# The Singularity

## Fantasy, threat or opportunity?

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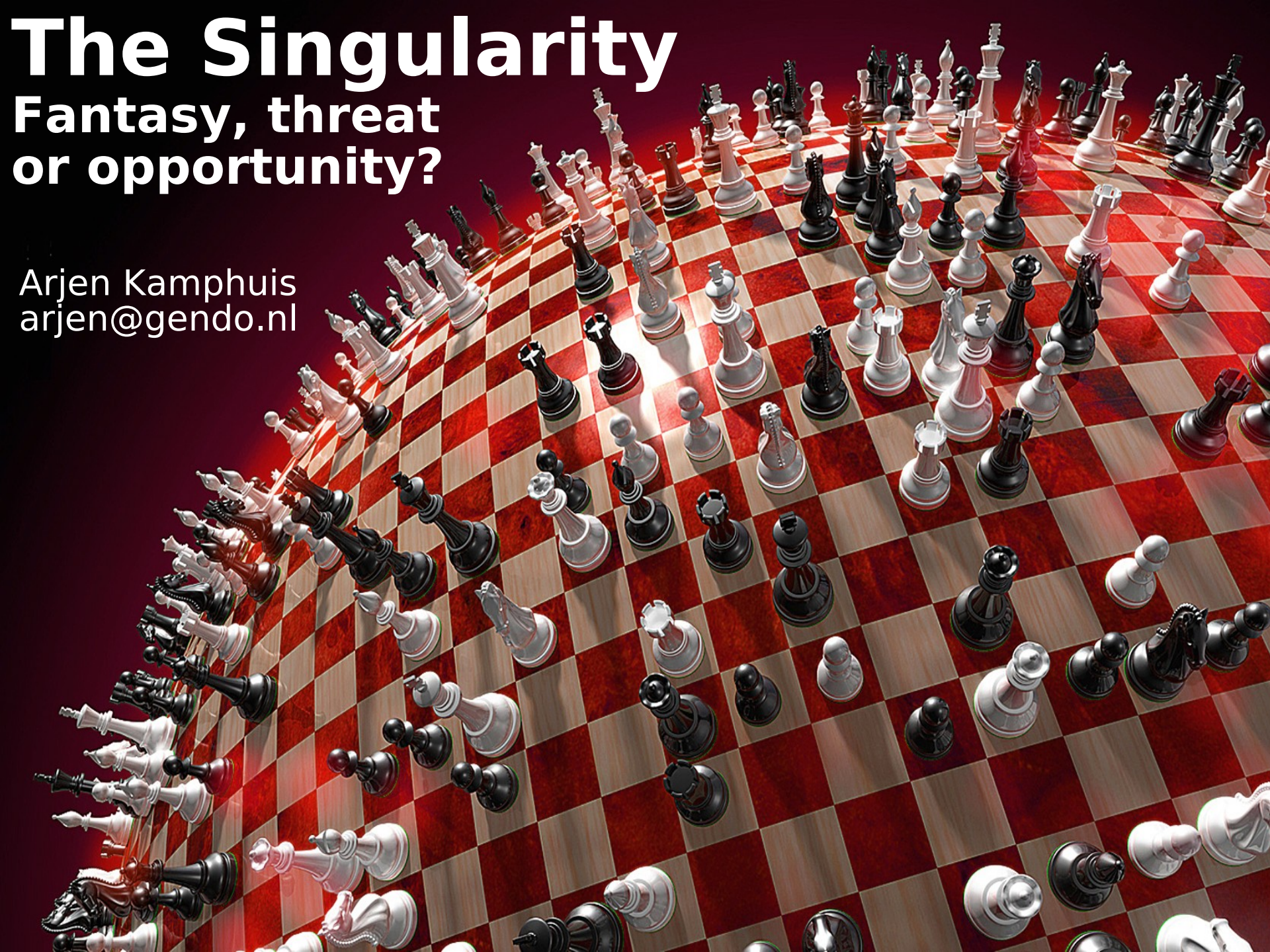
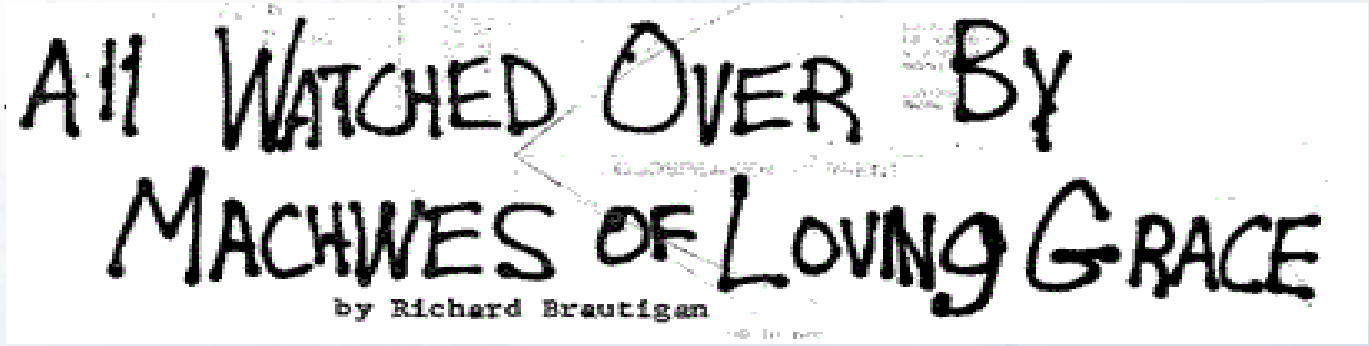
arjen@gendo.nl



