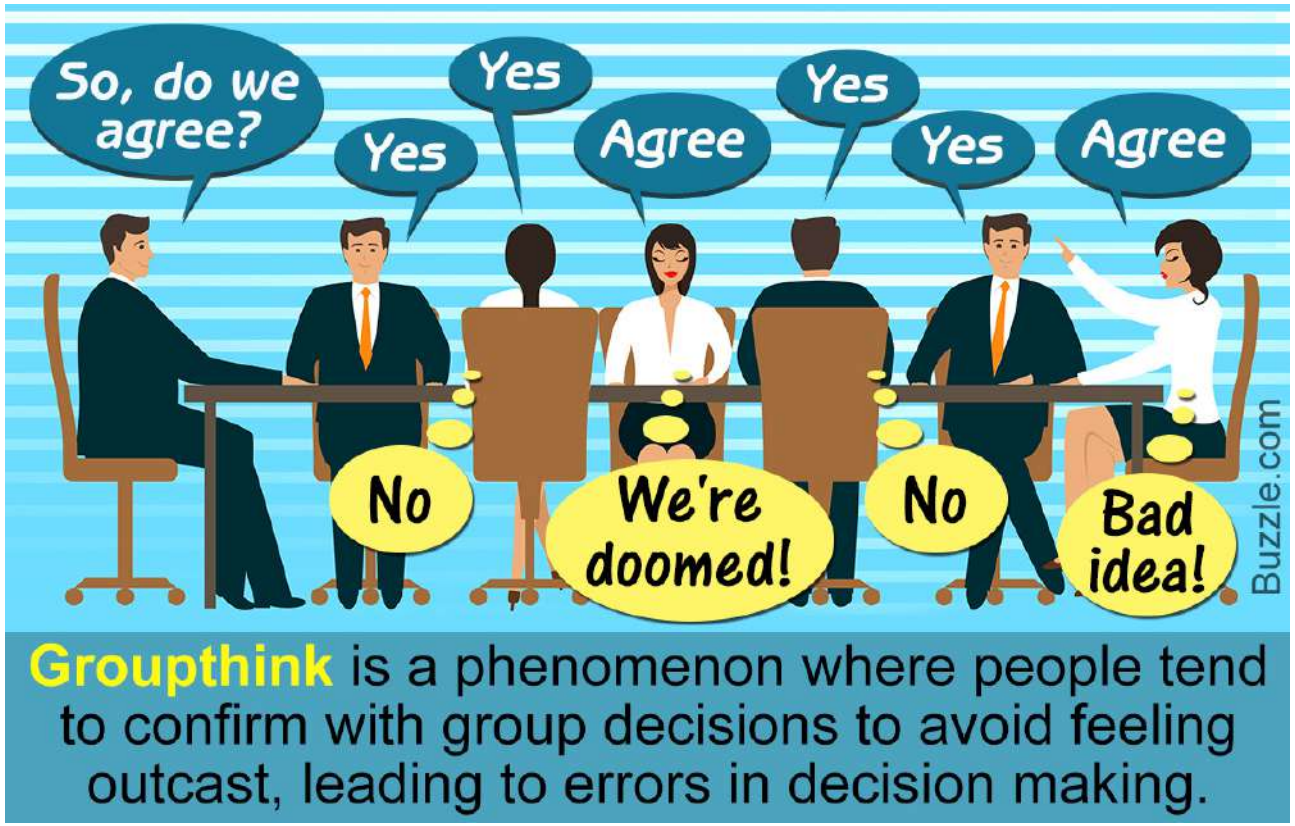
Black Hat - Cautions

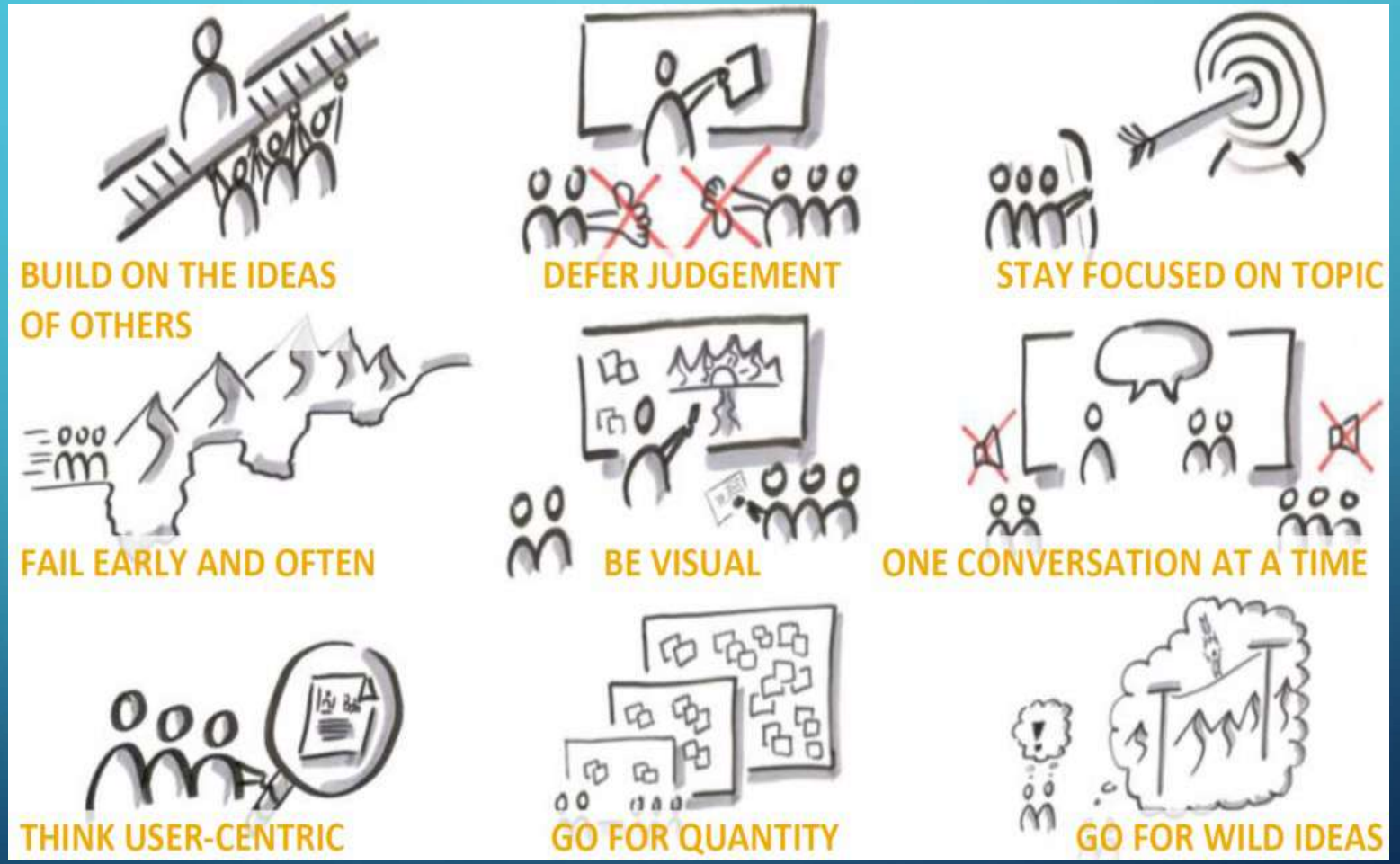
Difficulties, weaknesses, dangers.
Spotting the risks.
Logical reasons are given.


Whoever
Comes
is the right
PEOPLE

Be **casual**

NO GROUPTHINK




BUILD ON THE IDEAS OF OTHERS
DEFER JUDGEMENT
STAY FOCUSED ON TOPIC
FAIL EARLY AND OFTEN
BE VISUAL
ONE CONVERSATION AT A TIME
THINK USER-CENTRIC
GO FOR QUANTITY
GO FOR WILD IDEAS

BACKGROUND

Futures studies is the systematic study of possible, probable and preferable futures

Futures studies has moved from external forces influencing the future — astrology and prophecy— to structure and agency:

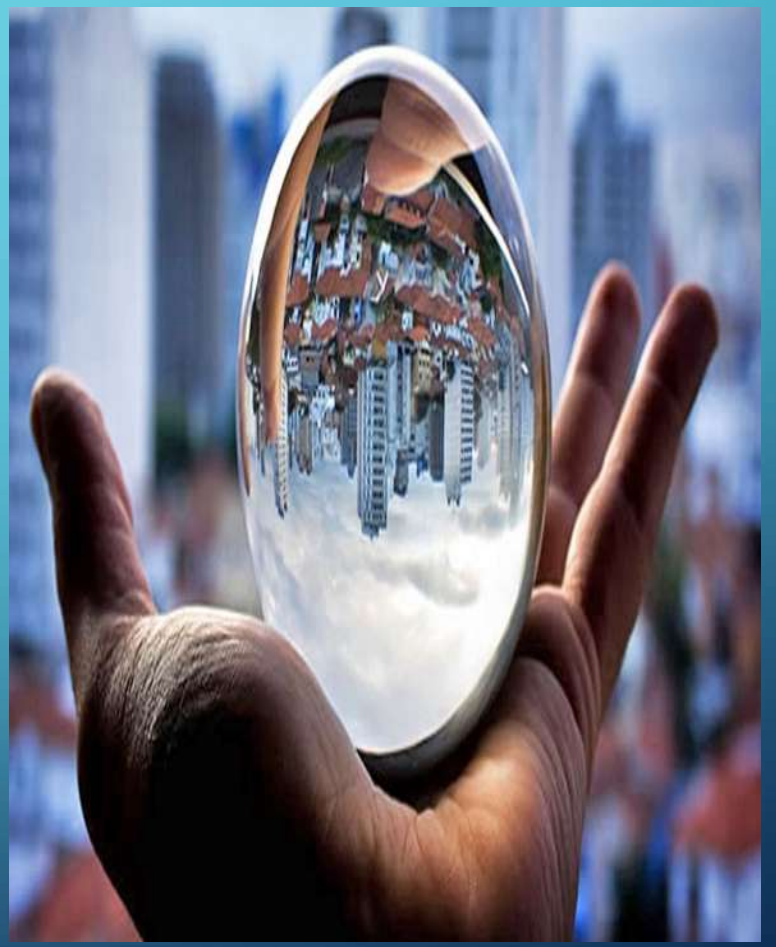
- Structure - historical patterns of change, of the rise and fall of nations and systems
- Agency - the study and creation of preferred images of the future

WHAT IS NOT

IS not about prediction

But alternative future should be forcast

Preferred futures should be envisioned



BACKGROUND

Futures studies has been eagerly adopted by planning departments in organizations and nations.

Yet there are clear differences between the planning and futures frameworks:

- Planning seeks to control and close the future
- Futures studies seeks to open up the future, moving from the 'likely' future to alternative futures

BACKGROUND

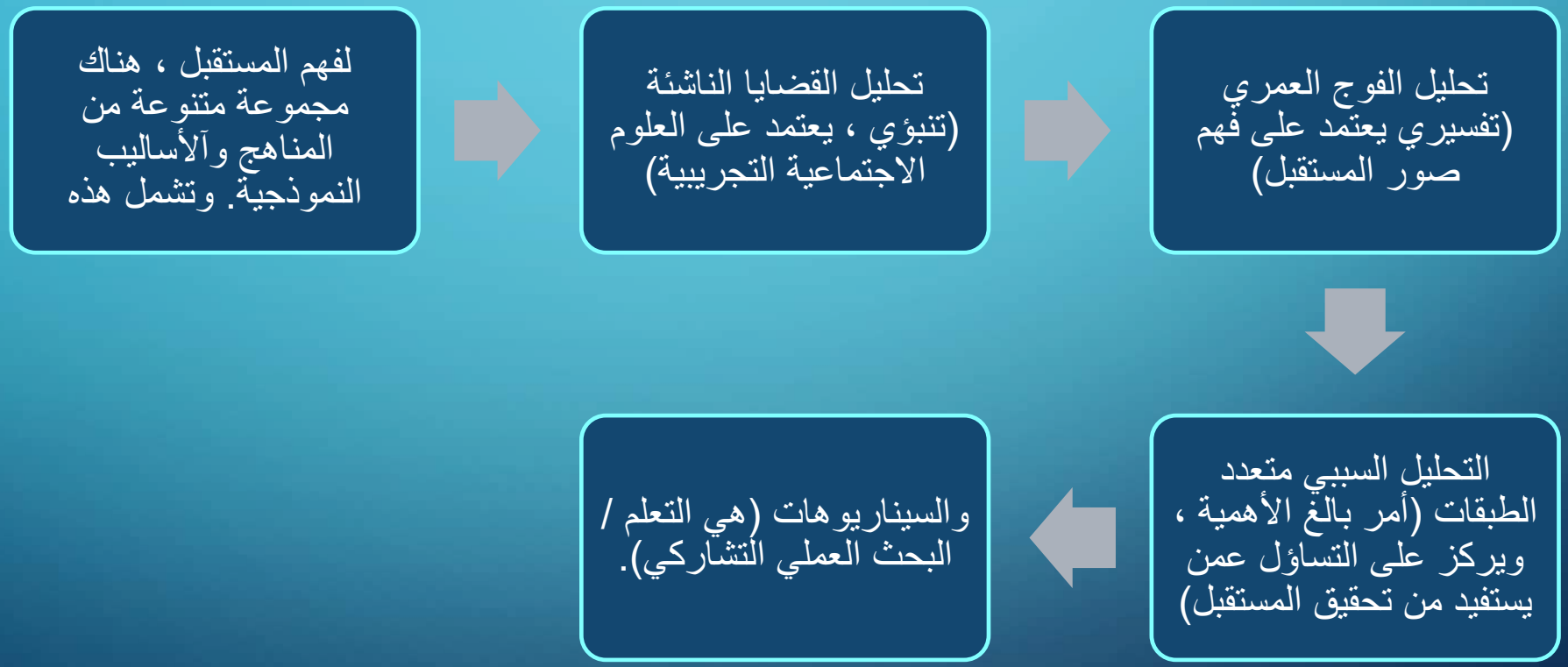
To understand the future, there are a variety of exemplary methods. These include

Emerging issues analysis (is predictive, based on empirical social sciences)

Age-cohort analysis (is interpretive based on understanding images of the future)

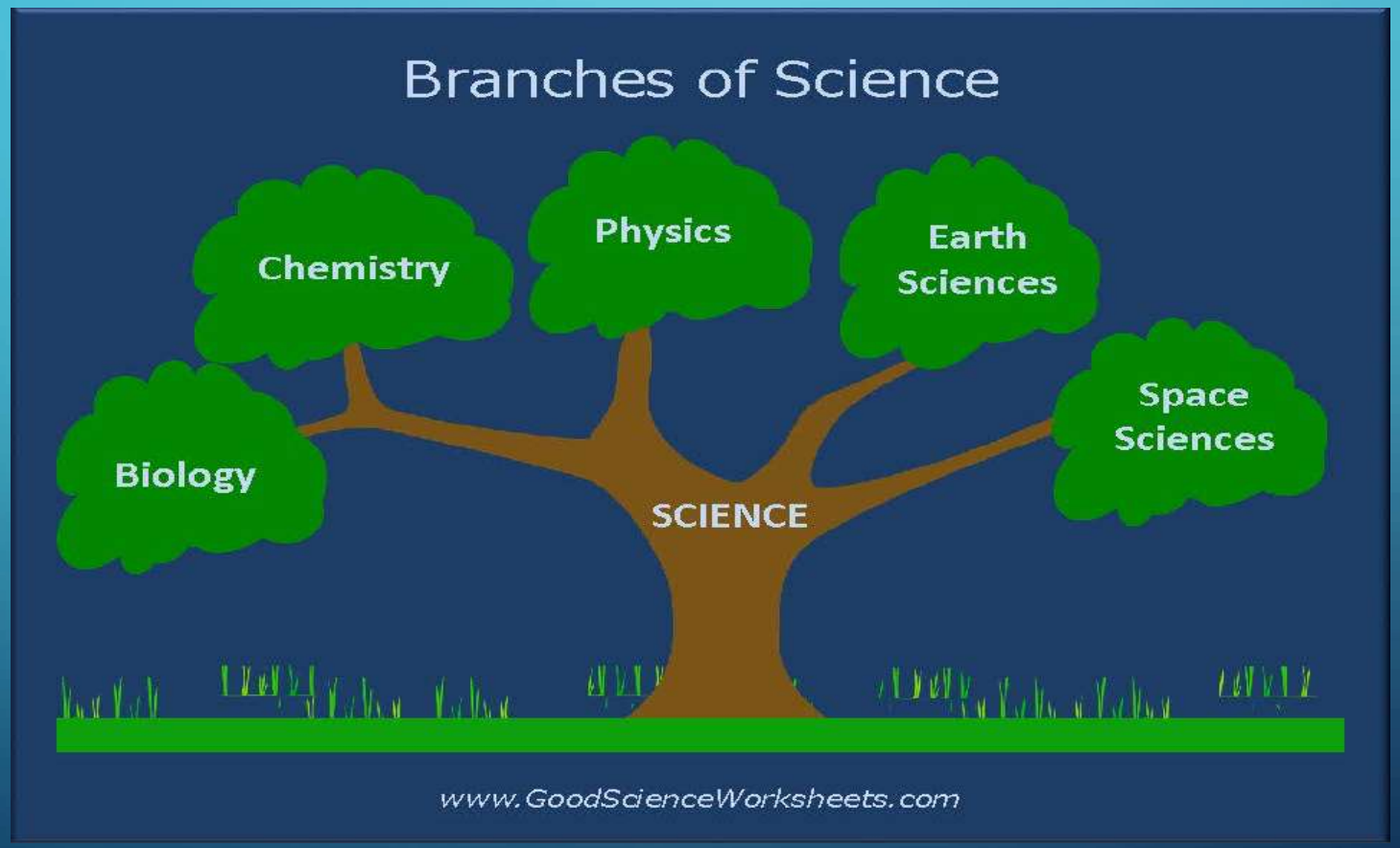
Causal layered analysis (is critical, focused on asking who benefits by the realization of futures)

And scenarios (is participatory action learning/research).

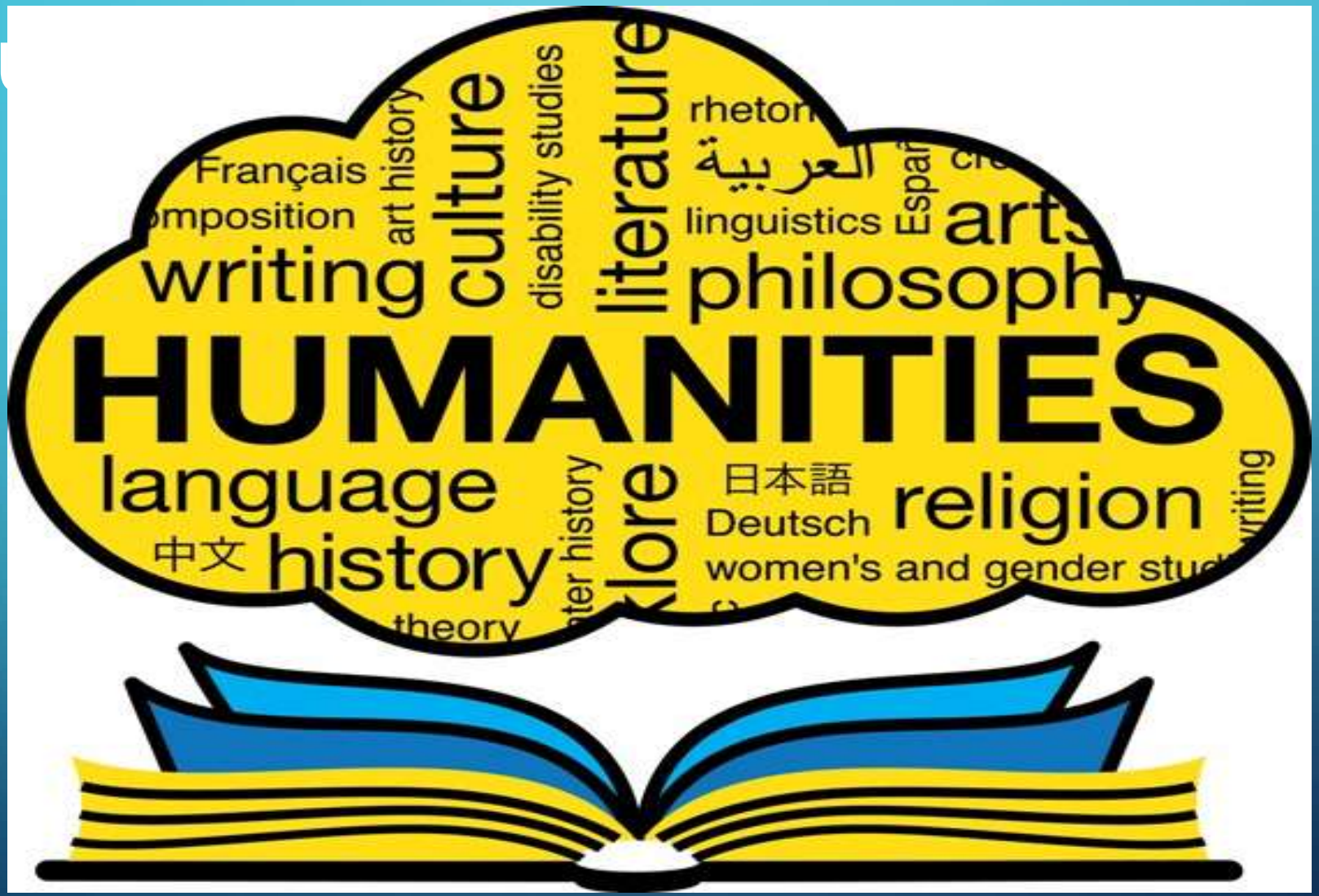

تحليل الفوج العمري (تفسيري يعتمد على فهم صور المستقبل)
تحليل القضايا الناشئة (تنبؤي ، يعتمد على العلوم الاجتماعية التجريبية)
لفهم المستقبل ، هناك مجموعة متنوعة من المناهج وآلأساليب النموذجية. وتشمل هذه
التحليل السببي متعدد الطبقات (أمر بالغ الأهمية ، ويركز على التساؤل عمن يستفيد من تحقيق المستقبل)
والسيناريوهات (هي التعلم / البحث العملي التشاركي).

ACADEMIC DISCIPLINE

1-Natural Sciences



2-HU


HUMANITIES
Français
art history
culture
disability studies
literature
rheton
العربية
linguistics
arts
writing
philosophy
language
history
中文
theory
klore
日本語
Deutsch
religion
women's and gender stud
writing

3- PERFORMING ARTS

FOURTH

Are the social sciences (sociology, economics, psychology, perhaps anthropology, geography, perhaps even political science).

Note that these, too, are ‘sciences.’ That is what makes them so suspect and yet legitimate.

They strive to be scientific (positivistic, reductionistic), but, alas, they cannot quite pull it off and thus are dubbed derisively as ‘soft’ in contrast to the true ‘hard’ sciences.

5TH : PROFESSIONAL SCHOOLS AND DISCIPLINES

agriculture, engineering, medicine, architecture, perhaps education,

law, urban planning, social work concerns.

These are strictly instrumental, barely scientific, and certainly not critical.

But they are very practical, hard-nosed, and successful.

JIM DATOR'S IMAGES

The future' may be considered as emerging from the interaction of four components:

- events,
- trends,
- images,
- and actions.

Futures

Present

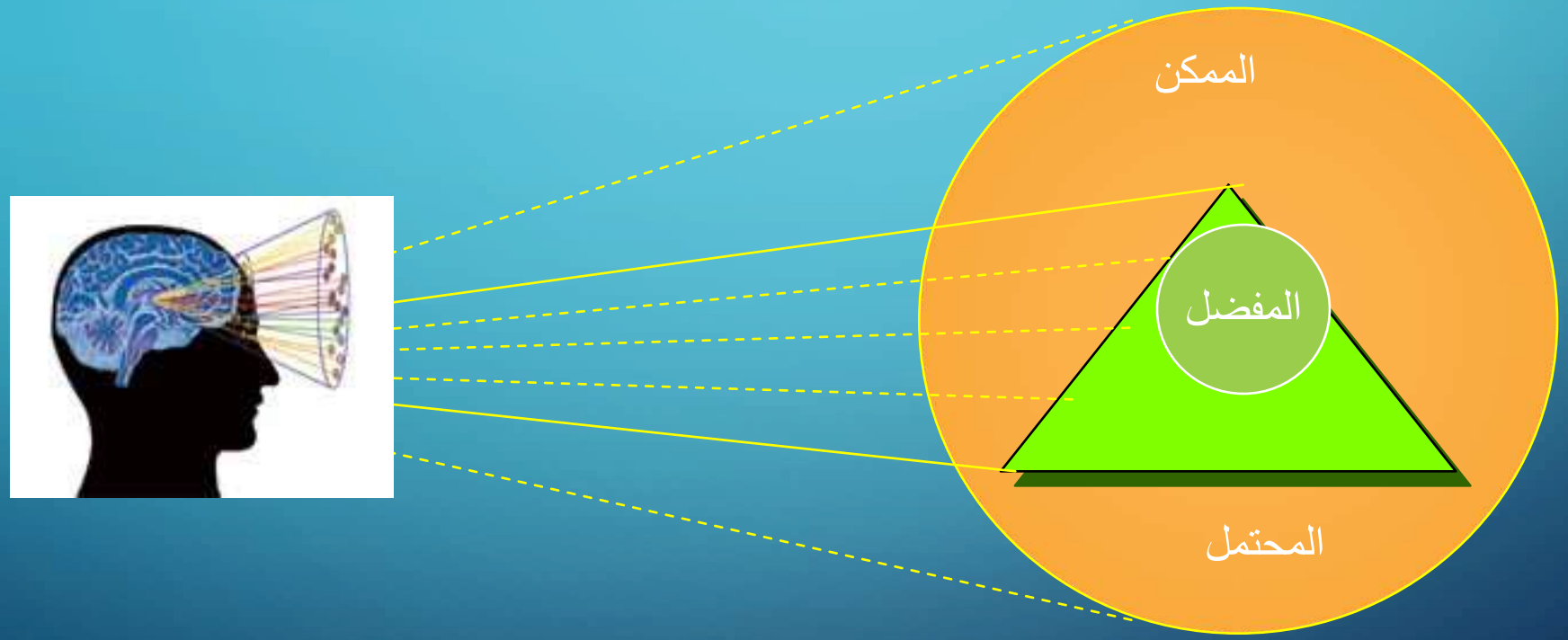
Continued growth

Collapse

Discipline

Transformation

الدراسات المستقبلية هي الدراسة المنهجية للمستقبل الممكن والمحتمل والمفضل

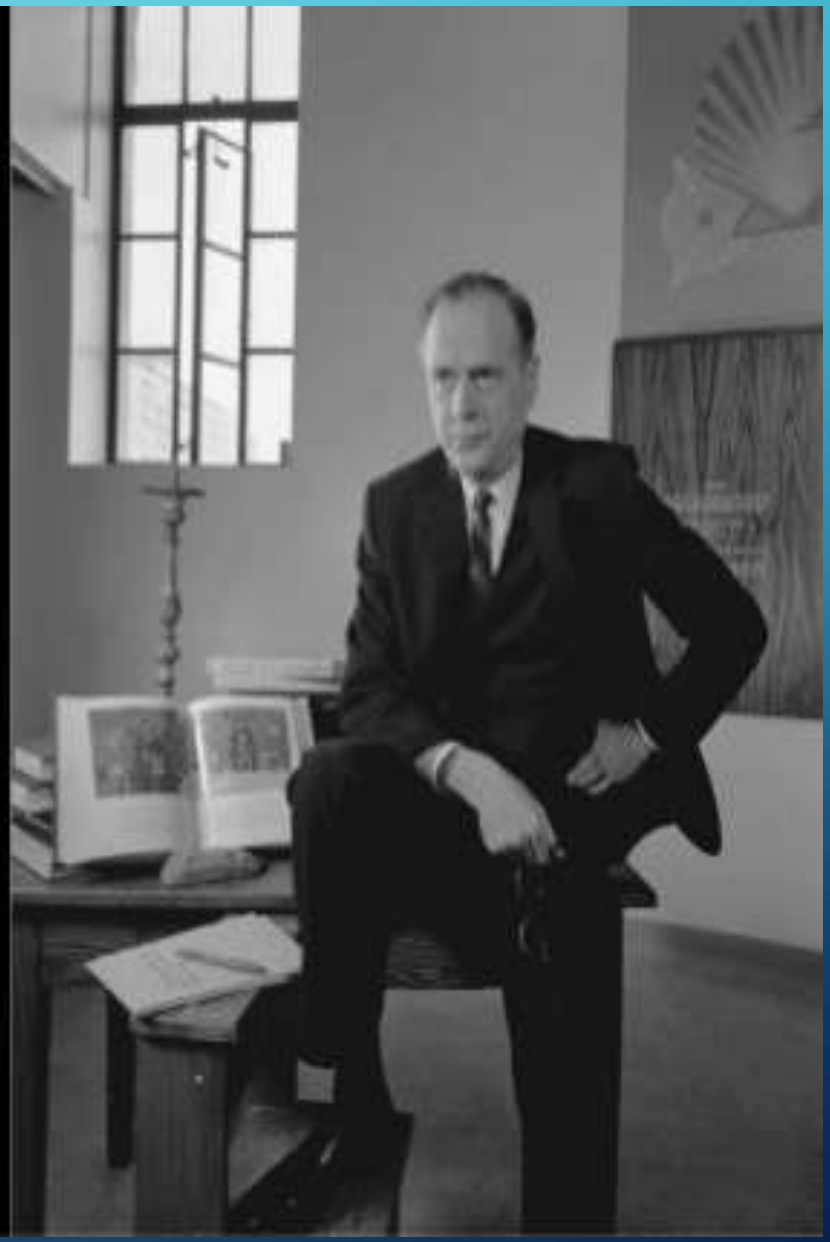


PERCEPTIONS

- In the Islamic world-Both to the system and the people futures studies is ridiculous…
- In the west Futures studies embedded in the system-Institutionalized
- But still common people thinks is it a kind of science fiction

"WE SHAPE OUR TOOLS, AND THEREAFTER OUR TOOLS SHAPE US."

Marshall McLuhan



Any useful statement about the future should at first seem ridiculous.
JIM DATOR
6

HDU MEETING IN 1900

Year 2022

- “professional athletes”
- Well paid for doing nothing
- People love them for no reason
- People willing to buy your product so they can identify with them.
- That product worthless, harmful, tooth-rotting, sugared water!

- Imagine the future as rushing towards us in the form of great tsunamis –Jim Dator

NOT JUST OBSERVE BUT TRANSFORM

Sweden: a “Ministry of the Future” to think about tomorrow’s public policy

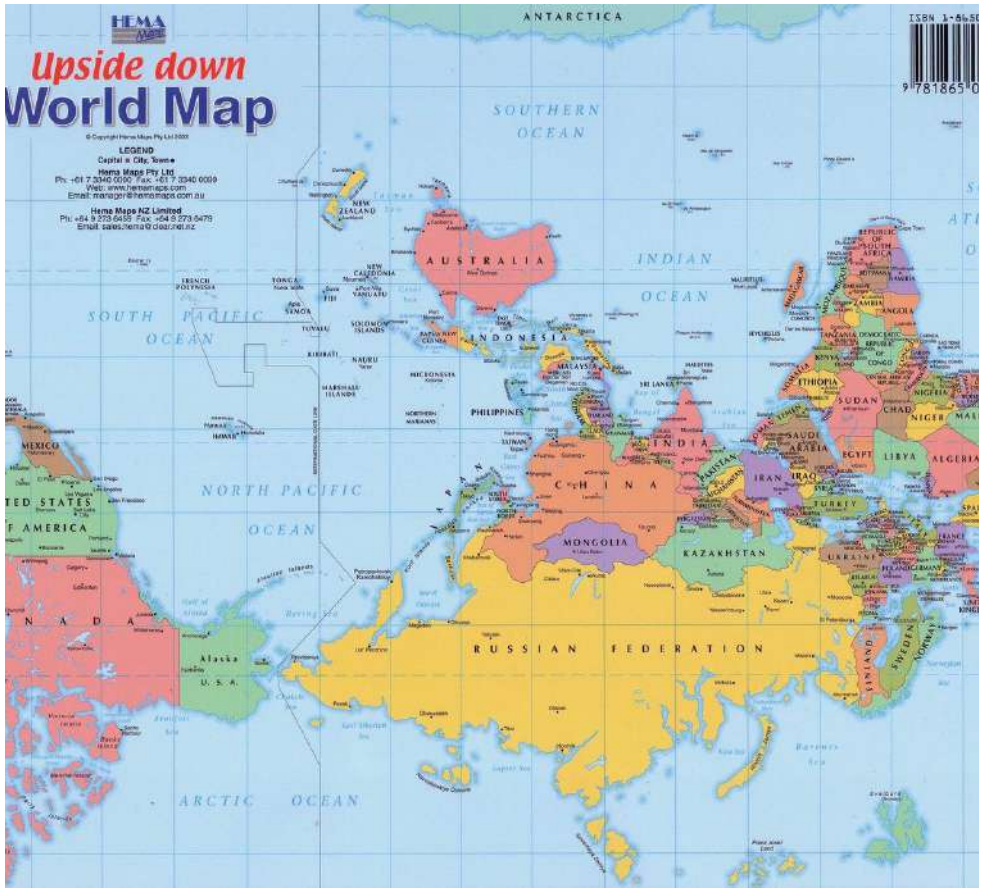
As early as 1973, Sweden, in a ground-breaking move for future planning, appointed a Minister of State to review the role of future studies. A Commission on the Future of Sweden, set up in 2011, which was tasked with identifying the challenges facing Sweden in the longer term, up to 2020 and 2050, submitted its report in March 2013. Created in November 2014, Sweden’s “Ministry of the Future” makes it, along with South Korea, one of the few countries to have such a body. Headed up by Kristina Persson, it has a mandate to think about public policy in the very long term.

MINISTRY OF HAPPINESS

parents. Unfortunately, history gives no discounts. If the future of humanity is decided in your absence, because you are too busy feeding and clothing your kids – you and they will not be exempt from the consequences. This is very unfair; but who said history was fair?

- The future is an asset, a resource and a narrative to be employed.
- It is a system of beliefs

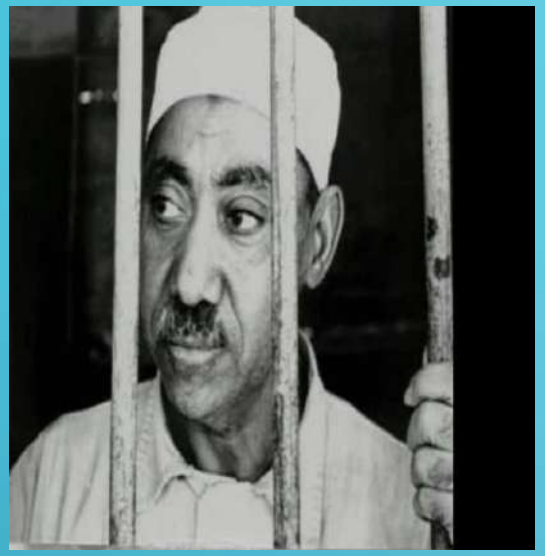
SEE THE WORLD DIFFERENTLY

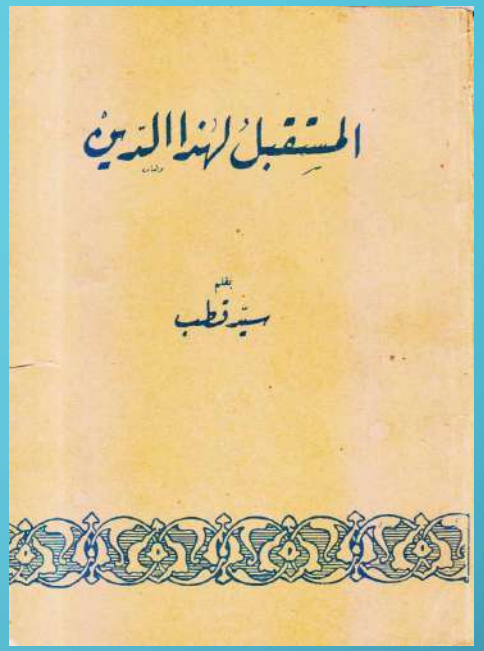


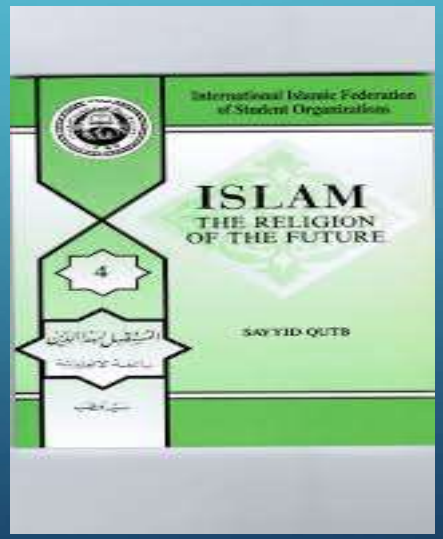
SEE MULTIPLE PERSPECTIVES, AND THE EVOLVING OVERALL

Her next step was clear but she wasn't so sure about the one after that
Horacek

WHAT TO DO?




المستقبل لهذا الدين
سيد قطب


International Islamic Federation of Student Organizations
ISLAM
THE RELIGION OF THE FUTURE
4
SAYYID QUTB

HG Wells,
Anticipations

Anticipating what the world would be like in the year 2000

Alvin Tofler,
Future Shocks

A revolution from an industrial society to a "super-industrial society". 'Information overload' overwhelms people

Michio Kaku, The
Future of the Mind

Possibilities of advanced technology that can alter the brain and mind

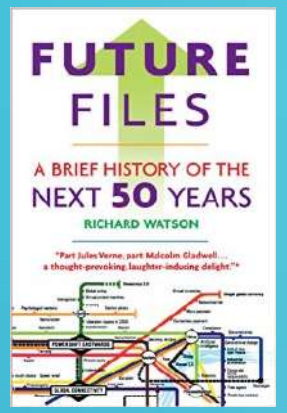
1902	1962	1970	1999	2014

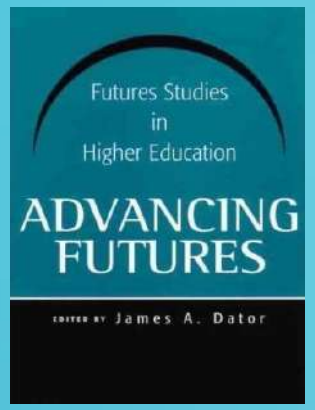
Defining the boundaries in which all possible futures must lie

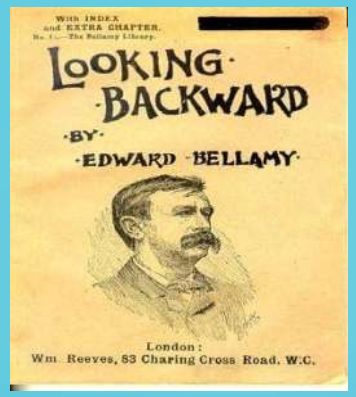
Sir Arthur C Clarke,
Profiles of the Future

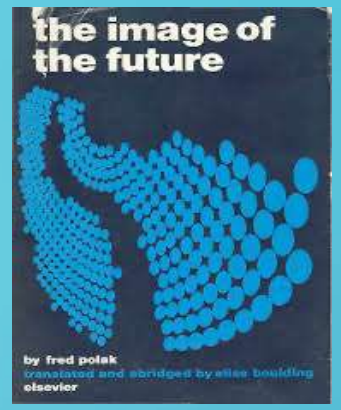
Expecting technological developments in artificial intelligence and molecular engineering. Tiny mechanisms controlled by microscopic powerful thinking computer

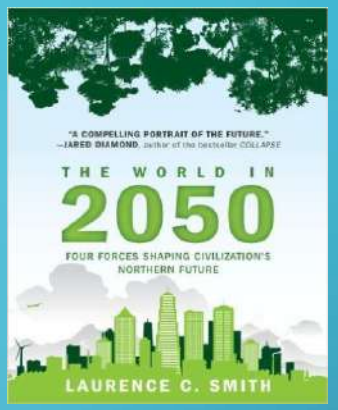
Eric Dexler,
Engines of Creation

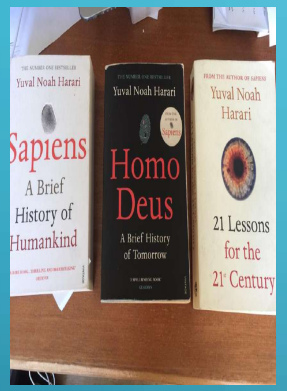

FUTURE
FILES
A BRIEF HISTORY OF THE
NEXT 50 YEARS
RICHARD WATSON

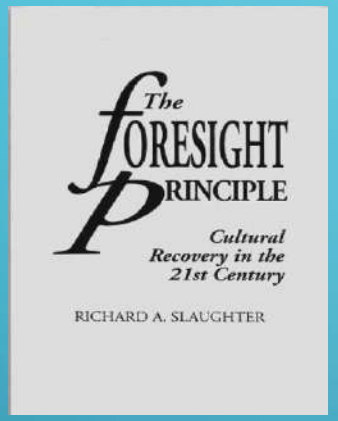

Futures Studies
in
Higher Education
ADVANCING
FUTURES
EDITED BY James A. Dator

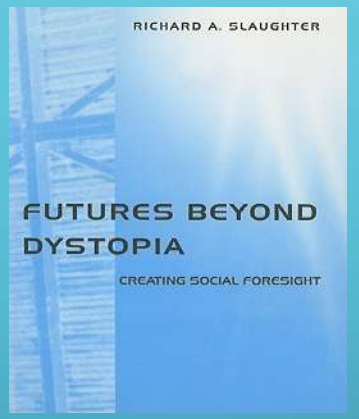

LOOKING
BACKWARD
BY
EDWARD BELLAMY
London:
Wm. Reeves, 83 Charing Cross Road, W.C.

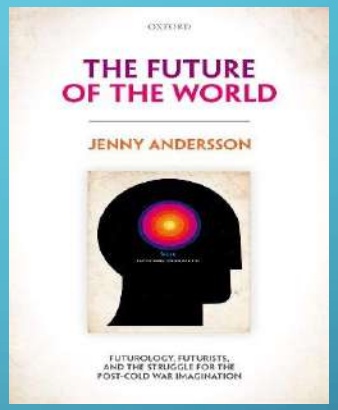

the image of
the future
by fred polak
translated and abridged by elise boulding
elsevier

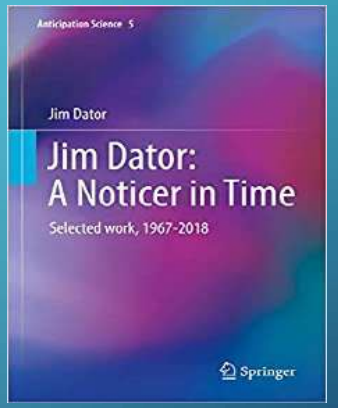

"A COMPELLING PORTRAIT OF THE FUTURE."
—JARED DIAMOND, author of the bestseller COLLAPSE
THE WORLD IN
2050
FOUR FORCES SHAPING CIVILIZATION'S
NORTHERN FUTURE
LAURENCE C. SMITH

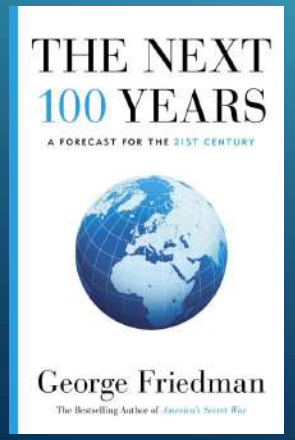

Yuval Noah Harari
Sapiens
A Brief
History of
Humankind
Yuval Noah Harari
Homo
Deus
A Brief History
of Tomorrow
Yuval Noah
Harari
21 Lessons
for the
21st Century


The
FORESIGHT
PRINCIPLE
Cultural
Recovery in the
21st Century
RICHARD A. SLAUGHTER

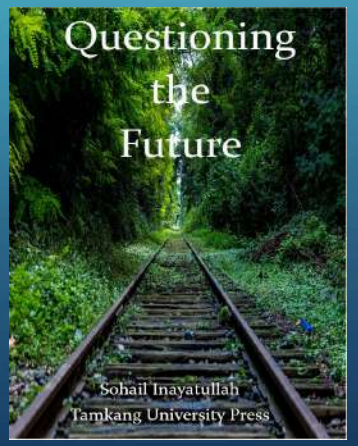

RICHARD A. SLAUGHTER
FUTURES BEYOND
DYSTOPIA
CREATING SOCIAL FORESIGHT

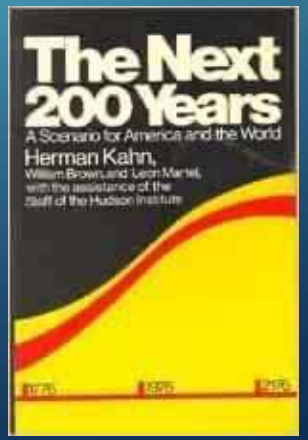

OXFORD
THE FUTURE
OF THE WORLD
JENNY ANDERSSON
FUTUROLOGY, FUTURISTS,
AND THE STRUGGLE FOR THE
POST-COLD WAR IMAGINATION


Anticipation Science 5
Jim Dator
Jim Dator:
A Noticer in Time
Selected work, 1967-2018
Springer


THE NEXT
100 YEARS
A FORECAST FOR THE 21ST CENTURY
George Friedman
The Bestselling Author of America's Secret War

ELISE BOULDING
KENNETH E. BOULDING
THE
FUTURE
Images and Processes


Questioning
the
Future
Sohail Inayatullah
Tamkang University Press


The Next
200 Years
A Scenario for America and the World
Herman Kahn,
William Brown and Leon Martel
with the assistance of the
staff of the Hudson Institute

ASIA
2050
Realizing
the Asian
Century
Executive
Summary

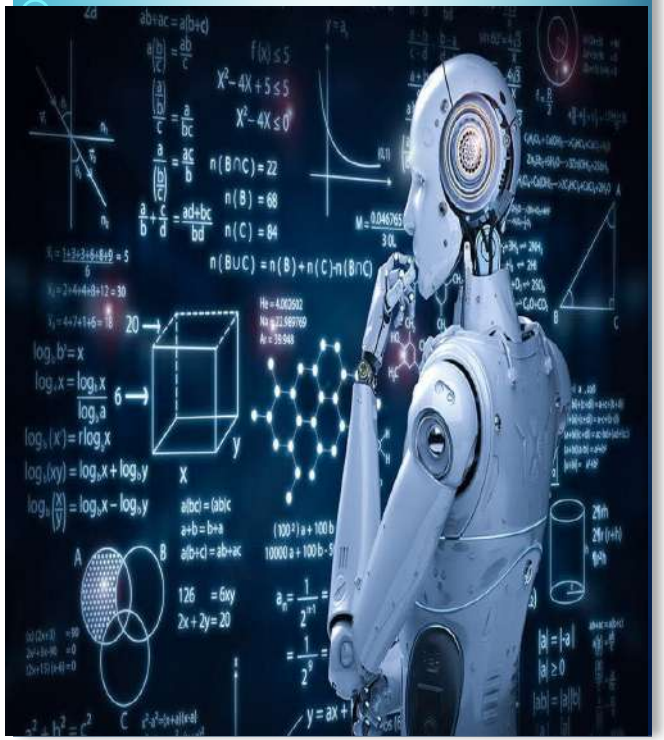
EMERGING ISSUE

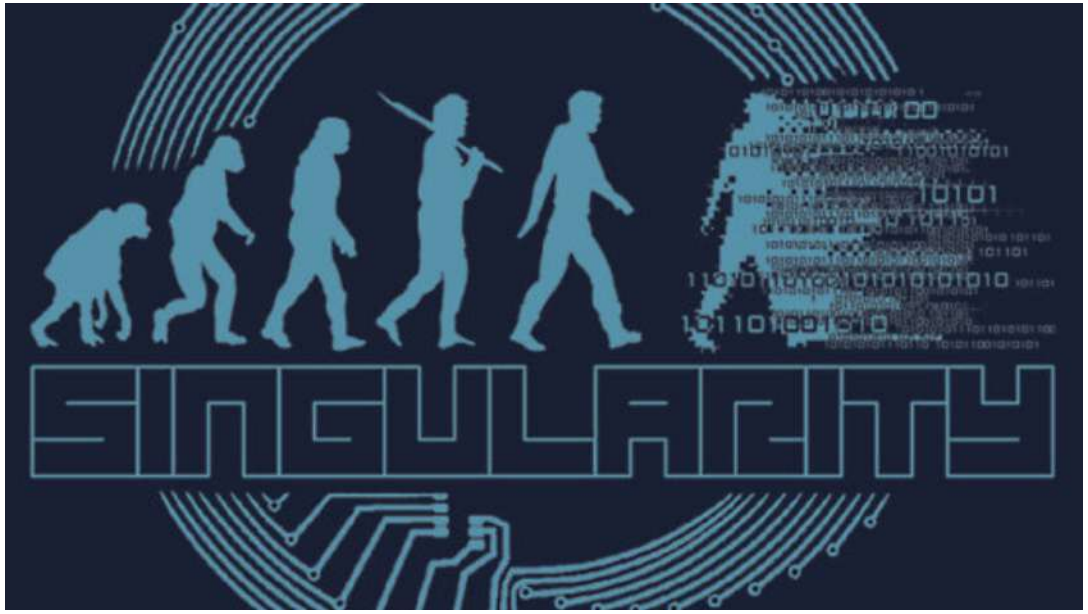
- Making meat in laboratories might eventually mean that the world only needs a global cattle herd of 40,000 head, the medical pioneer behind 'cultured meat' said Dr Mark Post

- One stem cell has the potential to make 10,000 kilograms of tissue.