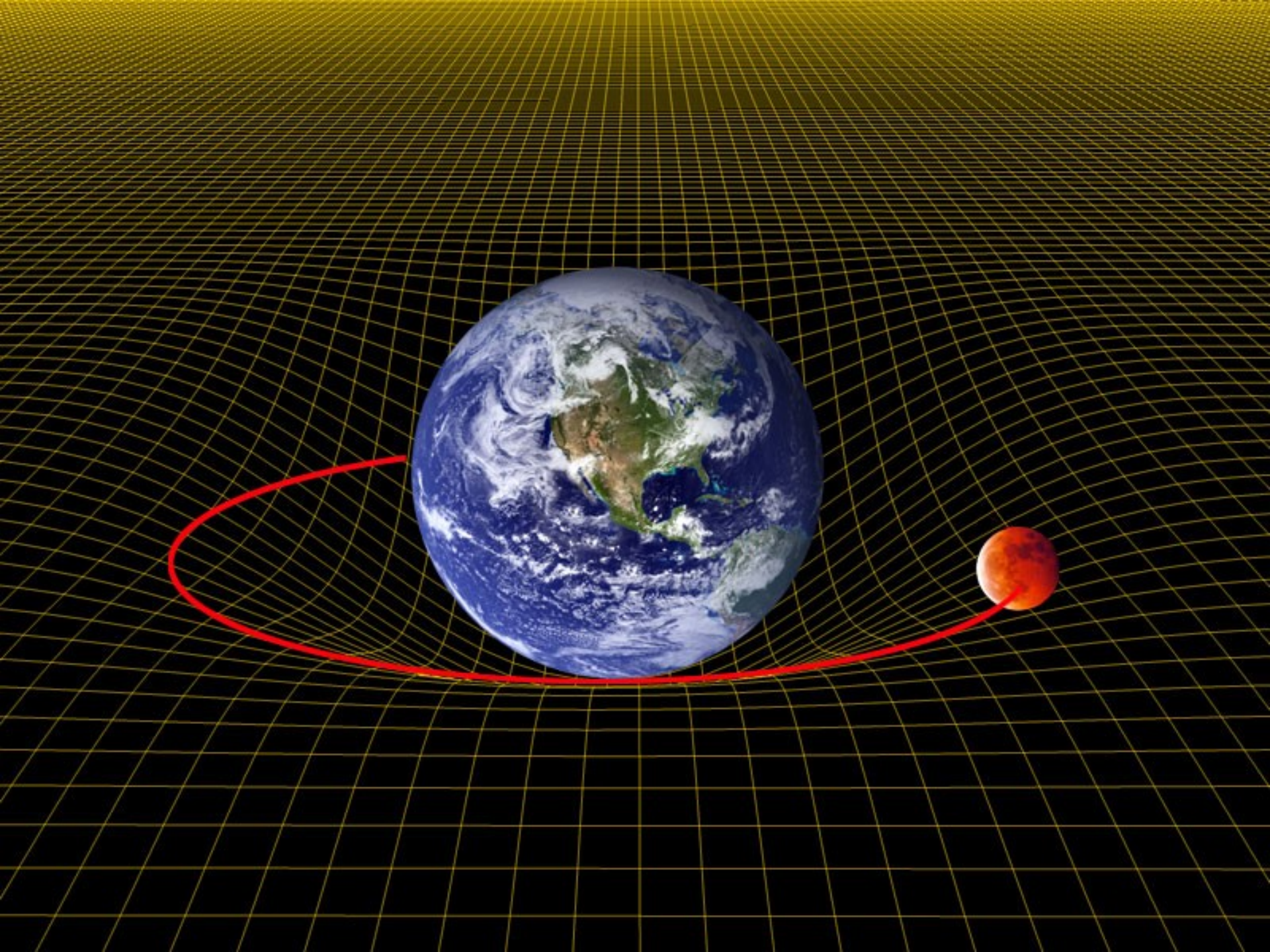


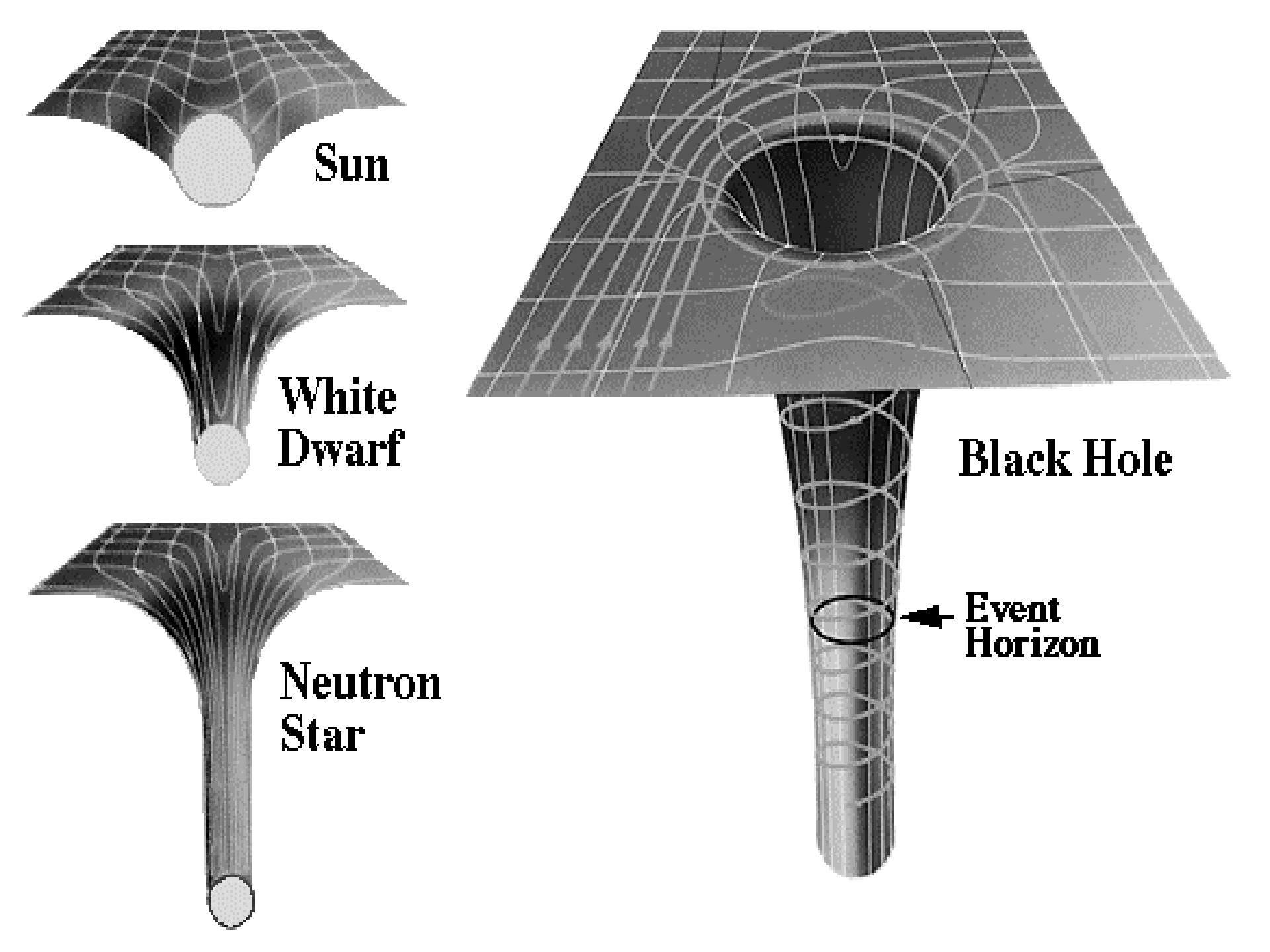

I'd like to think (and
the sooner the better!)
of a cybernetic meadow
where mammals and computers
live together in mutually
programming harmony
like pure water
touching clear sky.