- Dr Post eats beef. But in 50 years, he wonders, if there are alternatives to beef. "Will we be willing to allow the killing of animals for food?

WESTERN WORLDVIEW OF SCIENCE AND TECHNOLOGY





Six Epochs of Evolution

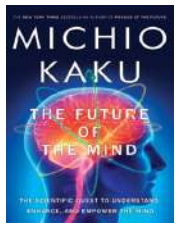
- Epoch-1 Physics and Chemistry – Atomic molecules
- Epoch-2 Biology/Information in DNA
- Epoch-3 Brains/Information in neural patterns
- Epoch-4 Technology/Information in hardware and software
- Epoch-5 Merger of Technology and Human Intelligence
- Epoch-6 The Universe Awakens
  - mater and energy in the universe become saturated with intelligent process and knowledge

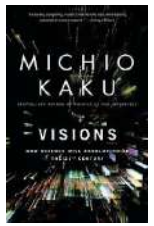
Ray Kurzweil, "By 2040 you will be able to upload your brain...", The Independent, 2009

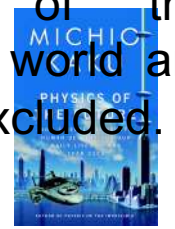
- In 2040, by his estimation, we will be able to upload the human brain to a computer, capturing "*a person's entire personality, memory, skills and history*"!
- (And upload to brains?)

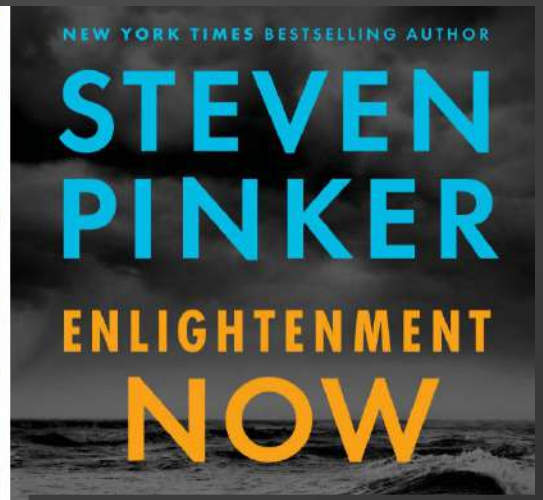
- *Three pillars of modern science*
- *quantum physics,*
- *DNA technology*
- *computer revolution.*

Kaku is clearly writing from a scientific worldview. Viewpoints of religions, thinkers and philosophers outside of the scientific world are largely excluded.

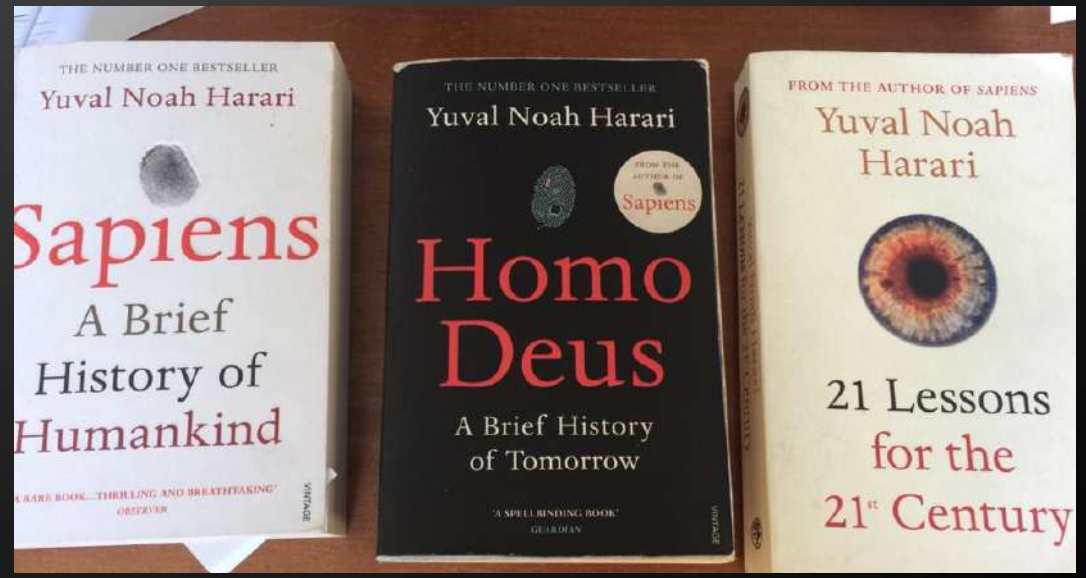


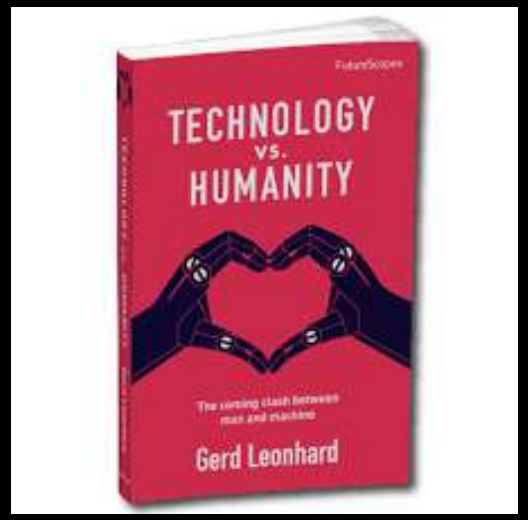





NEW YORK TIMES BESTSELLING AUTHOR
STEVEN PINKER
ENLIGHTENMENT NOW

4 News
'We have become gods'


THE NUMBER ONE BESTSELLER
Yuval Noah Harari
Sapiens
A Brief History of Humankind
THE NUMBER ONE BESTSELLER
Yuval Noah Harari
Sapiens
Homo Deus
A Brief History of Tomorrow
FROM THE AUTHOR OF SAPIENS
Yuval Noah Harari
21 Lessons for the 21st Century


TECHNOLOGY
vs.
HUMANITY
Gerd Leonhard

TECHNOLOGY
WILL NOT SOLVE
POLITICAL
PROBLEMS

GERD LEONHARD
TECNOLOGIA
versus
HUMANIDADE

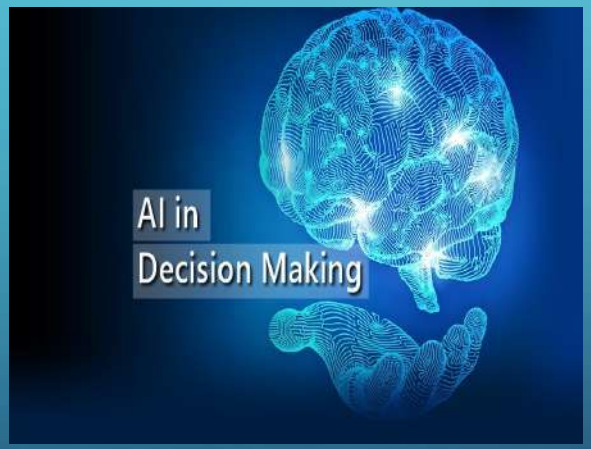
WHAT DO WE WANT
TO BE IN THE
FUTURE?

Gerd Leonhard
Futurist, Author, CEO
TheFuturesAgency
The Future
of Business
GERD
FUTURIST

AI

NEG
NEWS BITE GLOBAL
FACEBOOK
A.I. OUT OF
CONTROL

Gramener
Insights as Stories
AI and Law: 9 Ways
Artificial Intelligence is
Transforming the
Legal Industry


AI in
Decision Making

LAW PRACTICE AI:
BEST TOOLS to GET STARTED

IMPLANTABLE TECHNOLOGIES

Negative impacts
- Privacy/potential surveillance
- Decreased data security
- Escapism and addiction
- Increased distractions (i.e. attention deficit disorder)

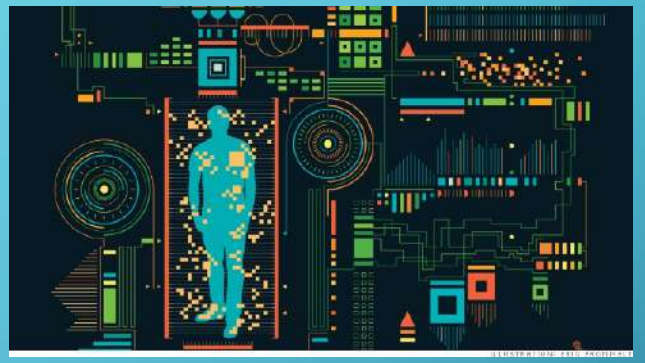
Positive impacts
- Reduction in missing children
- Increased positive health outcomes
- Increased self-sufficiency
- Better decision-making
- Image recognition and availability of personal data (anonymous network that will “yelp”2 people)

Serving communications, location and behaviour monitoring, and health functions.

By 2025: 82% of respondents expected this tipping point will have occurred

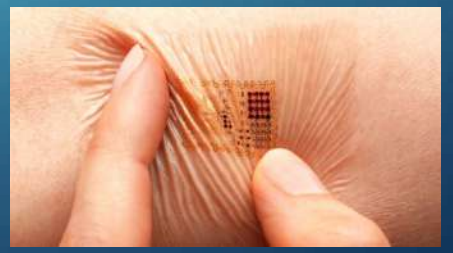
THE QUANTIFIED SELF

Personal data

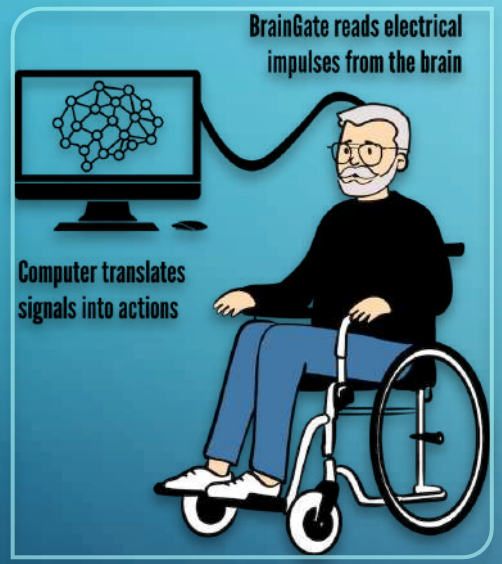


Collective data

Built in data



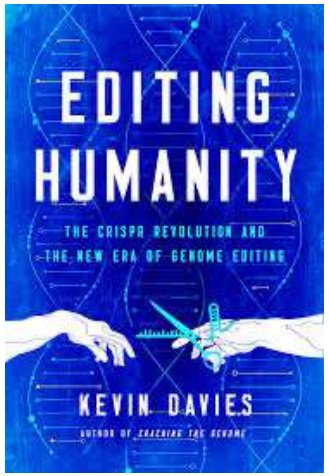
BRAIN CONTROLLED TABLET



- The BrainGate research program is focused on developing brain-computer interface (BCI) technologies to restore the communication, mobility, and independence of people with neurologic disease, injury, or limb loss.

Using micro-electrode arrays implanted into the brain, this pioneering research has shown that neural signals associated with intent to move can be “decoded” and used to operate external devices.

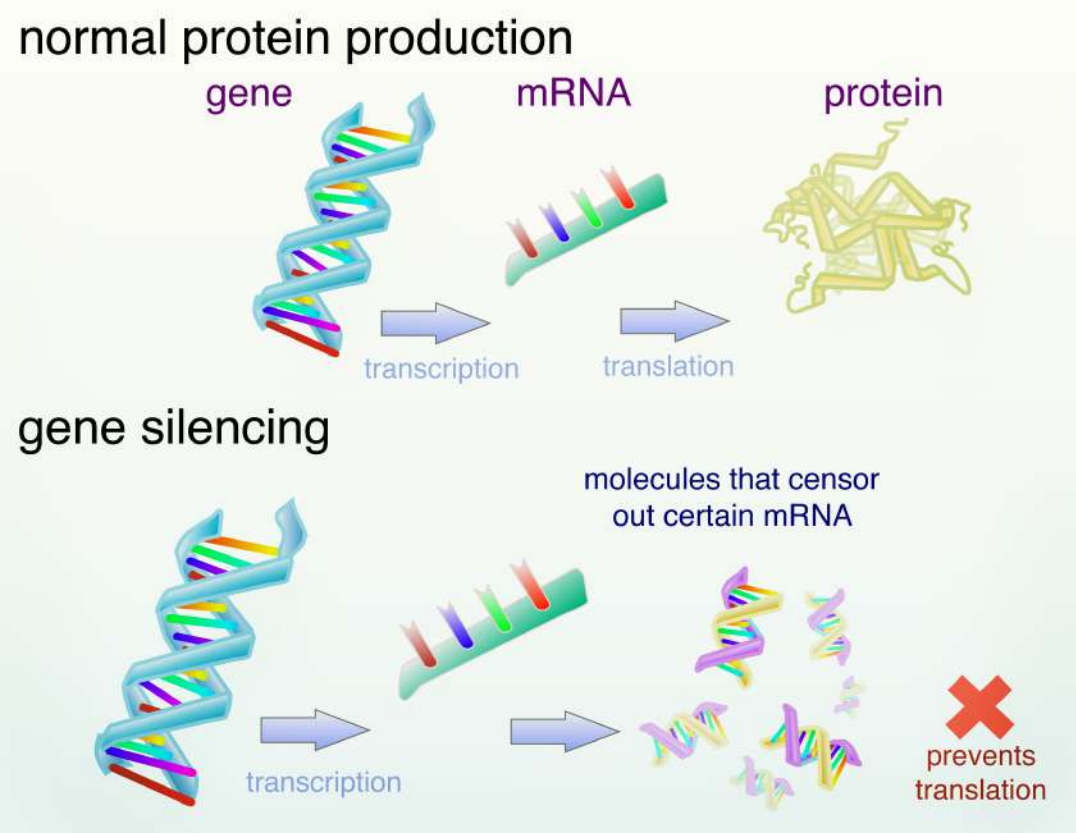
Brown University-Carney Institute for **Brain Science**.

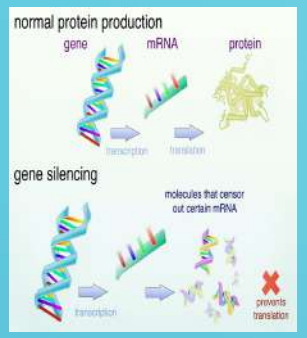


GENETIC COUNSELING

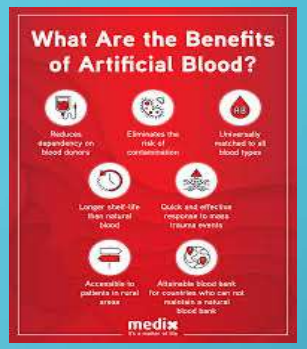
GENE SILENCING

- Interruption or suppression of the expression of a gene at transcriptional or translational levels.




normal protein production
gene
mRNA
protein
transcription
translation
gene silencing
molecules that censor out certain mRNA
transcription
prevents translation

Ritalin® 10 mg
Ciba
Tablets
Methylphenidate hydrochloride U.S.P.
CD


What Are the Benefits of Artificial Blood?
Reduces dependency on blood donors
Eliminates the risk of contamination
Universally matched to all blood types
Longer shelf-life than natural blood
Quick and effective response to mass trauma events
Accessible to patients in rural areas
Attainable blood bank for countries who can not maintain a natural blood bank
medix

Genomic Medicine Cycle

Modafinil
100 mg
tablets
100 mg

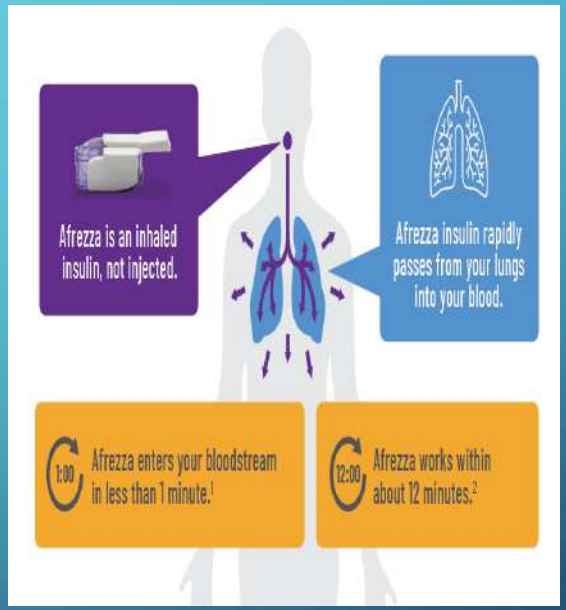
James Gimzewski

LISTENING FOR CANCER

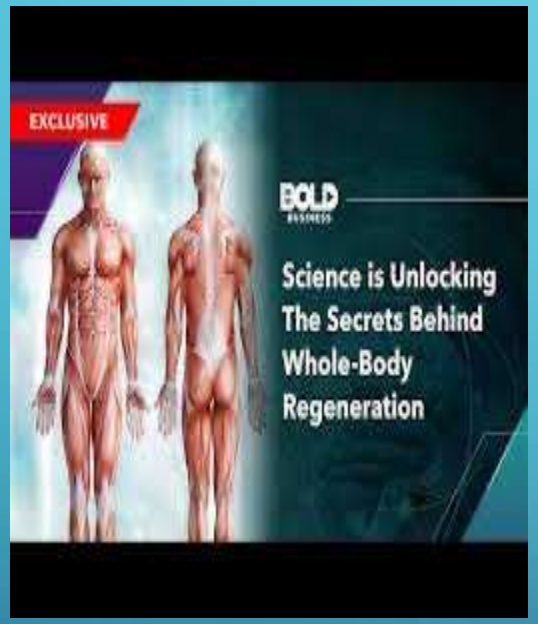
- Human cells have tiny moving parts, then surely they must produce tiny vibrations? This in turn would create tiny noises. Theoretically the sound produced by cells would also vary according to levels and types of sickness, so it might be possible literally to listen for cancer.

BREATH ANALYSIS FOR MEDICAL DIAGNOSIS

INHALED INSULIN



BOOM IN REGENERATION RESEARCH

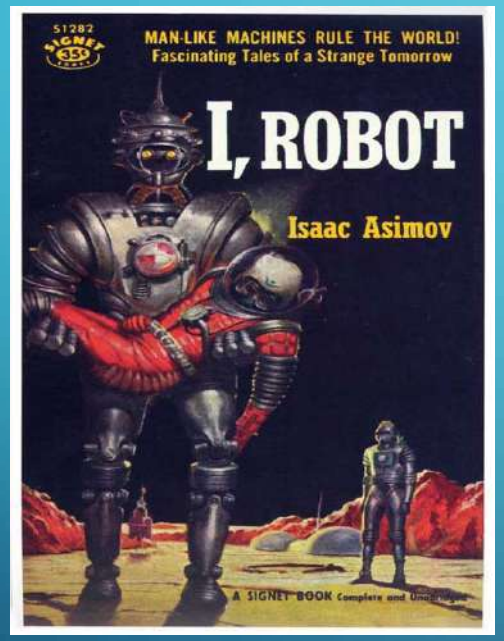


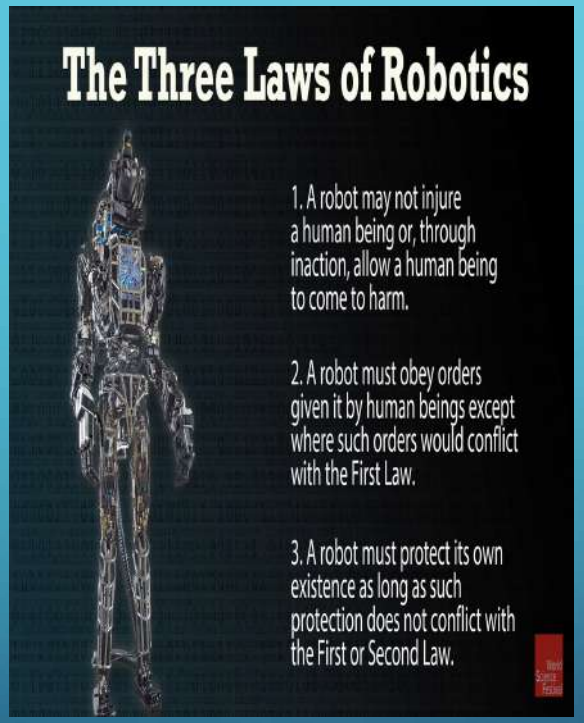
humble newt

- Health planners and strategists will target local communities and even individuals who are most in need of health intervention.

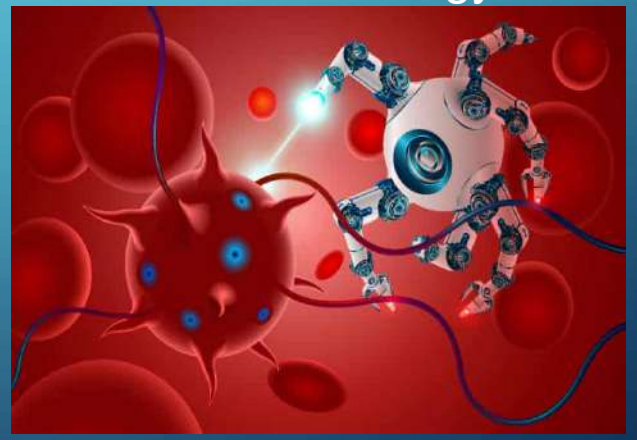
- The process can be employed to target specific streets, schools and workplaces.

COMPUTERS BECOME MORE INTELLIGENT IN 2026





Convergence of Robot-Nanotechnolgy



DIGITAL PRESENCE

By 2025: 86% of respondents expected this tipping point will have occurred

Positive impacts

- Increased transparency
- Increased and faster interconnection between individuals and groups
- Increase in free speech
- Faster information dissemination/exchange
- More efficient use of government services

Negative impacts

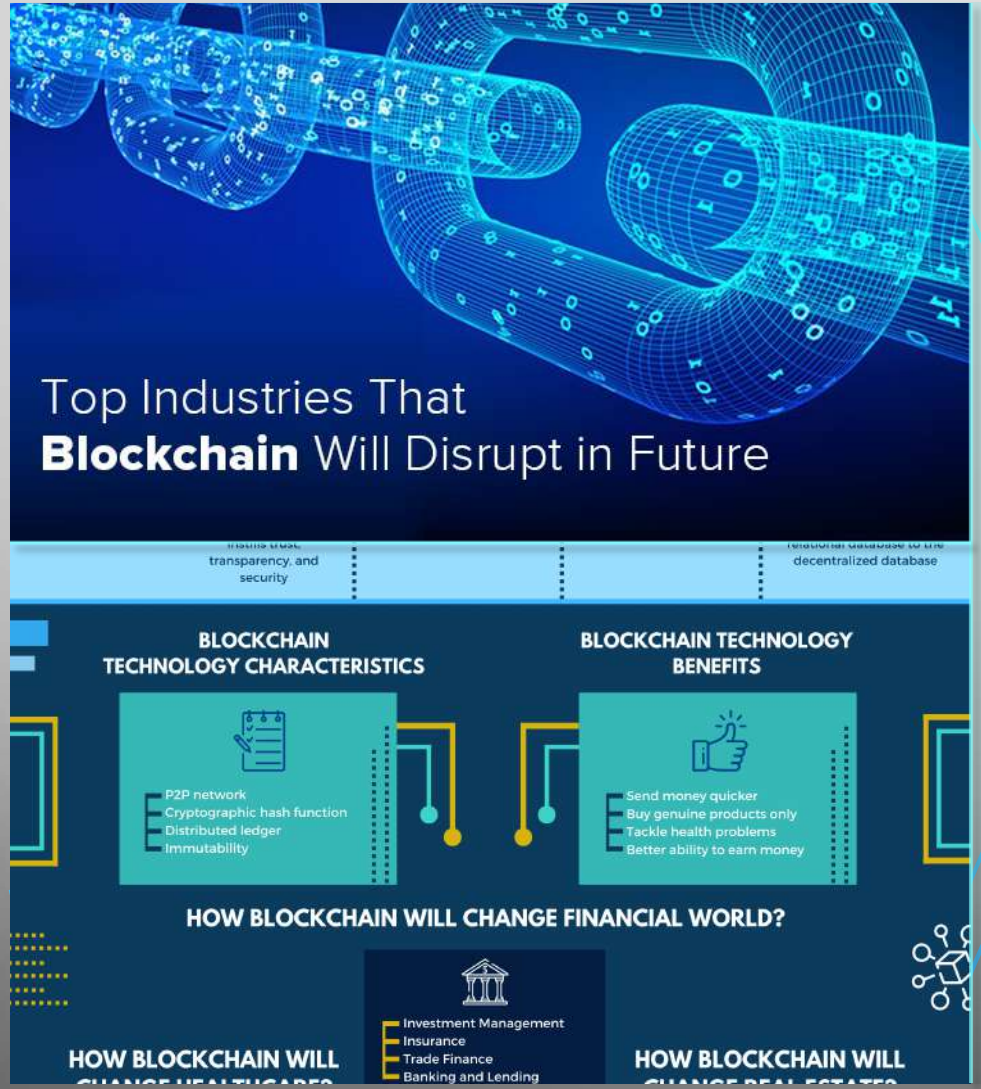
- – Privacy/potential surveillance
- – More identity theft
- – Online bullying/stalking
- – Groupthink within interest groups and increased
- polarization
- – Disseminating inaccurate information
- – Lack of transparency where individuals are not privy to
- information algorithms (for news/information)

3D Printing and Consumer Products

By 2025: 81% of respondents expected this tipping point to have occurred

Positive impacts
– More personalized products and personal fabrication
– Creating niche products, and making money selling
them
– Fastest growth of 3D printing where each customer
has slightly different needs from a product – e.g. a
particular shaped foot requires a specially sized shoe

Negative impacts
– Global and regional supply and logistics chain: lower demand resulting in job losses
– Gun control– Growth in waste for disposal, and further burden on the environment
– Major disruption of production controls, consumer regulations, trade barriers, patents, taxes and other government

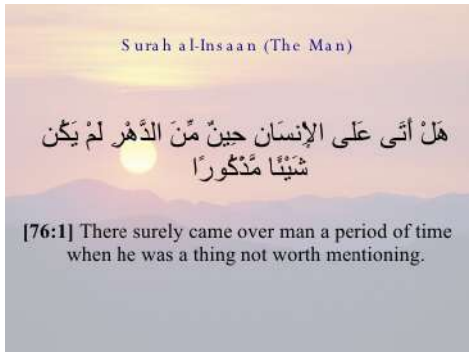


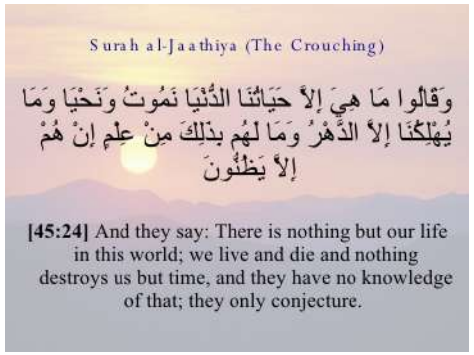
- **ESTONIA PRESCRIBES BLOCKCHAIN FOR HEALTHCARE DATA SECURITY**

- Estonia has long been known as one of the most [illegible] countries in Europe.
- And now its government is putting ground-breaking blockchain technology to use in securing its citizens' medical data.

- The country's eHealth Authority has signed a deal with Guardtime, a blockchain pioneer, to secure the health records of over a million Estonians.
-

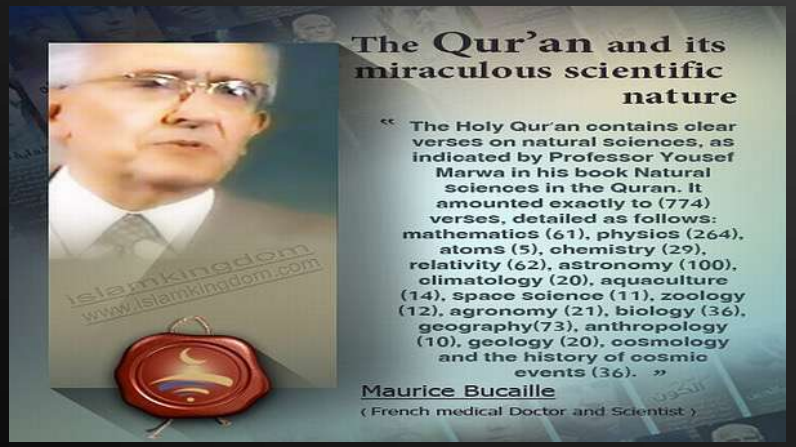
AUGMENTED REALITY- ADVANCED ODR

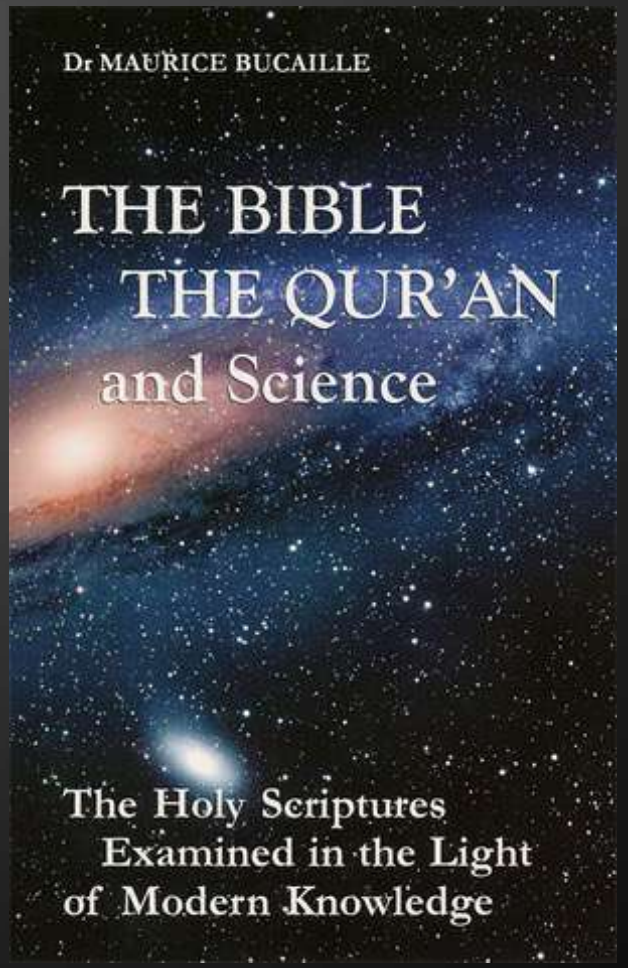


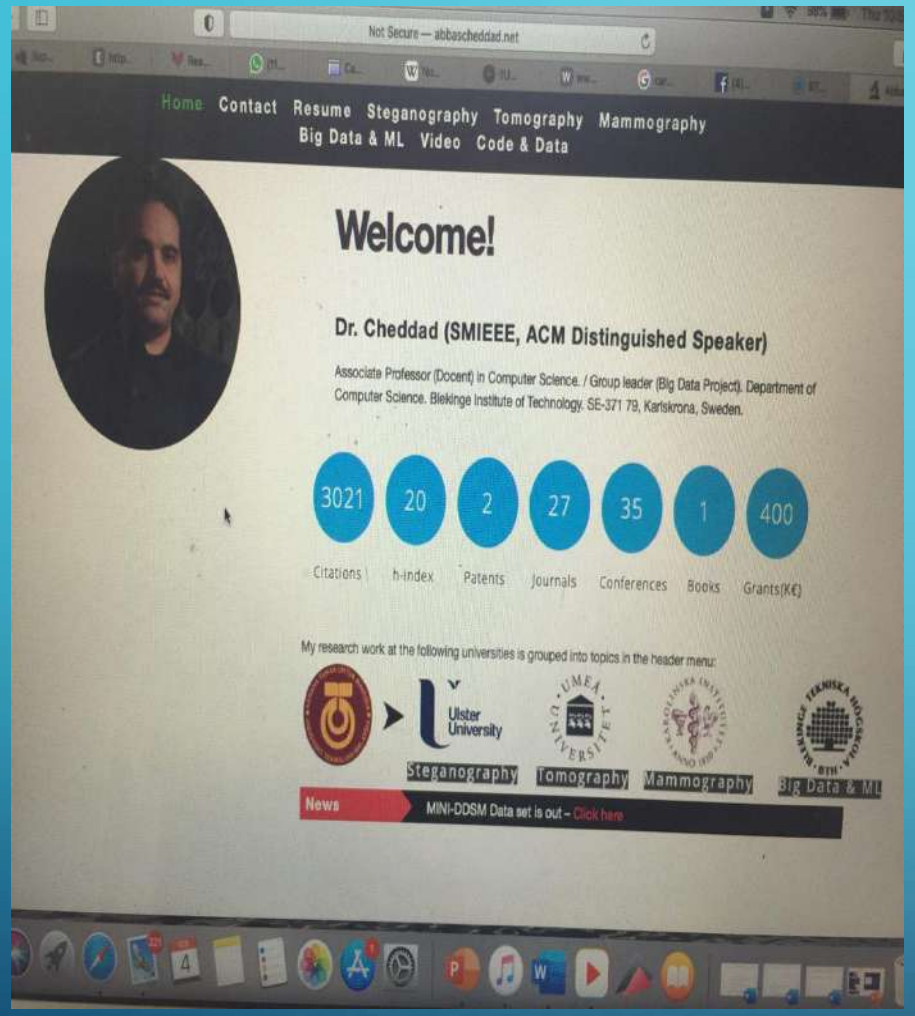


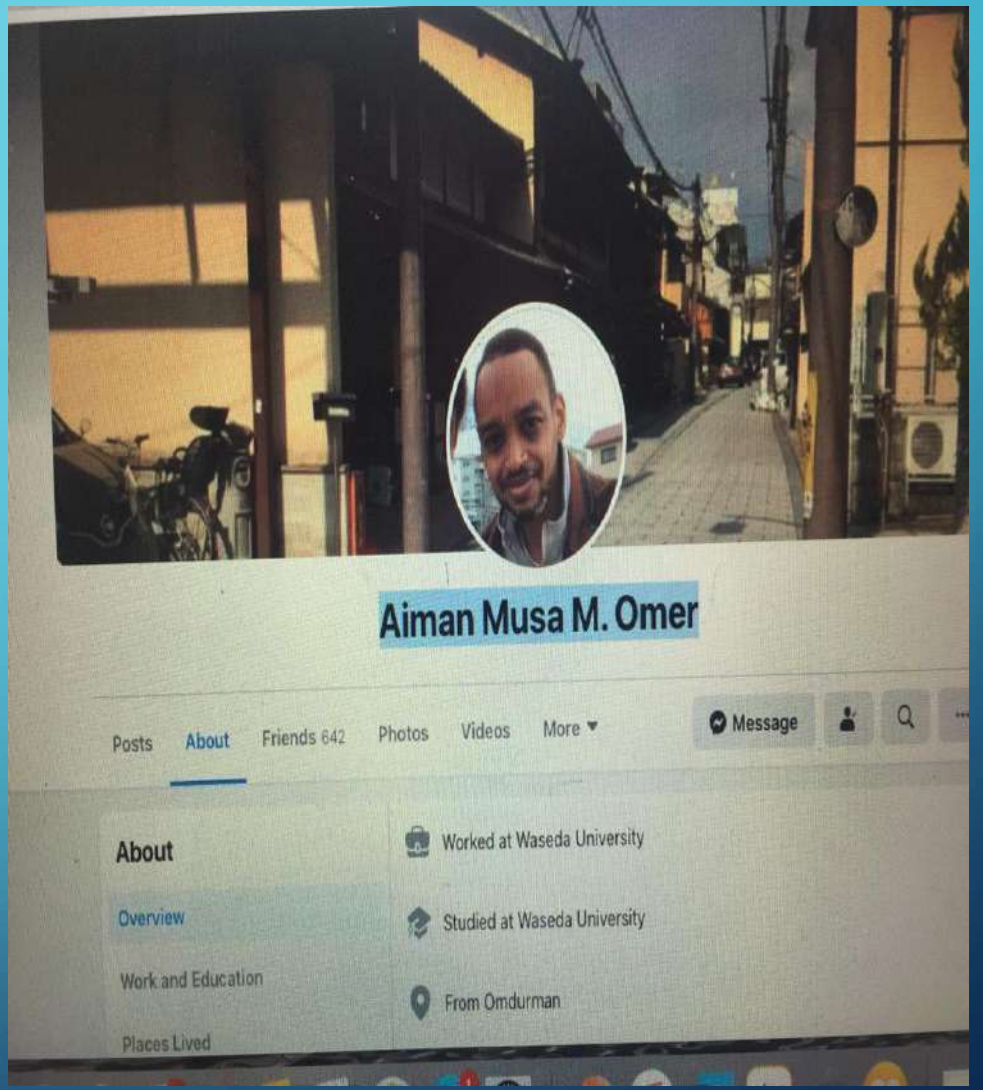
- Islamic Worldview

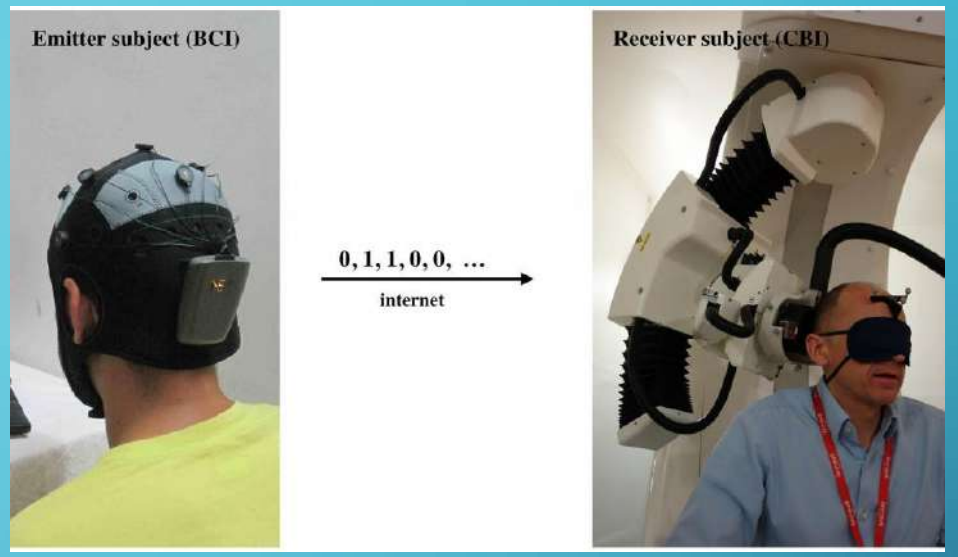
"...there is not a single verse found in the holy Quran inconsistent to science, so it is fully scientific and purely divine scripture."
MAURICE BUCAILLE (July 1920 - Feb. 1998)
French Doctor and Author of
"The Bible, The Quran and Science"
www.forthought.info

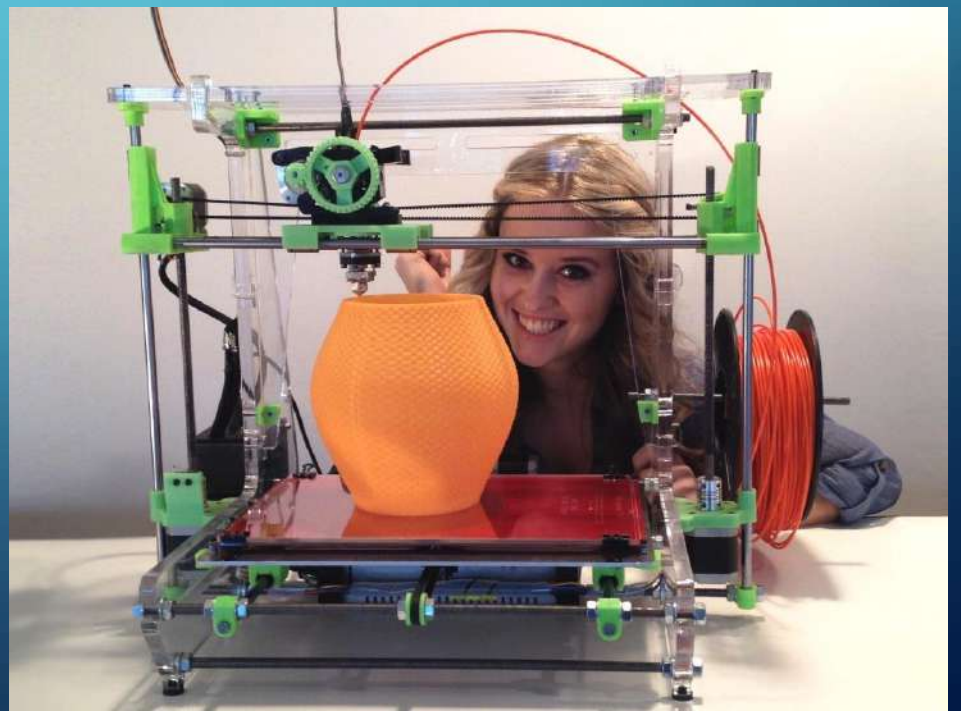

The Qur'an and its miraculous scientific nature
" The Holy Qur'an contains clear verses on natural sciences, as indicated by Professor Yousef Marwa in his book Natural sciences in the Quran. It amounted exactly to (774) verses, detailed as follows: mathematics (61), physics (264), atoms (5), chemistry (29), relativity (62), astronomy (100), climatology (20), aquaculture (14), space science (11), zoology (12), agronomy (21), biology (36), geography(73), anthropology (10), geology (20), cosmology and the history of cosmic events (36). »
Maurice Bucaille
(French medical Doctor and Scientist)


Dr MAURICE BUCAILLE
THE BIBLE
THE QUR'AN
and Science
The Holy Scriptures
Examined in the Light
of Modern Knowledge

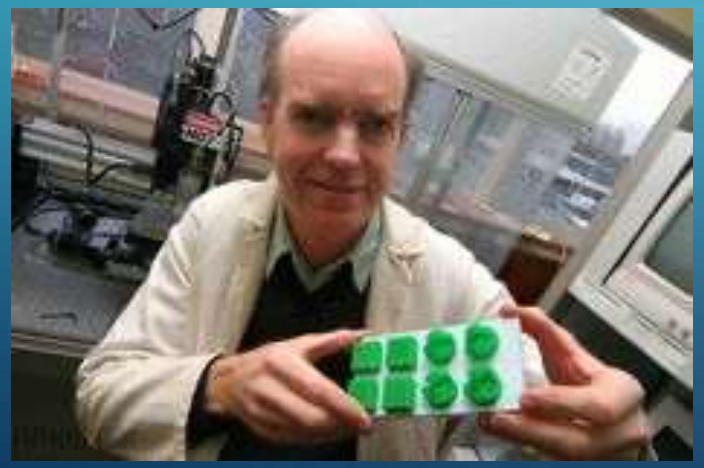

Not Secure — abbascheddad.net
Home Contact Resume Steganography Tomography Mammography
Big Data & ML Video Code & Data
Welcome!
Dr. Cheddad (SMIEEE, ACM Distinguished Speaker)
Associate Professor (Docent) in Computer Science. / Group leader (Big Data Project). Department of Computer Science. Blekinge Institute of Technology. SE-371 79, Karlskrona, Sweden.
3021 20 2 27 35 1 400
Citations h-index Patents Journals Conferences Books Grants(K€)
My research work at the following universities is grouped into topics in the header menu:
Ulster University
Steganography
Tomography
Mammography
Big Data & ML
News
MINI-DDSM Data set is out – Click here


Aiman Musa M. Omer
Posts About Friends 642 Photos Videos More
Message
About
Overview
Work and Education
Places Lived
Worked at Waseda University
Studied at Waseda University
From Omdurman


Emitter subject (BCI)
0, 1, 1, 0, 0, …
internet
Receiver subject (CBI)



3D PRINTED EVERYTHING? – YOU ARE THE MAKER



VIRTUAL REALITY REUNITE MOTHER WITH DEAD DAUGHTER

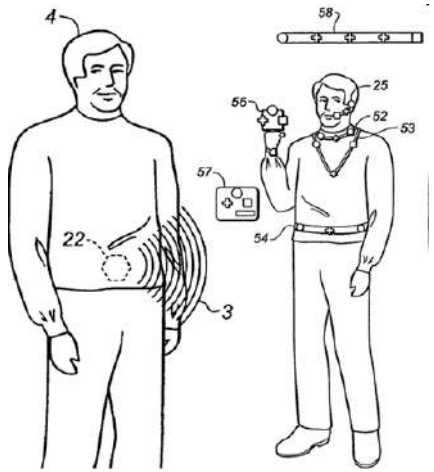
ARE COLAS THE NEW TOBACCO?