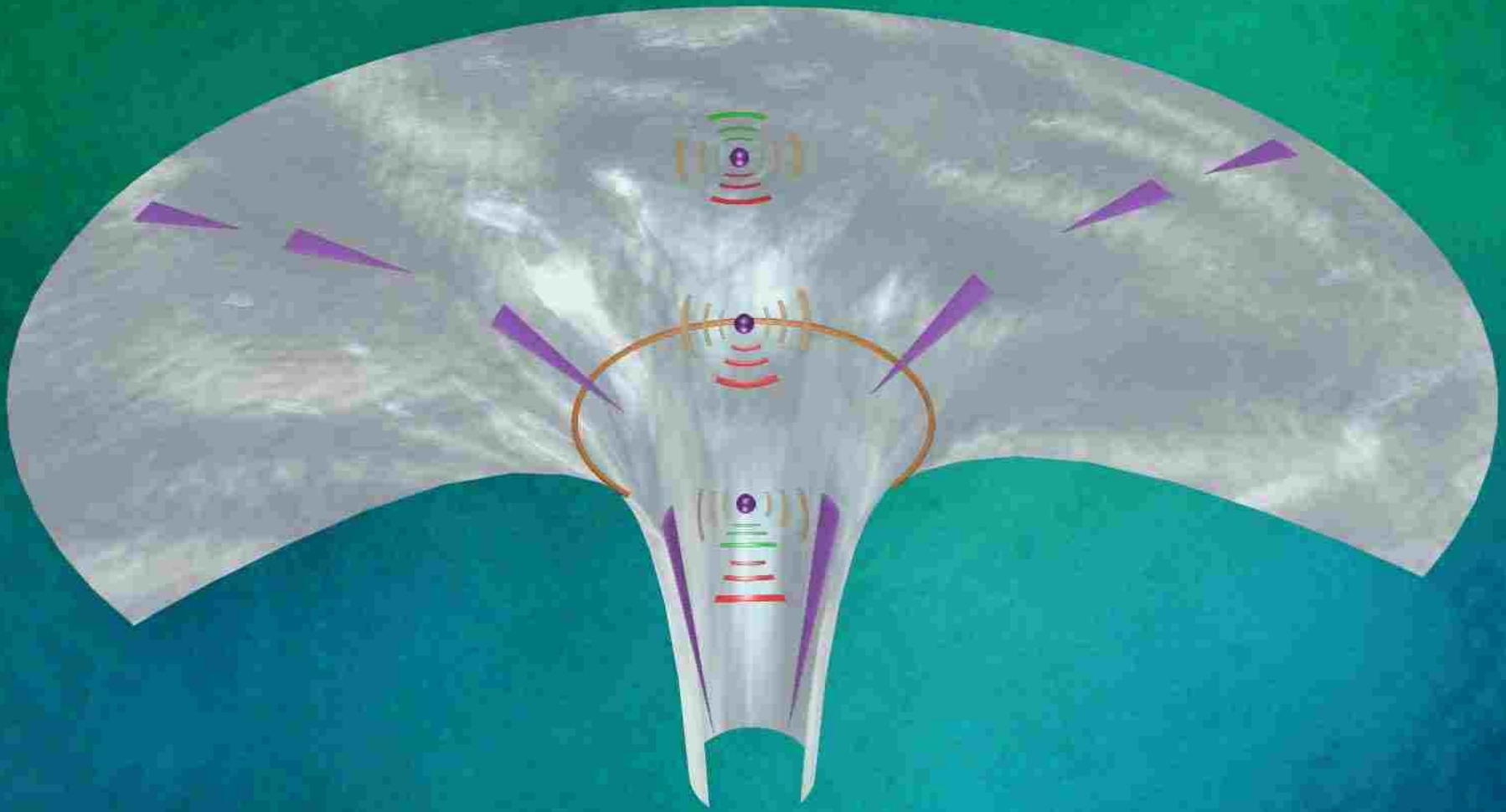
I like to think
    (right now, please!)
of a cybernetic forest
filled with pines and electronics
where deer stroll peacefully
past computers
as if they were flowers
with spinning blossoms.

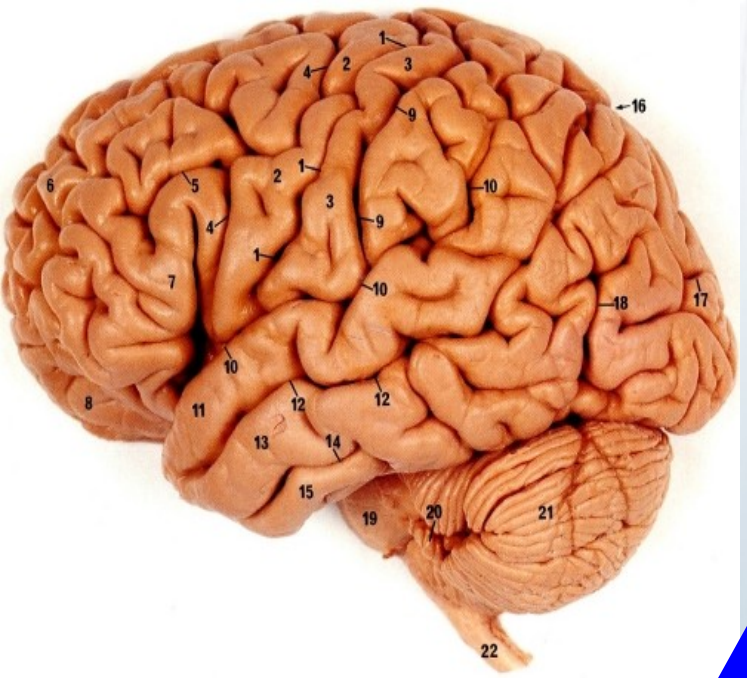
GENDO
CHOICE IN IT

I like to think
(it has to be!)
of a cybernetic ecology
where we are free of our labors
and joined back to nature,
returned to our mammal brothers
and sisters,
and all watched over
by machines of loving grace.




Sun
White
Dwarf
Neutron
Star
Black Hole
Event
Horizon




1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22

Hand drill
Hand brace
Push drill
Electric drill

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CHOICE IN IT

800.000 jr

Tijd

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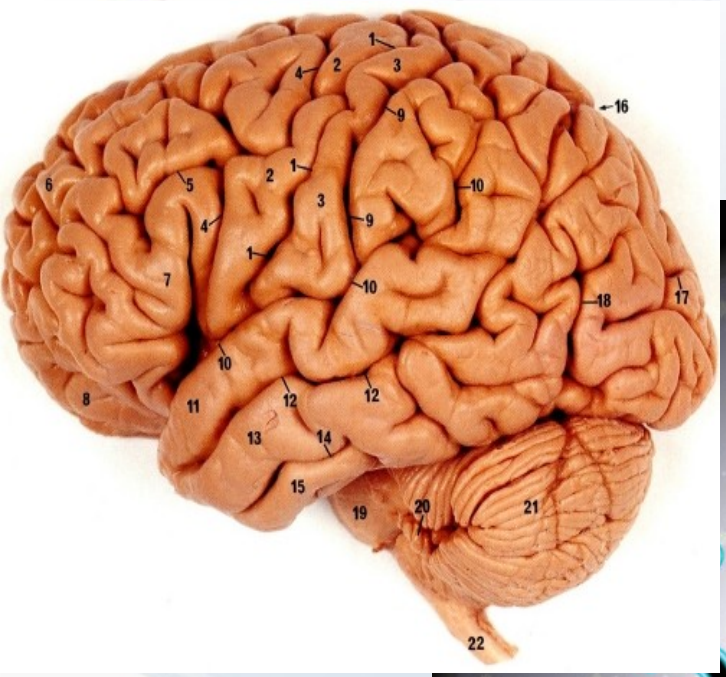
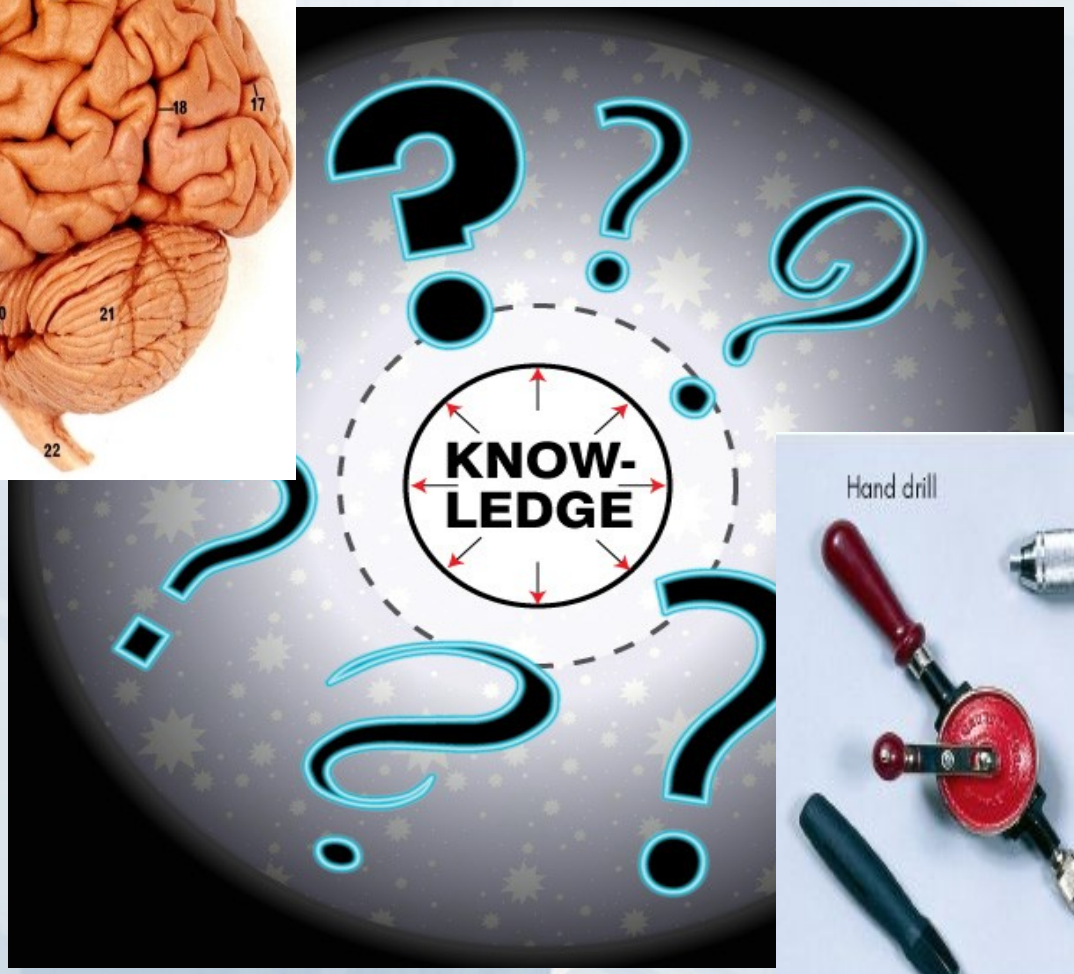
800.000 yr