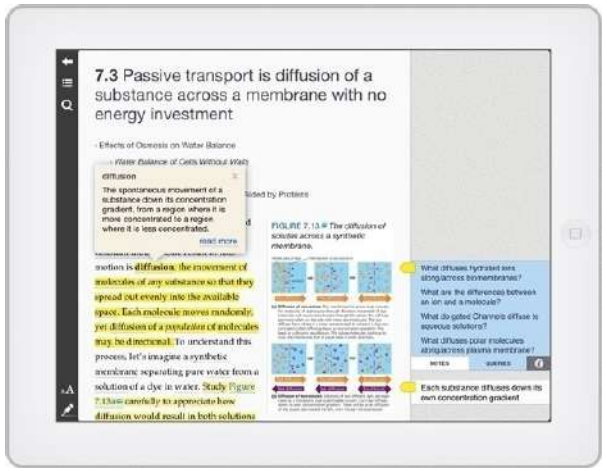
BOYALIFE GROUP

- The world's largest cloning factory could one day clone HUMANS: Scientist claims technology is ready but public opinion isn't...China's Boyalife Group will start producing dogs, cows and horses in 2016

Over thirty trillion four dollars at risk – who will provide the solutions to sea level rise for Asian Cities?

EVERYTHING IS A HYPERLINK – THE INTERNET OF EVERYTHING AND PERSON



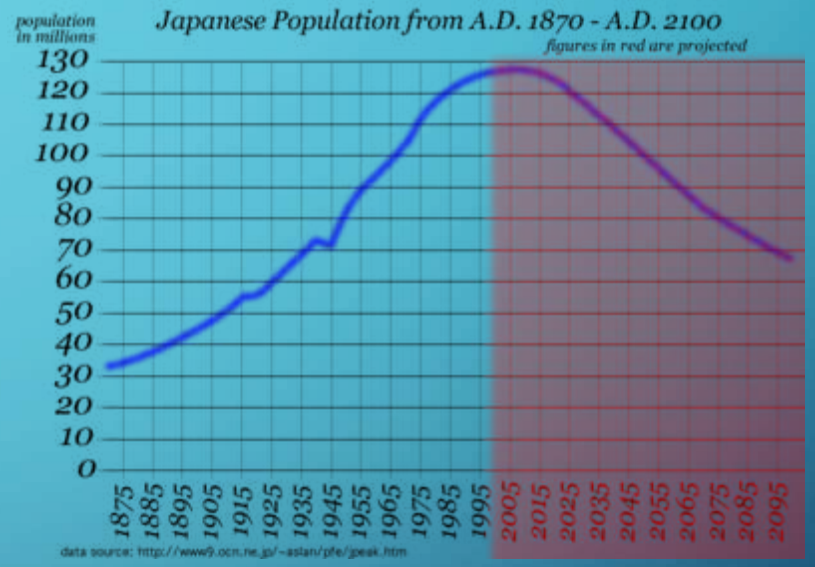


- Everything is hyperlinked
- Persons, places, and objects all linked via smart devices
- Biosensors
- Smart books - bio

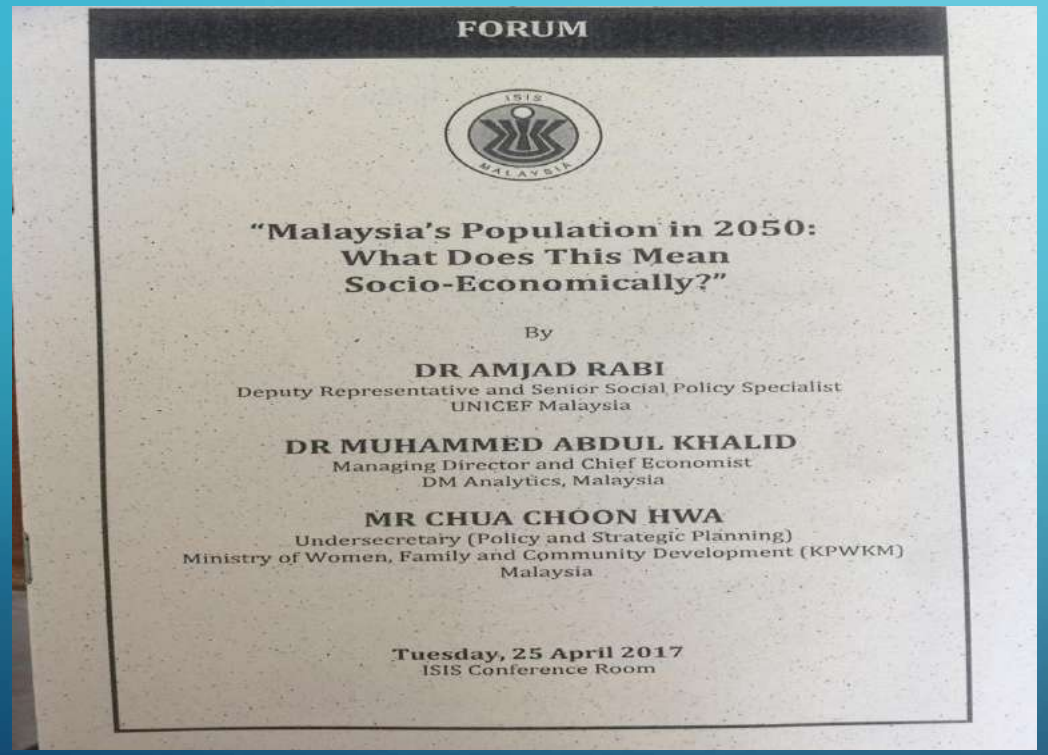
DEPOPULATION – THE GROWTH PARADIGM?

- By 2050, 46 countries are expected to lose population by mid-century including Germany, Italy, Japan, South Korea, most of the countries in the former Soviet Union, and several small island nations.

- And by 2050 Asia and Latin America are expected to be in a similar situation as much of Europe is now, with more elderly than babies.



Japan, likely to go from the current 127 million to 89 million by 2050.



FORUM

"Malaysia's Population in 2050: What Does This Mean Socio-Economically?"

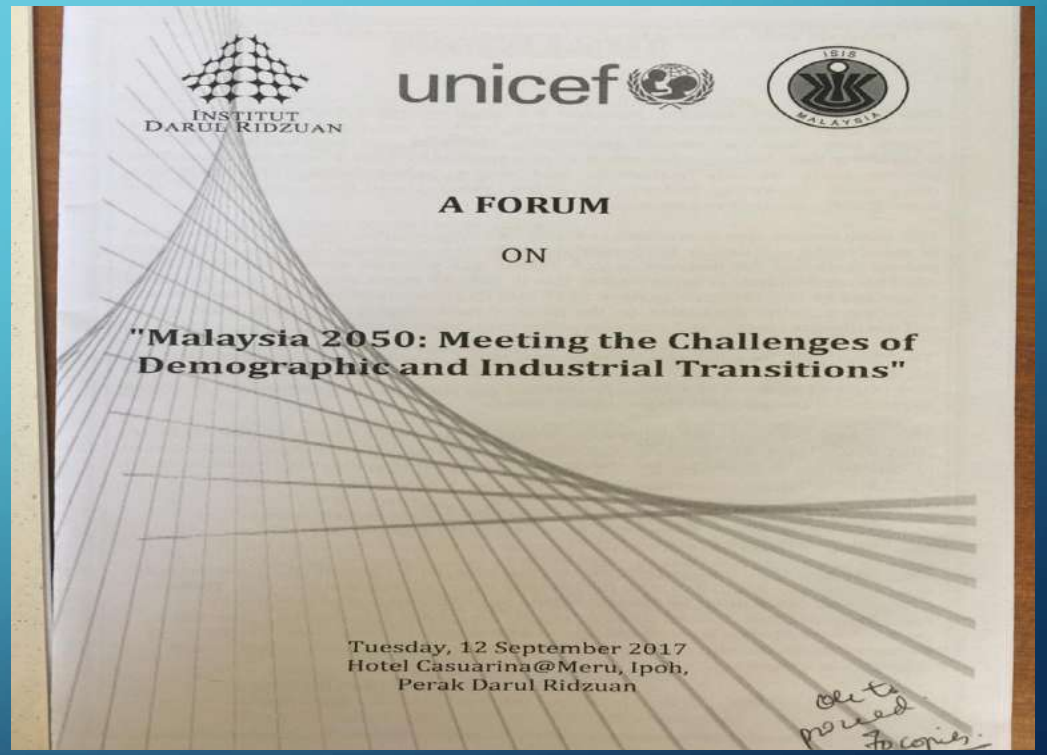
By

DR AMJAD RABI
Deputy Representative and Senior Social Policy Specialist
UNICEF Malaysia

DR MUHAMMED ABDUL KHALID
Managing Director and Chief Economist
DM Analytics, Malaysia

MR CHUA CHOON HWA
Undersecretary (Policy and Strategic Planning)
Ministry of Women, Family and Community Development (KPWKM)
Malaysia

Tuesday, 25 April 2017
ISIS Conference Room



INSTITUT DARUL RIDZUAN

unicef

A FORUM

ON

"Malaysia 2050: Meeting the Challenges of Demographic and Industrial Transitions"

Tuesday, 12 September 2017
Hotel Casuarina@Meru, Ipoh,
Perak Darul Ridzuan

AUTOMATION

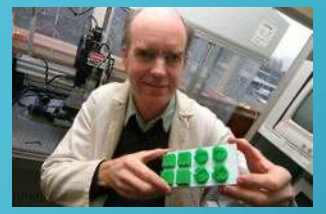
- 1988 Kodak had 145, 000 employees

13 employees, 30 million customers

55 employees, 450 million customers, bought for 19$ billion

3D PRINTED EVERYTHING? – THE NEXT INDUSTRIAL REVOLUTION

1 Printed Skin -2010

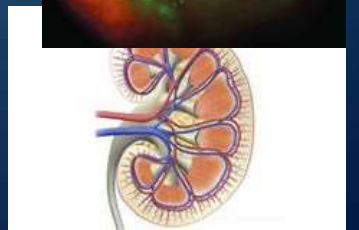


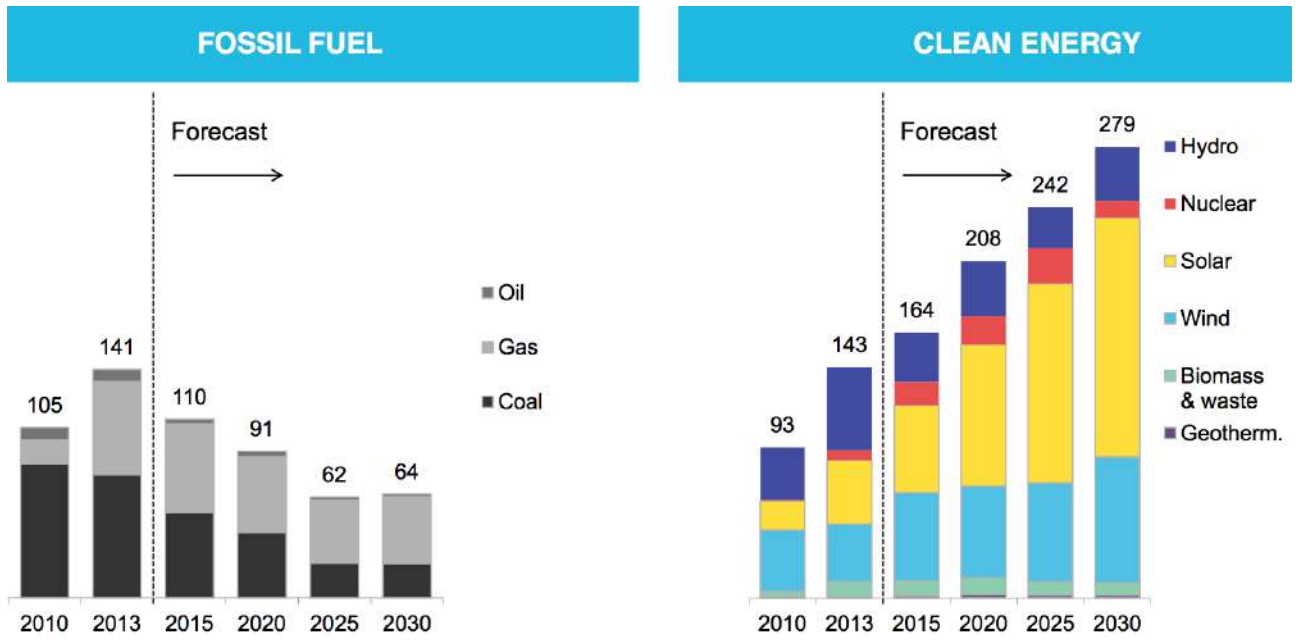
Printed heart patches , 2011 (rats), repair damaged cells

Cartilage and bone – in progress

Blood vessels and sheets of cardiac tissue – 2008, in progress

Organs – science fiction





THE BEGINNING OF THE END

- The race for renewable energy has passed a turning point. The world is now adding more capacity for renewable power each year than coal, natural gas, and oil combined. And there's no going back - Tom Randall, Bloomberg

THE USED FUTURE

THE DISOWNED FUTURE

- What we excel at becomes our downfall. And we do not see this because we are busy focusing on our strategic plans

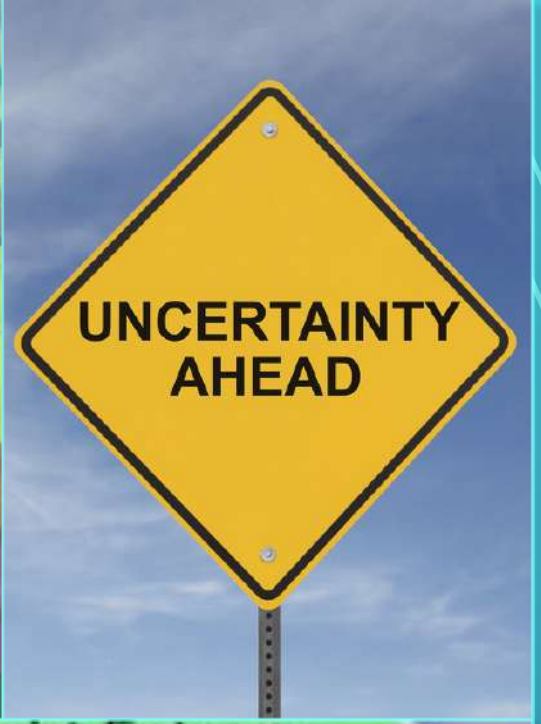
ALTERNATIVE FUTURE

- We often believe that there is only one future.
- We cannot see the alternatives, and thus we make the same mistakes over and over.
- But by looking for alternatives, we may see something new. We are not caught in the straitjacket of one future.
- As well, if our particular future does not occur, we do not die from emotional shock, rather, we learn how to adapt to changing conditions.

ALIGNMENT

Often we envision a particular future, and yet how we measure this future, our organizational indicators, have no relationship to that vision.

Thus the vision fails, because everyone knows the vision is there for show so as to appear to look modern



MODEL OF SOCIAL CHANGE

MODEL OF SOCIAL CHANGE

Do you believe that the future is positive and you can do something about it? Or is the future bleak and there is nothing you can do about it?

Or do you believe that the future is cyclical, everyone has a turn and the most effective strategy is to be patient.

Or do you believe the future is not given, but created by our daily actions, and thus we must take the "bull by the horns".

THE USE OF FUTURE

Futures thinking can simply be about foresight training, helping individuals and organizations with new competencies and new skills.

At a deeper level, futures thinking can help create more effective strategy.

By understanding the alternative, used and disowned futures, organizations can become far more innovative.

METHOD 1 - SHARED HISTORY METHOD

- Shared history is a simple workshop tool to help participants map the past. The purpose of the exercise is to collectively demonstrate what has changed over the past decades and what has remained stable.

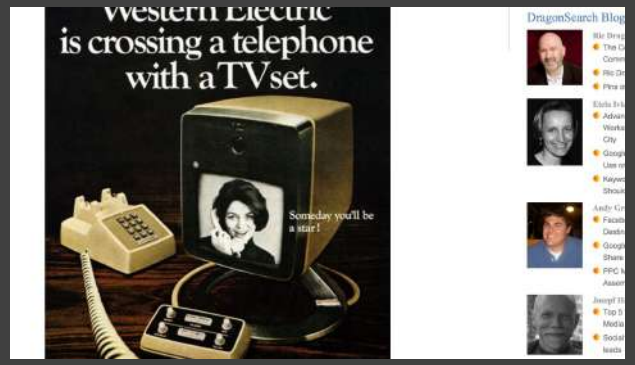
- As well the links between macro, meso and micro, often personal events, are explored.

- Acknowledging the past analytically and emotionally gives space for participants to move toward mapping alternative futures and invent the desire future.

CONT

- Step 1-Participants in turn walk over to a long piece of paper (placed on a wall) and write significant events and trends . This can be macro (global technological change, social changes, etc), Meso (changes in laws that impact the organization) and micro (personal story)

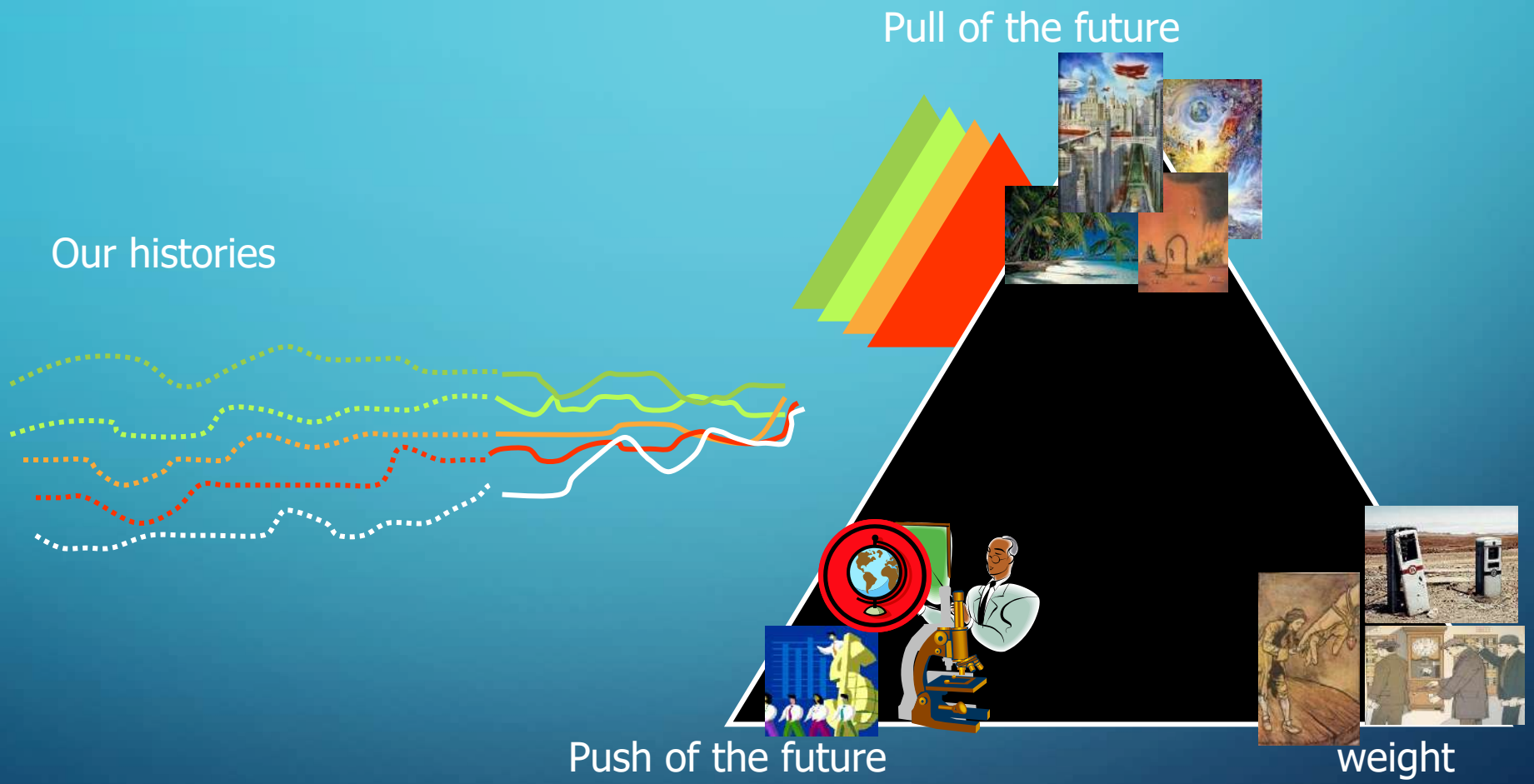
- Step 2-Participants reflect on the overall map of the past, searching in particular for any continuities and discontinuities


is crossing a telephone
with a TV set.
Someday you'll be
a star!
DragonSearch Blog

Jacqueline Marshall
End call
Stop video
02:57

Displair makes the world transparent!

METHOD 2: THE FUTURE TRIANGLE



- The futures triangle maps today's views of the future through three dimensions to arrive at plausible future. The image of the future pulls us forward.

There are many images of the future:

- Evolution and progress – more technology, man as the centre of the world, and a belief in rationality.

- Collapse – a belief that man has reached his limits, indeed he has overshot them: world inequity, fundamentalism, tribalism, nuclear holocaust, climate disasters all point to a worsening of the future.

- Gaia – the world is a garden, cultures are its flowers, we need social technologies to repair the damage we have caused to ourselves, to nature and to others, becoming more and more inclusive is what is important.

- Globalism – we need to focus on ways to come closer as economies and as cultures. Borders need to break down; technology and the free flow of capital can bring riches to all.

- Back to the future – we are past our prime; we need to return to simpler times, when hierarchy was clearer, when technology was less disruptive, when the Empire was clear. Change is too overwhelming; we have lost our way, and must return.

- Along with images are the pushes of the present. These are quantitative drivers and trends that are changing the future. An aging population is one such trend. We are living longer and having fewer children. Which future will this trend push us to?

- There are also weights. These are the barriers to the change we wish to see. Each image has differing weights. Those who imagine a globalized world are weighed down by nationalists and the brutal fact that while capital may be freer, labor is still tied to place. The Gaian image is weighed down by the dominance of hierarchy – male, empire or expertise. “The boss is always right,” is the guiding myth.

Method3

FUTURES LANDSCAPE

This tool helps us audit where our organization is. The landscape has four levels.

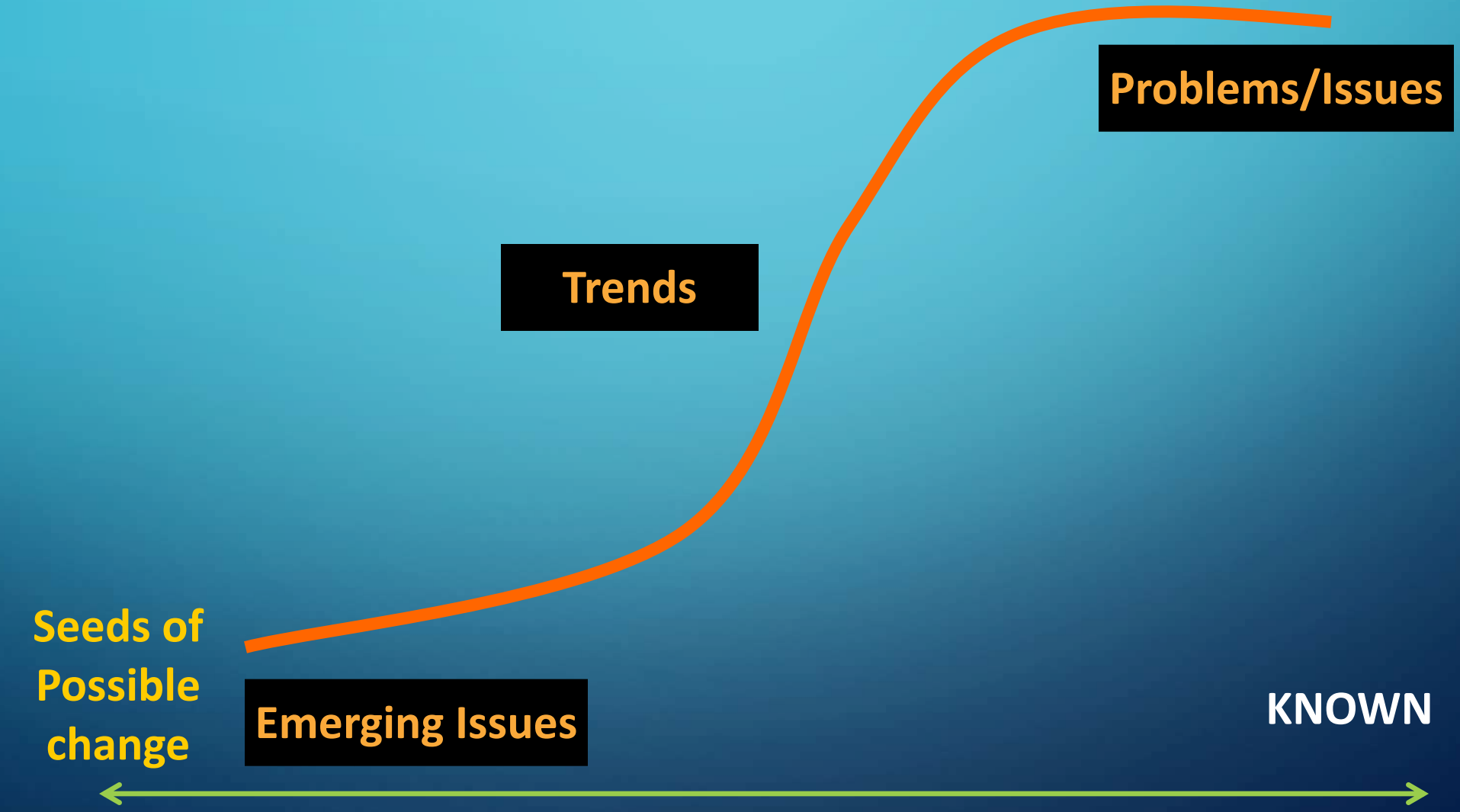
First is the jungle, a dog-eat-dog competitive world, wherein the goal is to survive.

Second is the chess set, where strategy helps us enhance our effectiveness – we succeed by being clear about our goals and creating more responsive organizations.

Third are the mountain tops – these are the big pictures, the broader social contest we find our organizations in.

Finally is the star, the vision. Is your organization engaged only in day-to-day survival, or is it using strategy to move forward? Has it developed scenarios of alternative futures, different assumptions of how the world might be? Does it have a vision?

METHOD 4: EMERGING ISSUES ANALYSIS



01

Emerging issues have both a forecasting utility in that they give us information on potential futures, and a disruptive dimension in that they call into question our assumptions about the present.

02

Emerging issues should be provocative, controversial, and perhaps even ridiculous.

03

If there is immediate agreement, most likely it is not an emerging issue but a trend.

04

The S-curve can be divided into 3 phases:

EMERGING LEVEL

- There is little or no quantitative data
- Issues has low likelihood of occurring
- If issues matures then impact will be dramatic
- Great ability to influence directions of issue

Any useful statement about the future should at first seem ridiculous.
JIM DATOR
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6

Year 2020

FSU MEETING IN 1900

- “professional athletes”
- Well paid for doing nothing
- People love them for no reason
- People willing to buy your product so they can identify with them.
- That product worthless, harmful, tooth-rotting, sugared water!

TREND LEVEL

THERE IS QUANTITATIVE DATA, BUT OFTEN CONTESTED

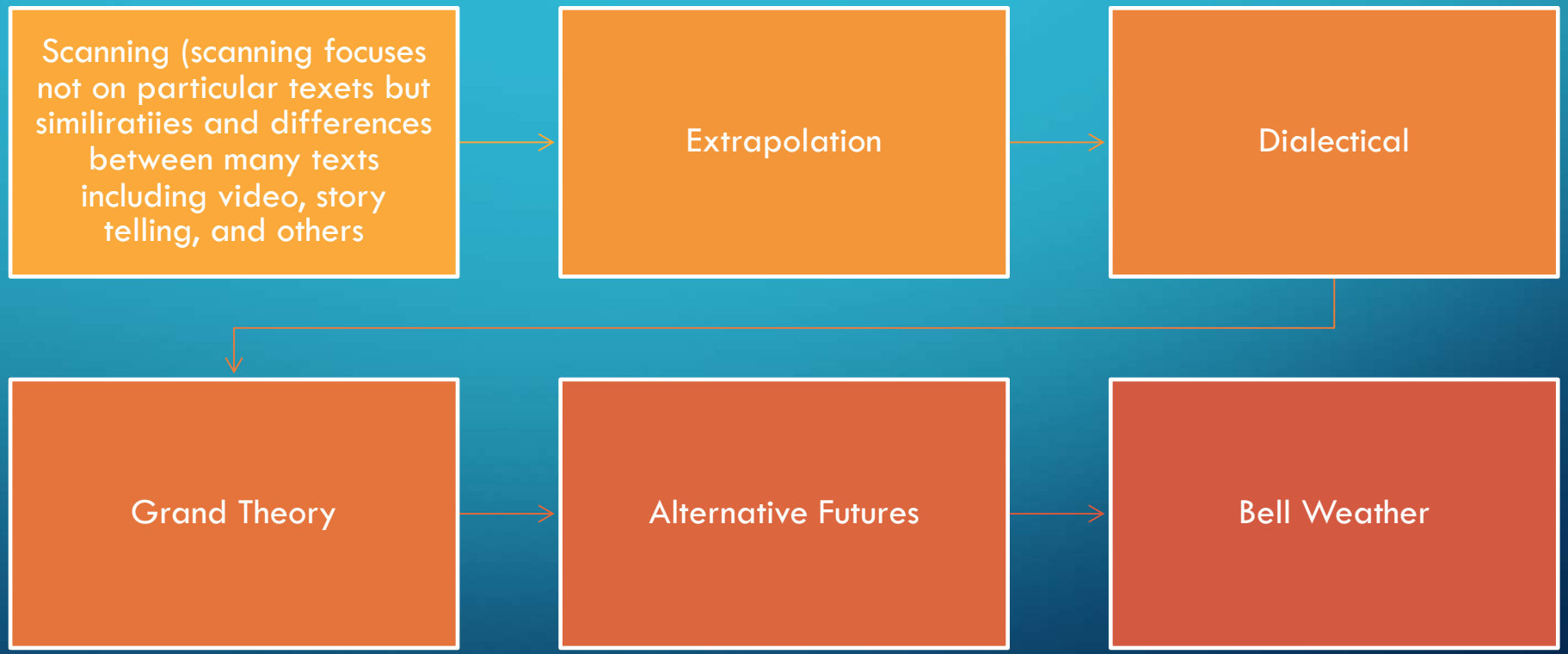
ISSUE HAS MEDIUM LIKELIHOOD OF FULLY BECOMING PROBLEM

TREND IS EVIDENT TO RESEARCH UNIT

PROBLEM LEVEL

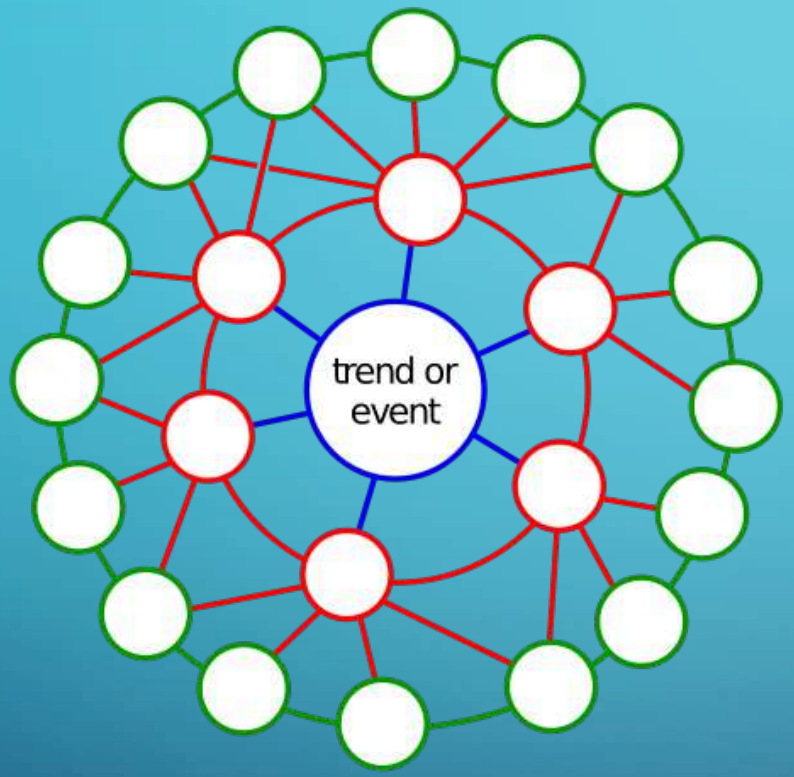
- Issue has emerged
- Strong emotions on all sides of issue
- Great deal of quantitative data
- Policy institute conduct research on the issue

FINDING EMERGING ISSUES



METHOD 5: FUTURES WHEELS

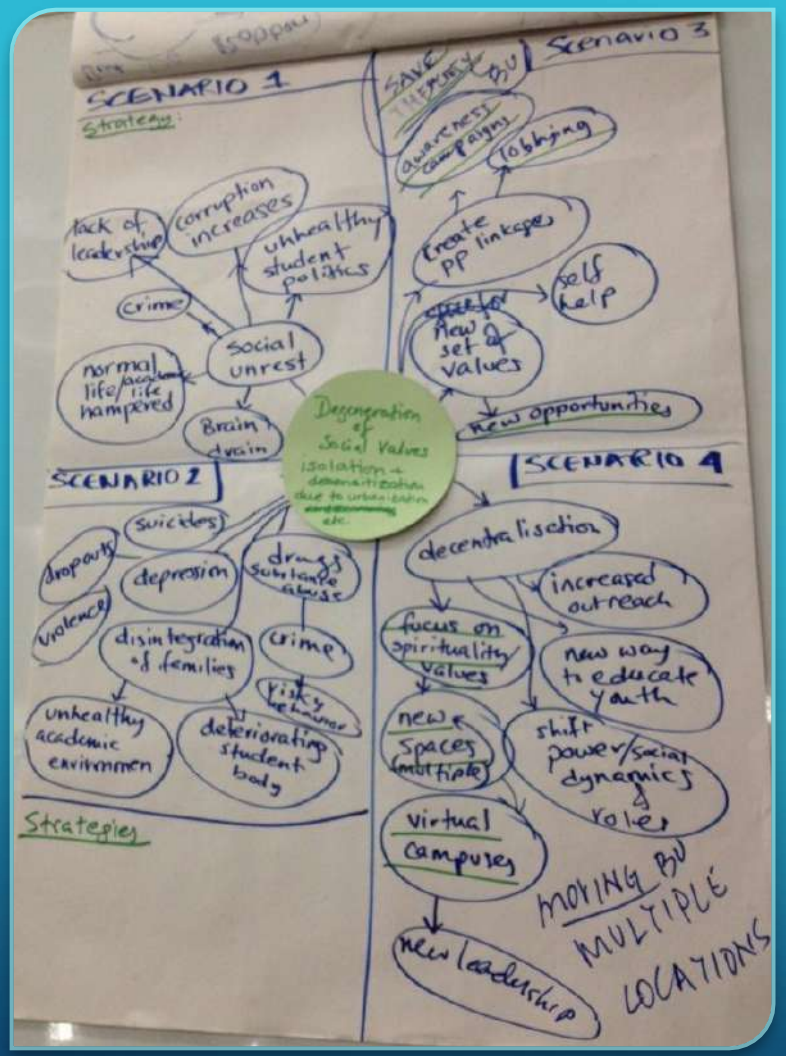
Jerome Glenn (born August 9, 1945) is a futurist who serves as the Executive Director of the Millennium Project. He has been the Executive Director of the American Council for the United Nations University 1988-2007and the Deputy Director of Partnership for Productivity International.

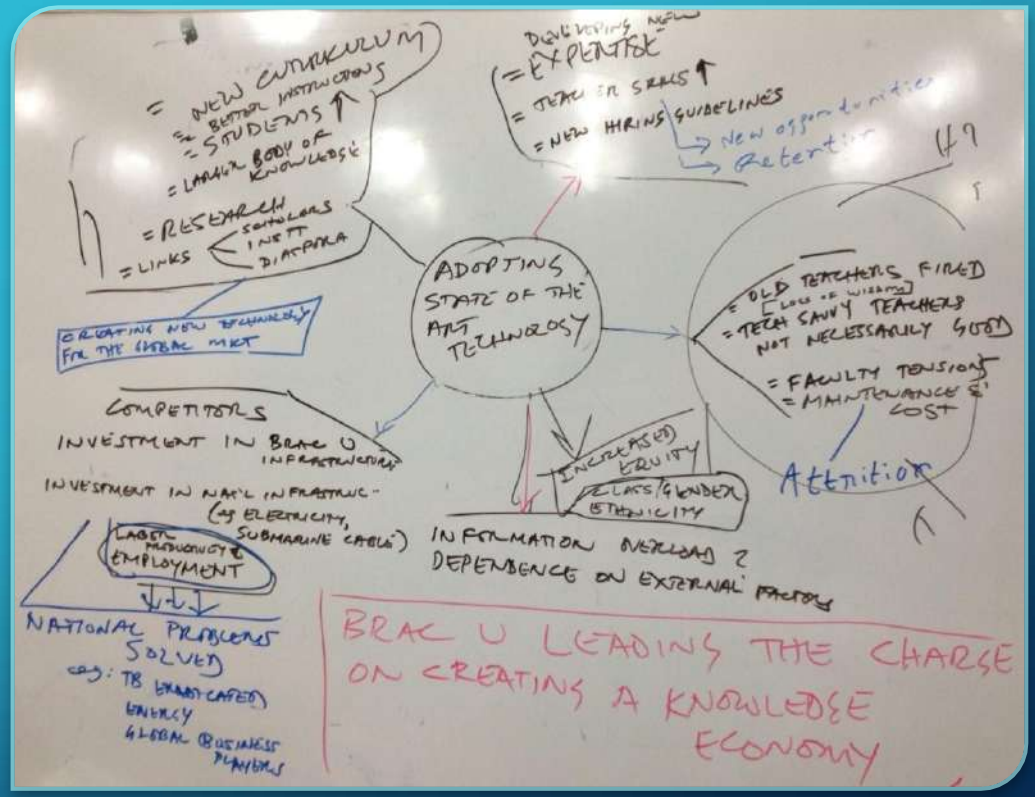


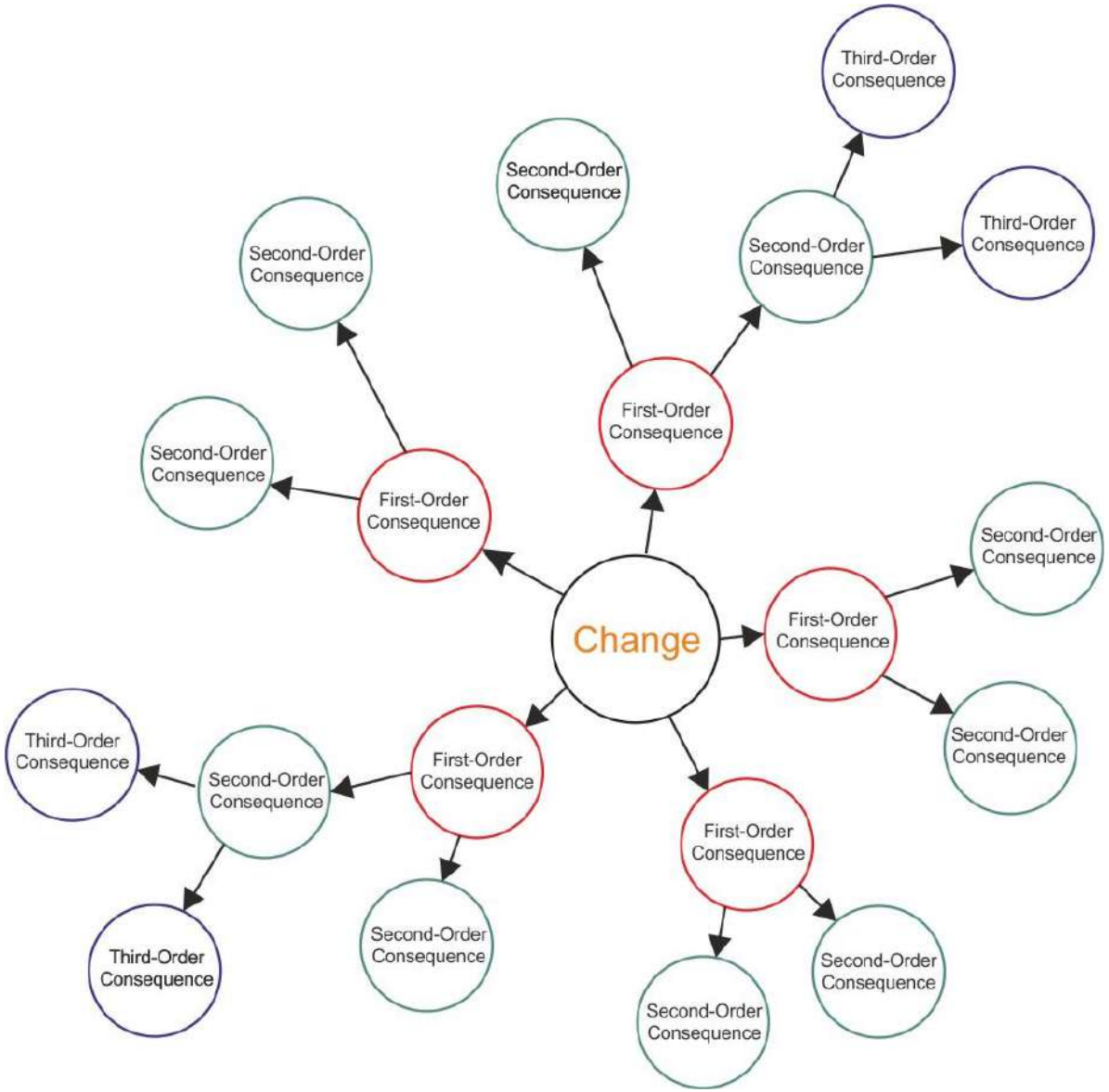
What –if questions and the futures wheel use emerging issues and develop implications for them.

Implications are structured around first, second and third order implications.

These implications can then be used to develop scenarios


SCENARIO 1
Strategy
lack of leadership
corruption increases
unhealthy student politics
crime
social unrest
normal life/ life hampered
Brain drain
SCENARIO 2
suicides
dropouts
depression
drugs/ substance abuse
violence
disintegration of families
crime
risky behaviour
unhealthy academic environment
deteriorating student body
Strategies
SAVE THE PLANET BU
Scenario 3
awareness campaigns
lobbying
create PP linkages
self help
New set of values
New opportunities
Degregation of Social Values
Isolation + dehumanization due to urbanization etc.
SCENARIO 4
decentralisation
increased outreach
focus on spirituality/ values
new way to educate youth
new spaces (multiple)
shift power/social dynamics roles
virtual campuses
new leadership
MOVING BU MULTIPLE LOCATIONS


= NEW CURRICULUM
= BETTER INSTRUCTIONS
= STUDENTS ↑
= LARGER BODY OF KNOWLEDGE
= RESEARCH
= LINKS
DEVELOPING NEW = EXPERTISE
= TEACH IN SKILLS ↑
= NEW HIRING GUIDELINES
New opportunities
Retention
ADOPTING STATE OF THE ART TECHNOLOGY
= OLD TEACHERS FIRED
= TECH SAVVY TEACHERS NOT NECESSARILY GOOD
= FACULTY TENSIONS
= MAINTENANCE $ COST
Attrition
CREATING NEW TECHNOLOGY FOR THE GLOBAL MKT
COMPETITORS
INVESTMENT IN BRAC U INFRASTRUCTURE
INVESTMENT IN NAT'L INFRASTRUC (eg ELECTRICITY, SUBMARINE CABLE)
LABOR MIGRATION & EMPLOYMENT
NATIONAL PROBLEMS SOLVED
eg: TB
INCREASED EQUITY
CLASS/GENDER ETHNICITY
INFORMATION OVERLOAD ?
DEPENDENCE ON EXTERNAL FACTORS
BRAC U LEADING THE CHARGE ON CREATING A KNOWLEDGE ECONOMY


Change
First-Order Consequence
First-Order Consequence
First-Order Consequence
First-Order Consequence
First-Order Consequence
Second-Order Consequence
Second-Order Consequence
Second-Order Consequence
Second-Order Consequence
Second-Order Consequence
Second-Order Consequence
Second-Order Consequence
Second-Order Consequence
Third-Order Consequence
Third-Order Consequence
Third-Order Consequence
Third-Order Consequence

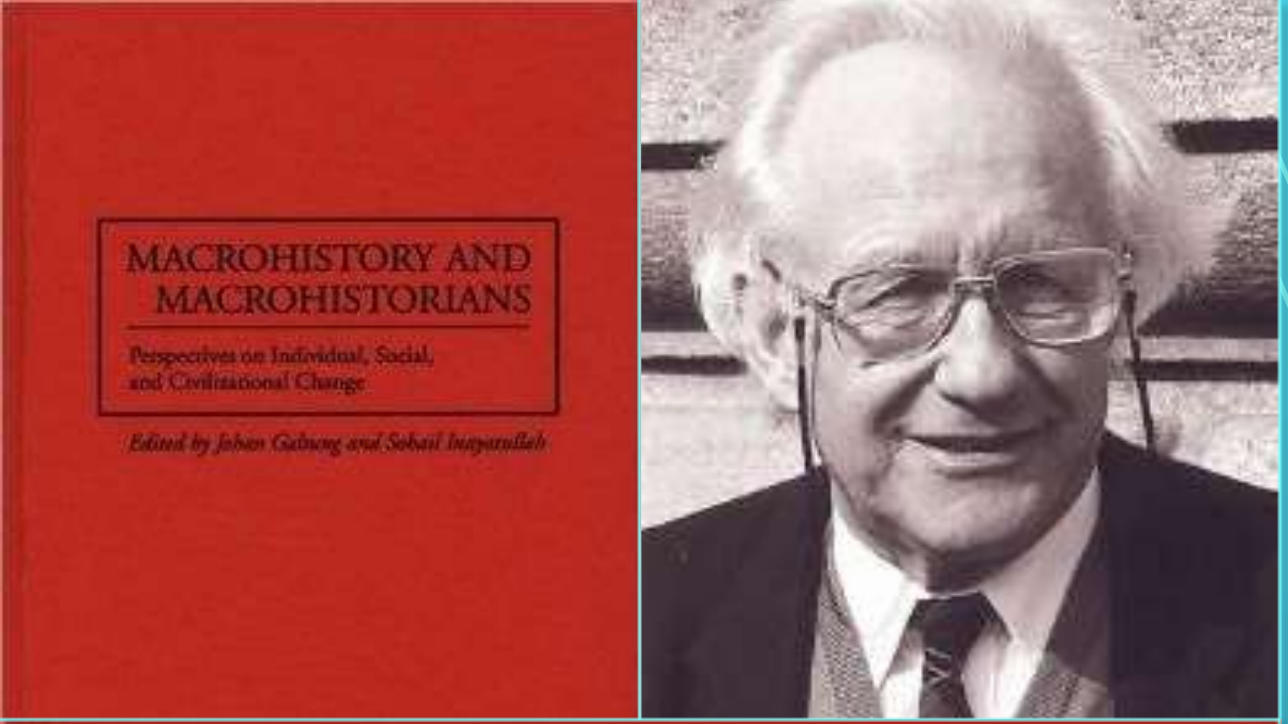
What if IIUM is the world's leading educational centers?