7.200 yr

Tijd




KNOW-
LEDGE

Hand drill
Hand brace
Push drill
Electric drill

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800.000 yr

4.000 yr

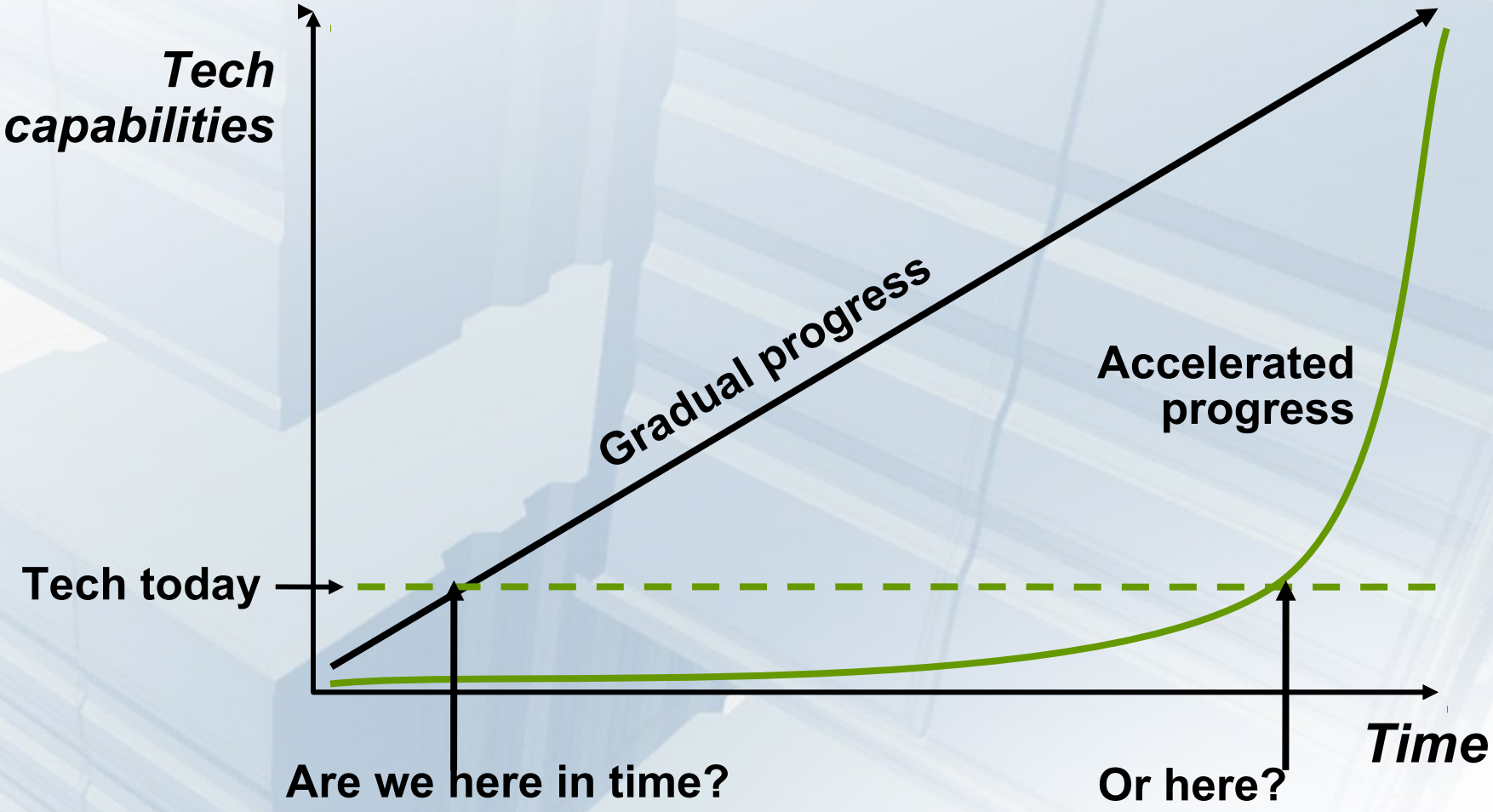
Tijd

800.000 jr

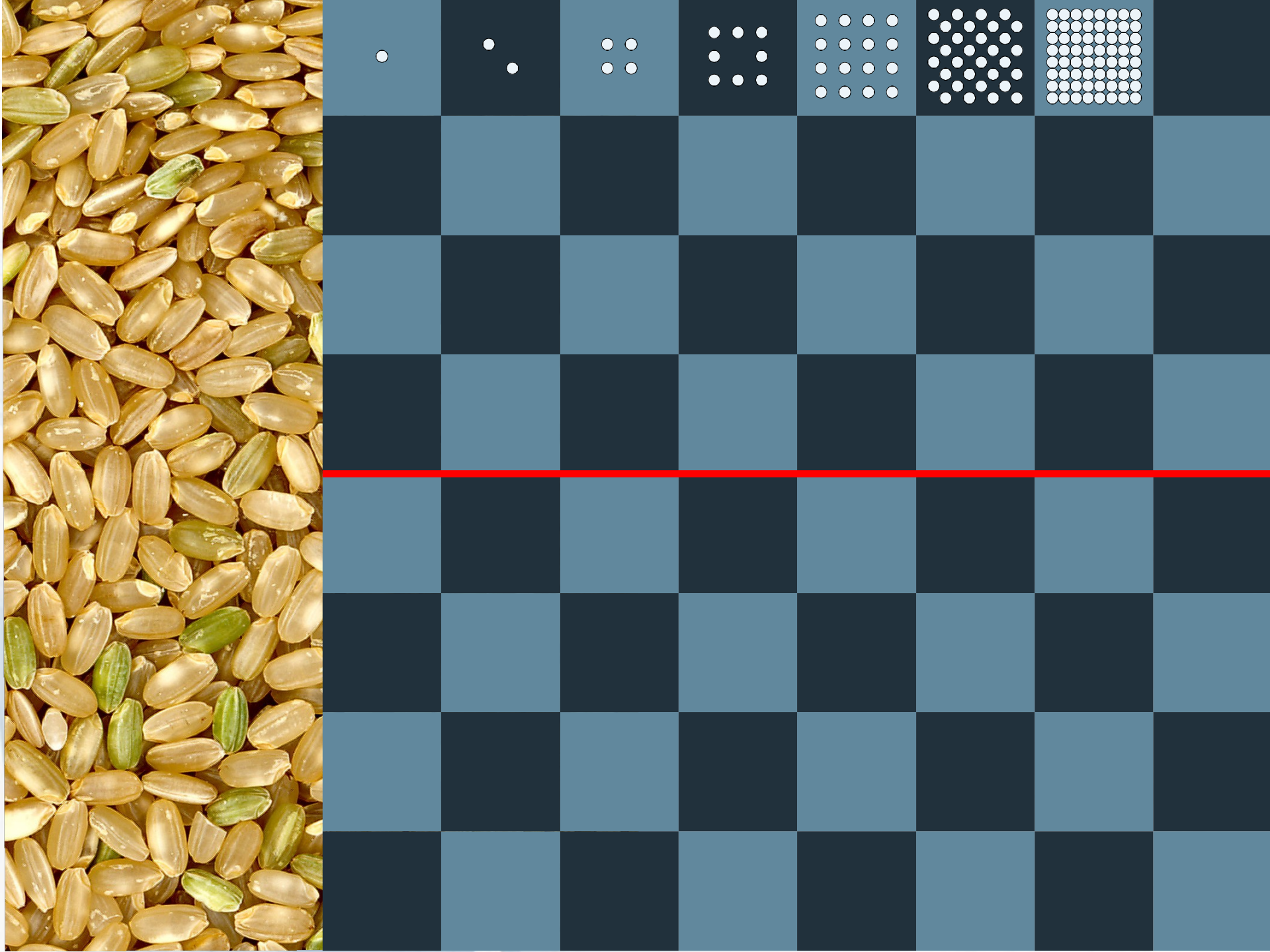