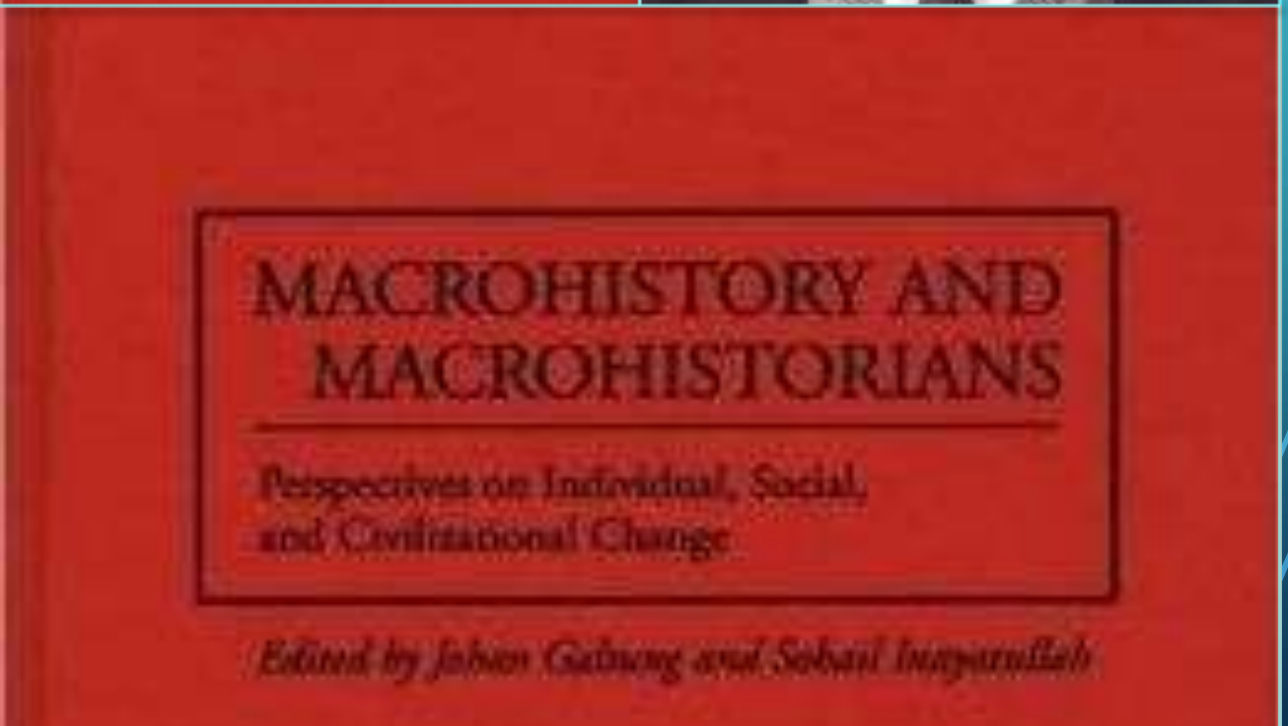
TIMING THE FUTURE

This is the search for the grand patterns of history and the identification of each one of our models of change. Do we believe that it is the creative minority that creates the new system?

Humans are essentially brutish, or lazy, or even evil. We can only resign ourselves to the fate of history.

Or do we believe that change comes from inner reflection and spiritual practice? Changing the outside world is next to impossible. But by changing our consciousness we can change the world.



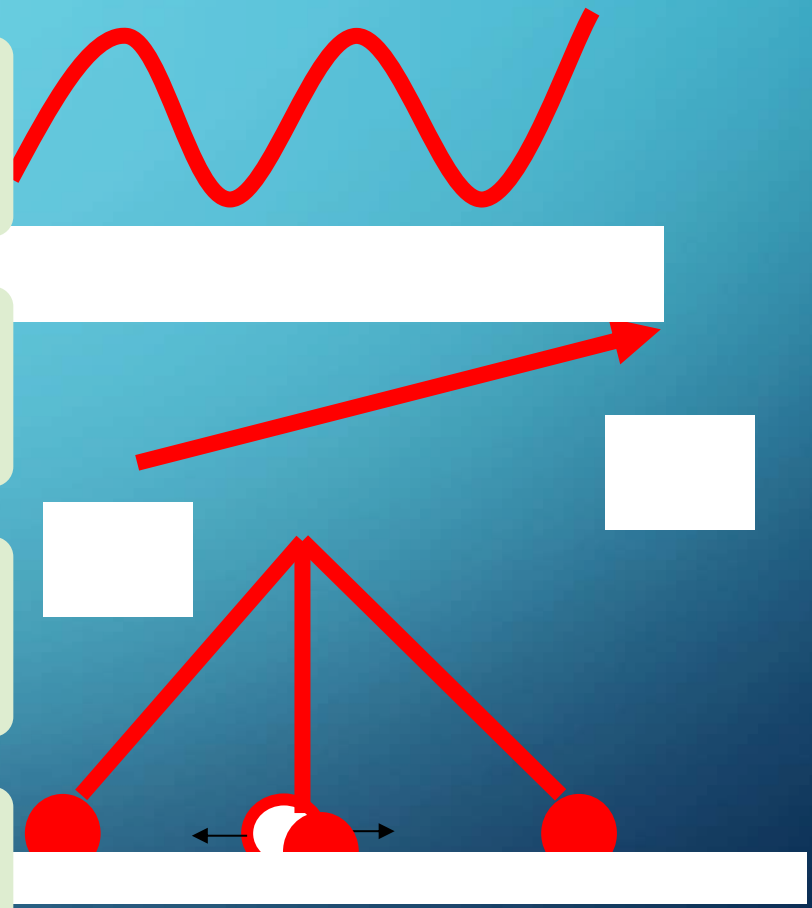


JOHAN GALTUNG

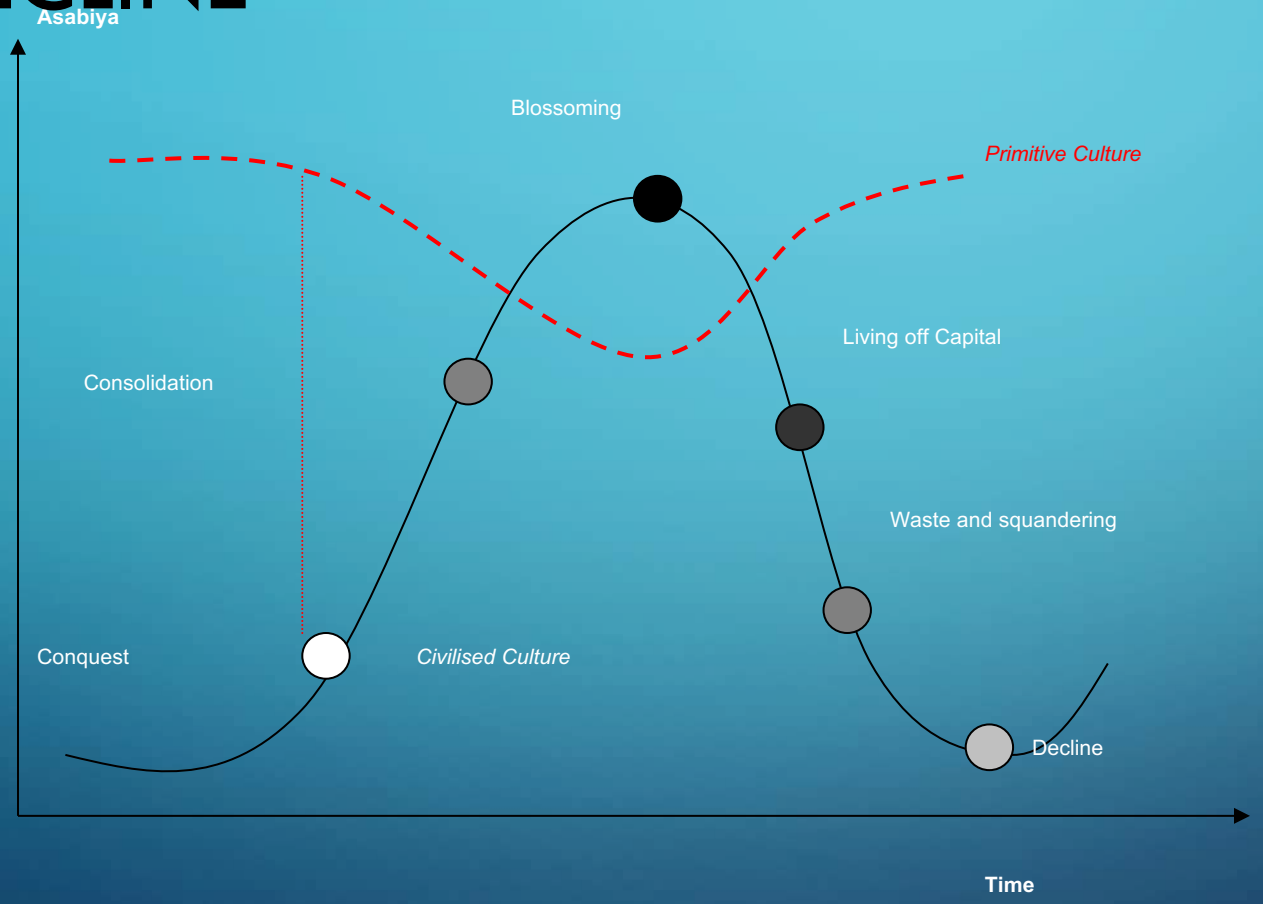
Macrohistory defined – search for patterns, stages of history, through time. History of social systems, searching for regularities, the causes of change through time.

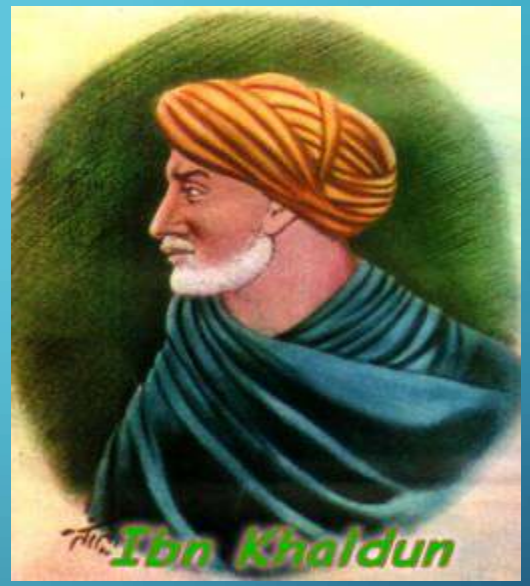
MACROHISTORICAL SHAPES

- CYCLICAL – IBN KHALDUN
- LINEAR – AUGUSTE COMTE AND HERBERT SPENCER
- THE PENDULUM – PITIRIM SOROKIN
- THE SPIRAL – P.R. SARKAR



IBN KHALDUN – ASIBYA AND GENERATIONAL DECLINE





The future is cyclical, there are ups and downs. Those at the top will one day find themselves at the bottom. Because they are on the top, they are unable to adapt and adjust as the world changes. Their success was based on mastery of yesterday's conditions.

Few are able to reinvent their basic values.

EXAMPLE OF HOW IT WORKS

From Ibn Khaldun we can use three ideas:

asabiya (unity gained through collective struggle),

The rise and fall of dynasties,

And the theory of four generations (from creativity to imitation to blind following to indolence).

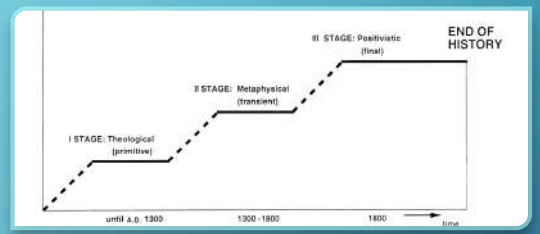
- Our questions then become: who are the new bedouins?
- Which collectivities are building unity are ready to sacrifice the present for the future?
- Which ones have struggled a great deal and still retain the warrior spirit?
- How long will they stay in power? One answer to this question is that the new Bedouins are Malay? Malaysians

- But moving away from the nation-state analysis, it is the social movements who could be the new leaders:

- The universities

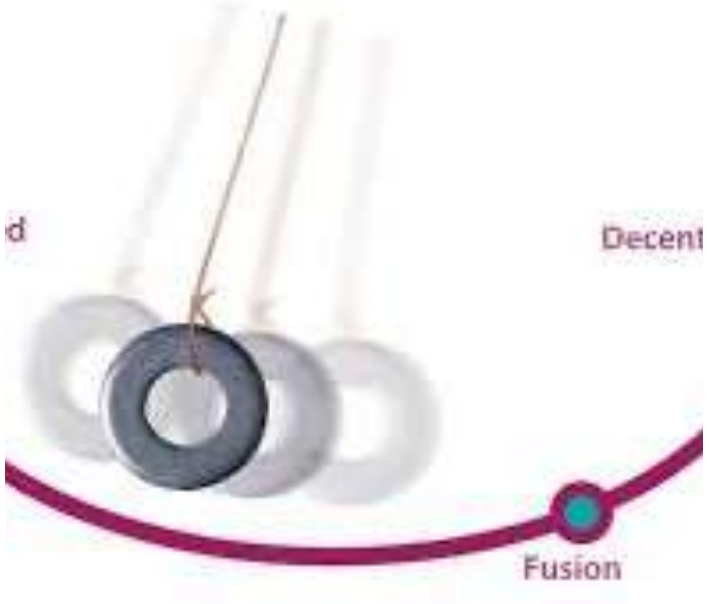
- The environmental movements,

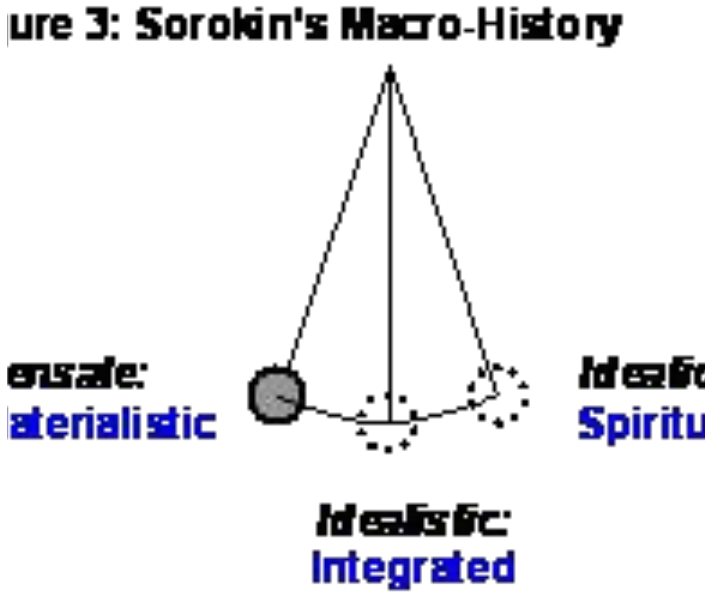
- The various spiritual movements. Their unity may develop from struggle against the status quo.



COMTE AND TOYNBEE – THE RISE OF THE LINEAR AND THE CHALLENGE

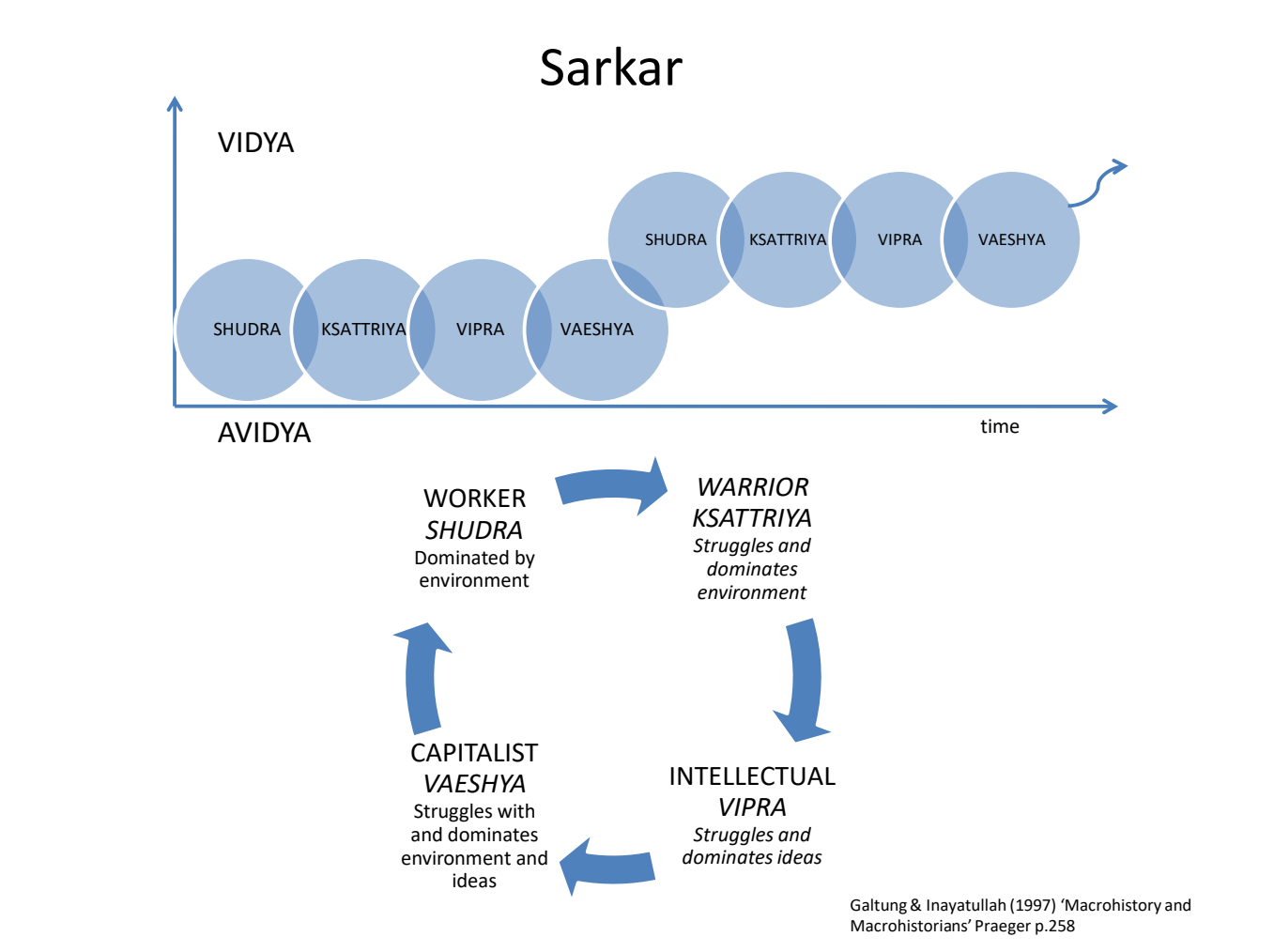
The future is linear, stage like, with progress ahead. By hard work, we will realize the good future.



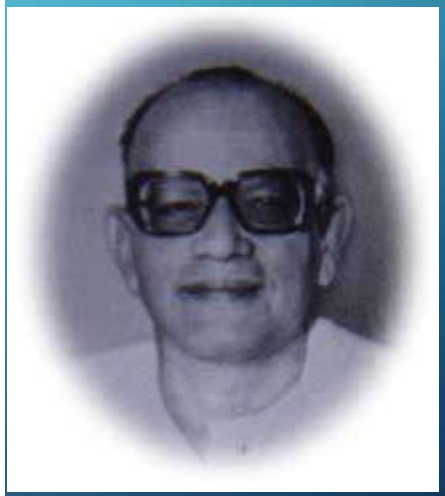


PITIRIM SORKOKIN – THE PENDULUM

P.R. SARKAR AND THE SOCIAL CYCLE



Galtung & Inayatullah (1997) 'Macrohistory and Macrohistorians' Praeger p.258



- The future is spiral – parts are linear and progress based, and parts are cyclical. With leadership that is courageous and has foresight a positive spiral can be created. The dogmas of the past are challenged but the past is not disowned, rather it is integrated in a march toward a better future.

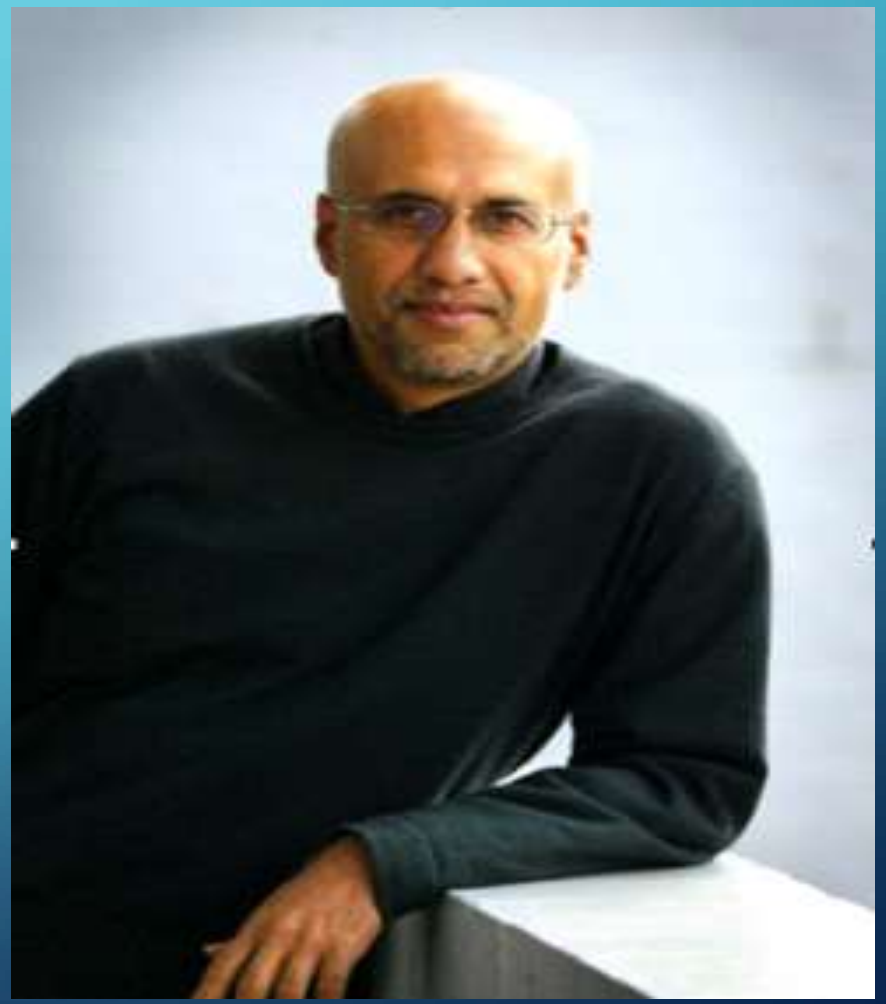
SOHAIL'S APPROACH: TYPES OF FUTURES

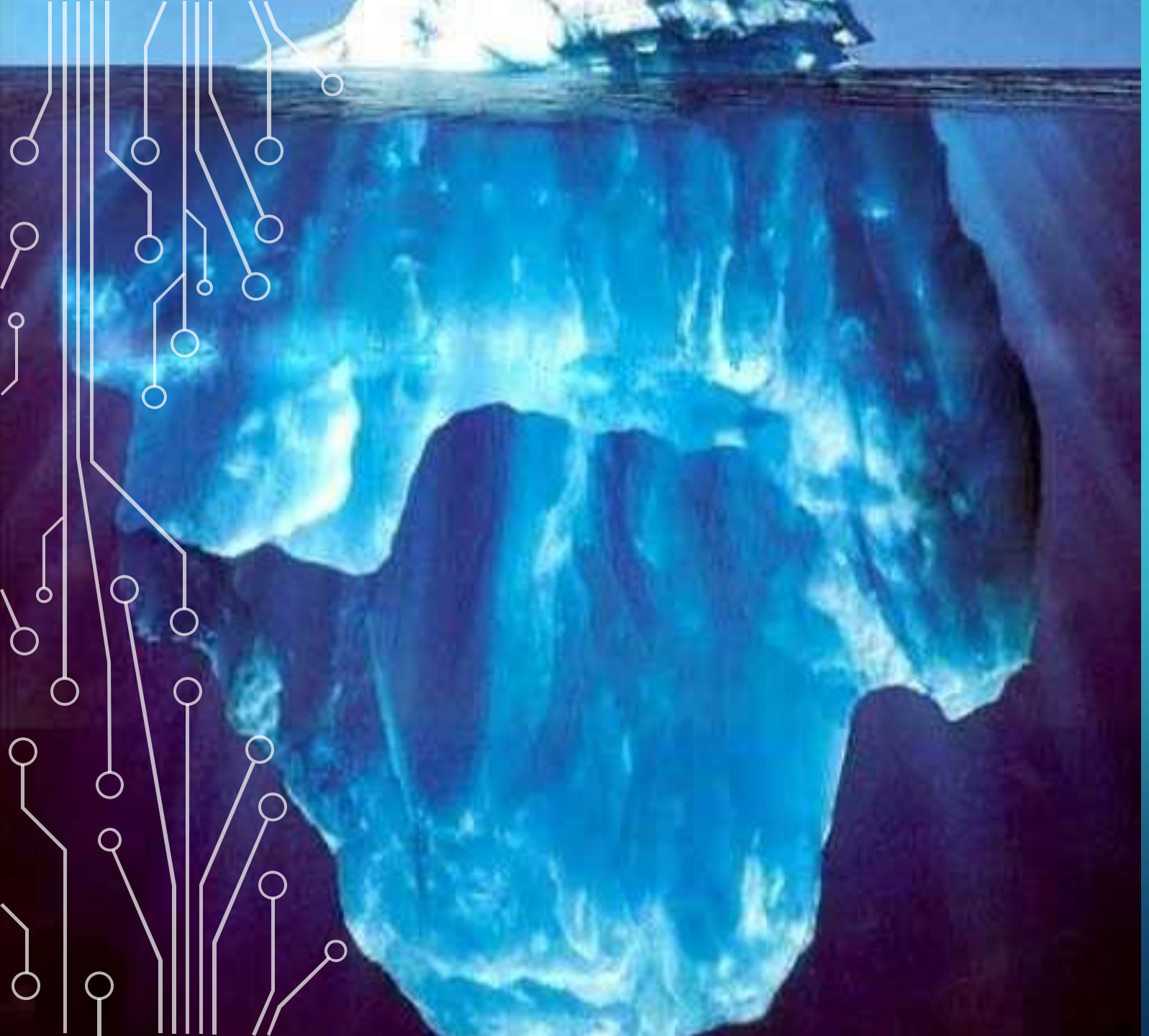
There are six basic concepts of futures thinking:

1. The used future
2. The disowned future
3. Alternative futures
4. Alignment
5. Models of social change
6. And uses of the future

SOHAIL INAYATULLAH

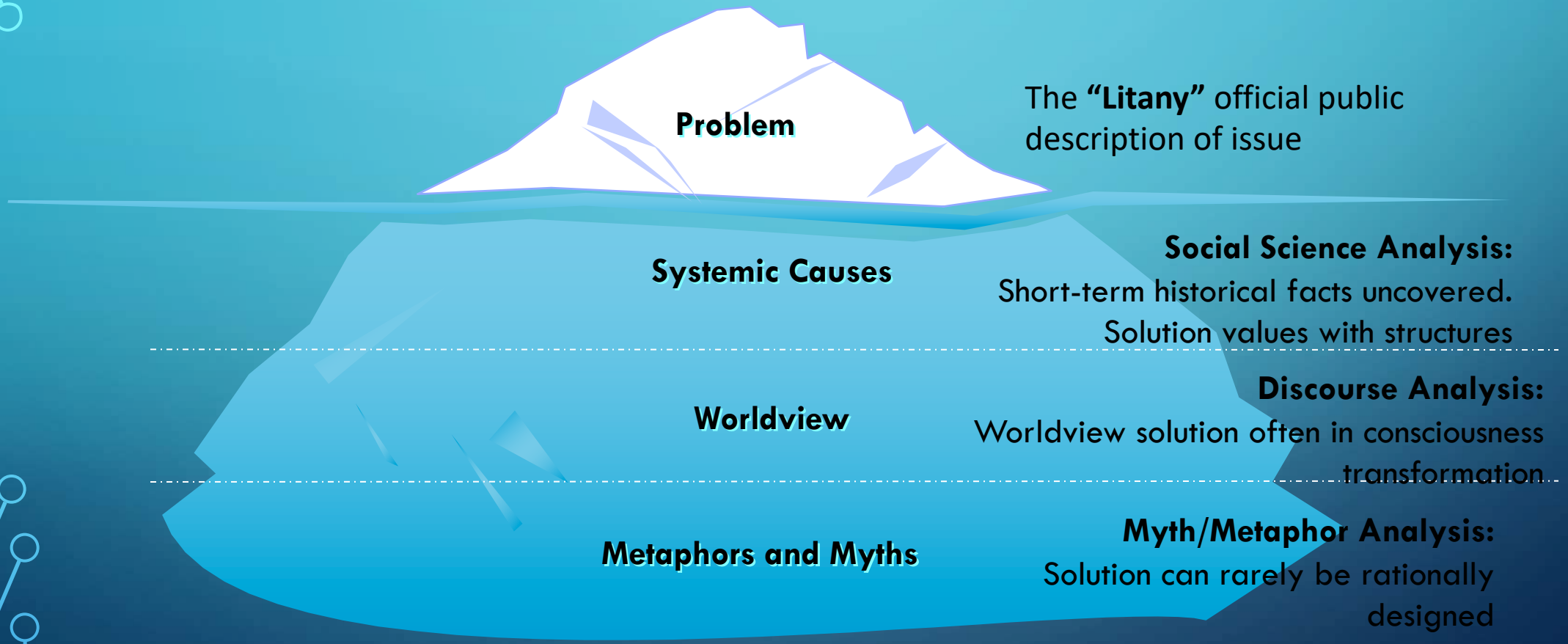
Sohail Inayatullah is a Pakistani-born Australian academic, futures studies researcher and a visiting professor at the Graduate Institute of Futures Studies at Tamkang University in Taipei, Taiwan.





CLA

CAUSAL LAYERED ANALYSIS-INAYATULLAH



The **"Litany"** official public description of issue

Social Science Analysis:
Short-term historical facts uncovered.
Solution values with structures

Discourse Analysis:
Worldview solution often in consciousness transformation

Myth/Metaphor Analysis:
Solution can rarely be rationally designed

Source: Inayatullah

- **Litany:**
  - visible
  - disconnected news events
- **Systemic:**
  - social, technological, economic, environmental and political causes
- **Discourses:**
  - stakeholders
  - ideologies
  - worldviews
- **Myths-metaphors:**
  - stories
  - legends
  - myths of trauma and transcendence

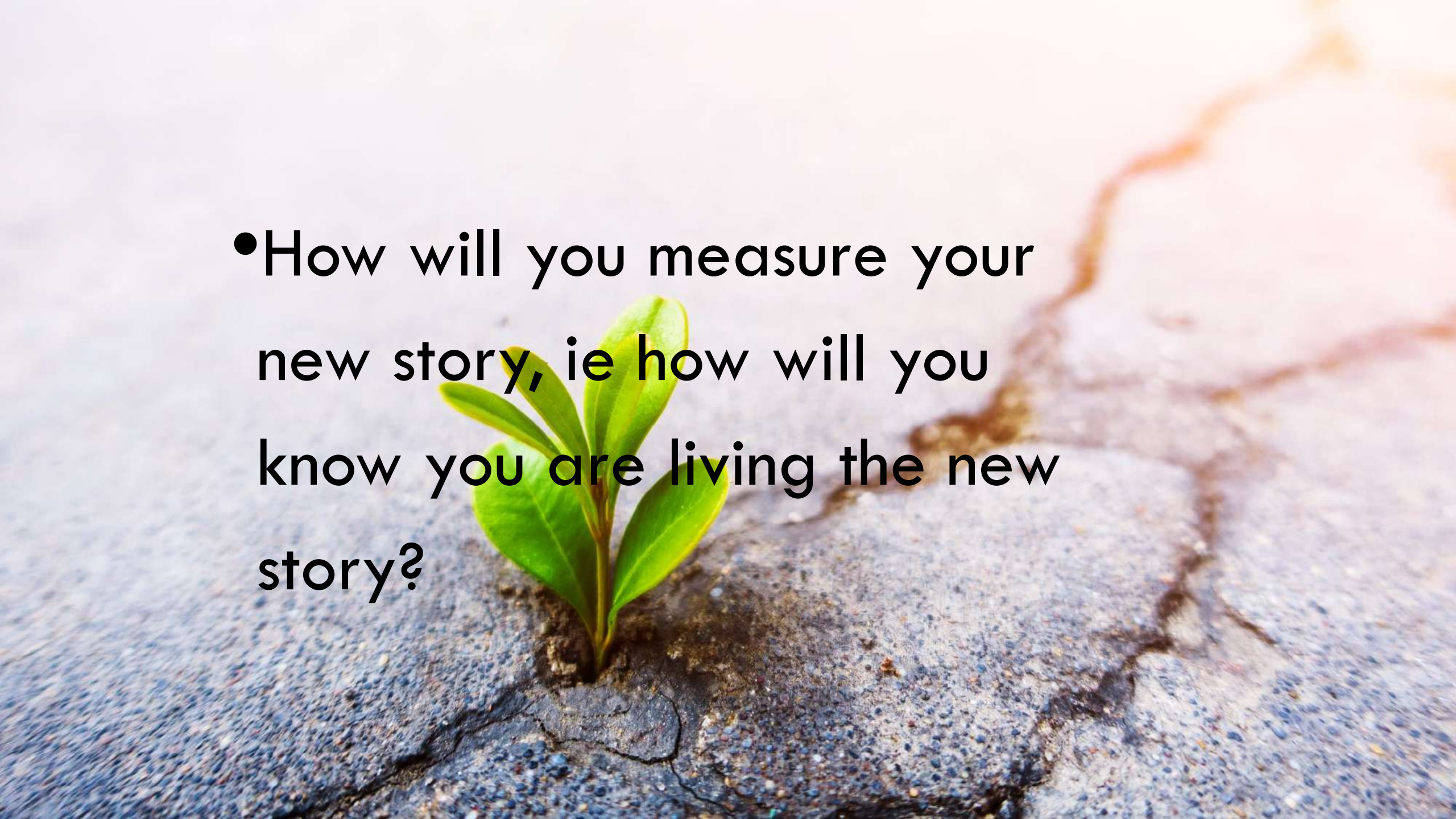
ADVANTAGES AND USES OF CLA

- Analyses from multiple perspectives – creates a map of positions at all four layers. Helps move away from worldview blindness
- Deconstructs the dominant or business and usual understanding and then allows for a reconstruction of alternative futures
- Deconstructs the present and then reconstructs the preferred future
- Ensures that new narrative has accompanying new measures (litanies) as well as required system changes – can be used to ensure robustness of implementation strategy
- Identifies where are the resistors and resistances to change and what and where are the possibilities of transformation

CLA Cas Study

THE NEW SYSTEM

WHAT ARE SOME PRACTICES THAT YOU CAN ENGAGE IN TO SUPPORT THE NEW STORY?



- How will you measure your new story, ie how will you know you are living the new story?

GLOBAL MALAYSIAN BRAIN 2025

BEST CASE

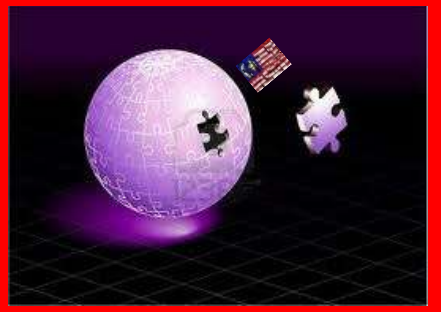
- Highly marketable graduates all over the world

Driving factors:

- Customized degrees
- Borderless Universities
- SOP & Policies

WORST CASE

- Malaysia is out from the education league



Driving factor:

- Planning in silos – no stakeholder collaboration

BUSINESS AS USUAL

- Malaysian graduates not able to compete locally and internationally

Driving factor:

- Resistance to change

OUTLIER

- Self-Indulgence

Driving factor:

- We think we are good (but no evidence)

MALAYSIAN UNIVERSITY 2025

Preferred - Industry-based University

- Research-led University
- Industry-funded research
- University produces industry-ready student
- Win-win situation

Disowned – Community needs

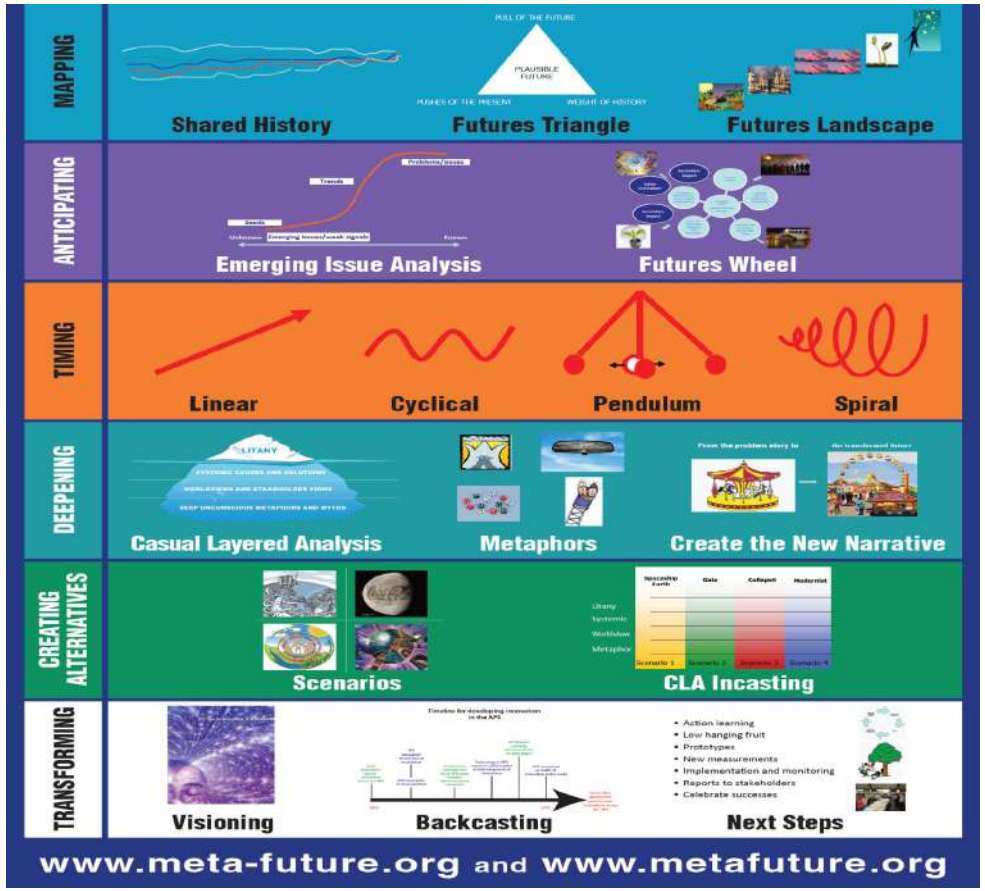
- Community is ignored
- Lack of support/fund from government and industry
- University does not solve community problem
- You can't have the cake and eat it too

Integrated – Industry-Community-based University

- Global recognition
- University within industry supporting community needs
- University grows together with community
- Café in the library

Outlier – Back to the Ivory Tower

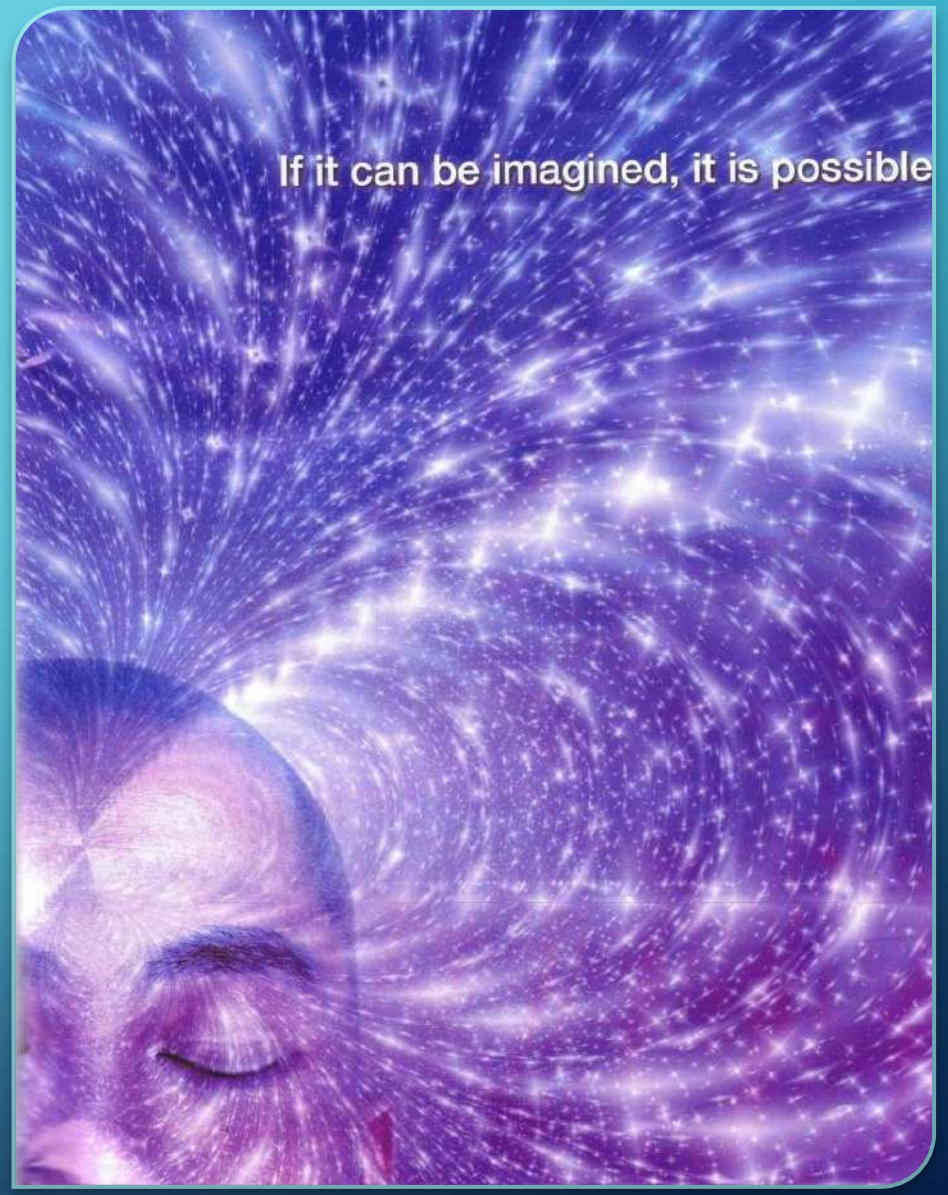
Universities continue but the best students do not enroll
Knowledge is not community nor industry based.
It is not relevant and new actors enter the market – Google, for example



TRANSFORMING THE FUTURE

TRANSFORMATION

- Visioning
  - analytic
  - interviewing
  - creative visualization
- Backcasting
- Strategic pathways
- Action learning experiments



THE CYCLE OF CYNICISM

1. Finding out about a problem
2. Wanting to do something to help
3. Not seeing how you can help
4. Not doing anything about it
5. Feeling sad, powerless, angry
6. Deciding that nothing can be done
7. Beginning to shut down
8. Wanting to know less about problems

Repeat until apathy results.

1. It is too hard
2. There are too many obstacles
3. Others will complain/attack
4. It may not be the right solution
5. Not doing anything about it
6. Deciding that nothing can be done
7. Going back to 'default' and 'used' futures
8. Reactive crisis management, piece meal solutions

REALISM

"People want to be 'realistic', and they take it as axiomatic that fears are realistic and hopes unrealistic."

Elise Boulding

BACKCASTING

Elise M. Boulding was a Norwegian-born American sociologist, and author credited as a major contributor to creating the academic discipline of Peace and Conflict Studies.

BACKCASTING

- **James Allen Dator** is a professor and Director of the Hawaii Research Center for Futures Studies in the department of political science at the Universsity of Hawaii at Manoa . He wrote on four futures archetypes which represent four alternative scenarios (Continuation, Limits & Discipline, Decline & Collapse, Transformation)

BACKCASTING IS REVERSE PLANNING, THE FUTURE IS ACCEPTED AS HAVING ALREADY OCCURRED, AND THE CHALLENGE IS TO REMEMBER THE PAST.

THE OUTCOME OF A SUCCESSFUL BACKCASTS IS INCREASED ORGANIZATIONAL AGENCY AND EFFECTIVENESS.

HOW IT IS DONE

- future is remembered
- Events and trends are posited
- These can be broken down in a variety of ways
- Based on crucial indicators (Transformative events; what others in the business are doing; global events, etc…

These are done in ten to hundred years time span

While imagination is important, a logical sequence is crucial

THESE TIME SPAN HAVE MULTIPLE PURPOSE

To reveal how the future can change, how the desire or plausible future will play itself out

To empower individuals to work for the future they believe in

After the backcast, individuals are asked which events/projects they want to be responsible for, and for making happen

Back Casting

Futures Thinking Enables The Strategic Capabilities Needed to Succeed

Next Steps

- Gap Analysis – anything missing that we need to do

THE PARADIGM QUESTIONS

- What today is impossible to do, but if it was possible would lead to change for the better?
- Why is it impossible?
- What could make it possible?
- What can you do to make it possible?
- What support do you need?

- Only those who are able to see the invisible are able to do the impossible.

Dr. Bernard Lown, developer of the defibrillator and 1985 Nobel Prize recipient for the international physicians for the prevention of nuclear war

The grass is greener,
where you water it.
-Neil Barringham-
rossifox.com