40 jr

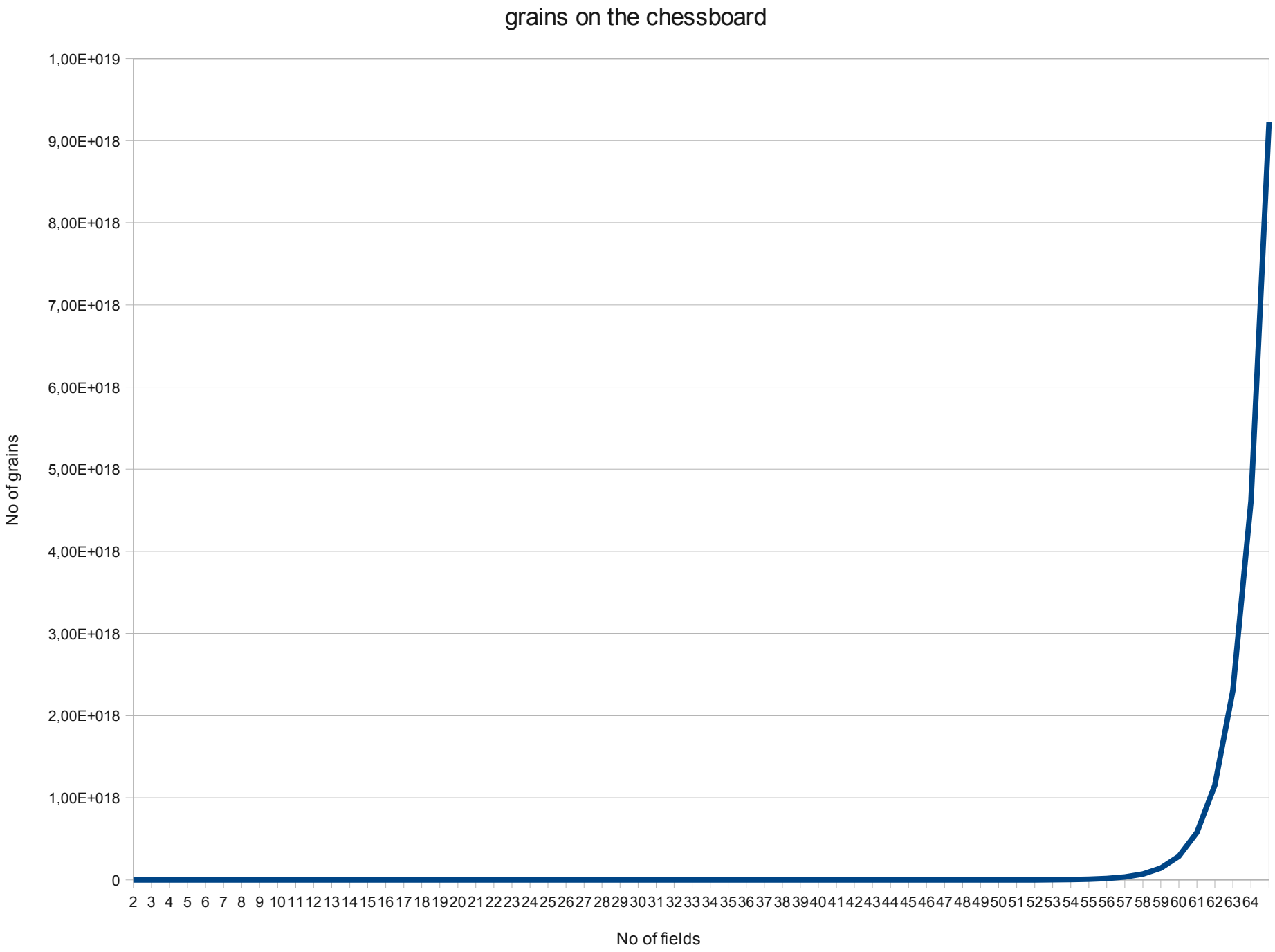
Time

# Linear vs accelerated change




*Bron: Foresight Institute*




grains on the chessboard
1,00E+019
9,00E+018
8,00E+018
7,00E+018
6,00E+018
5,00E+018
4,00E+018
3,00E+018
2,00E+018
1,00E+018
0
No of grains
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64
No of fields

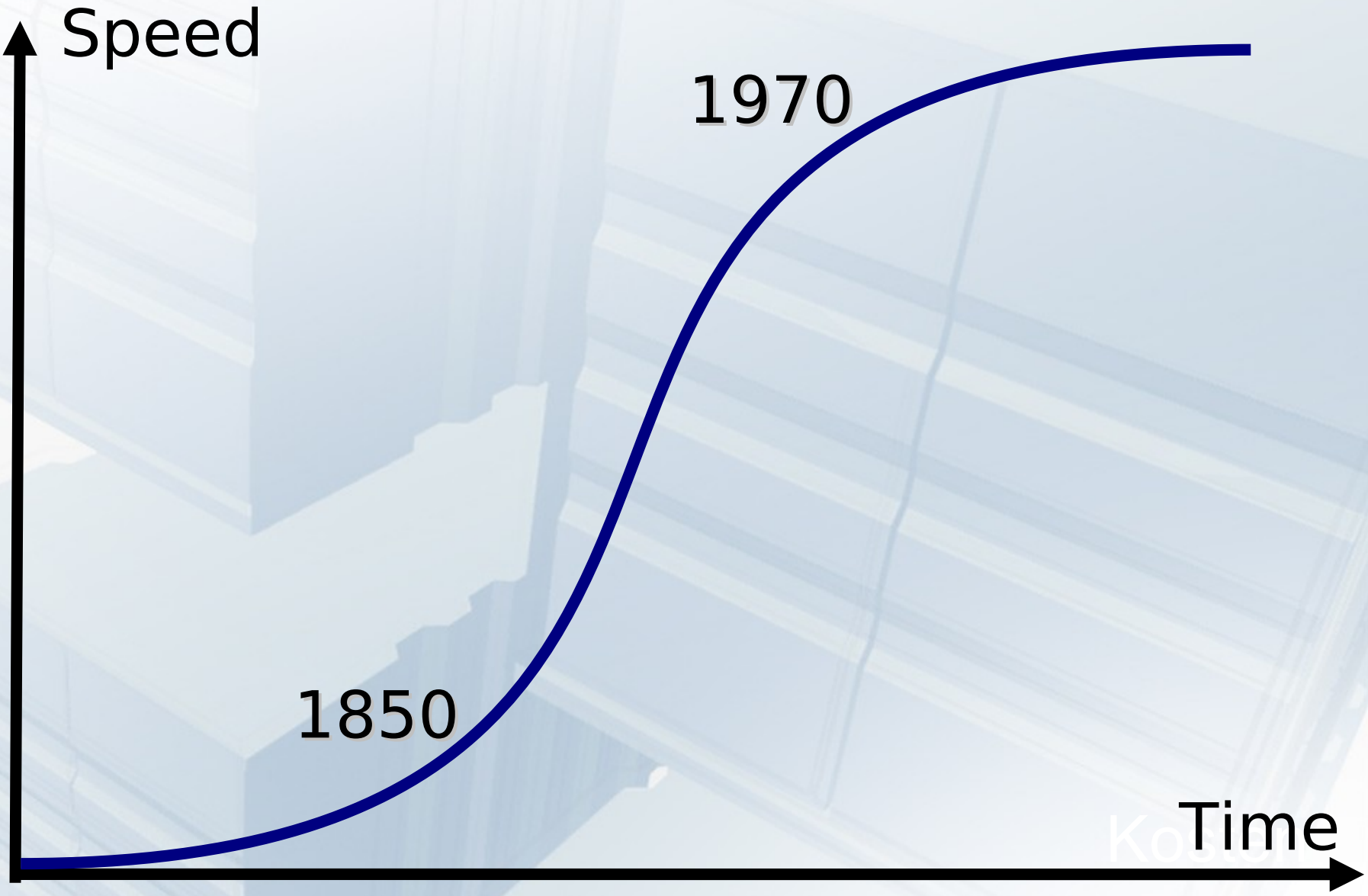
18,446,744,073,709,551,615 grains of rice

3985

AIR FRANCE
F-BTSD

Colin Smith - PhotoshopCafe.com

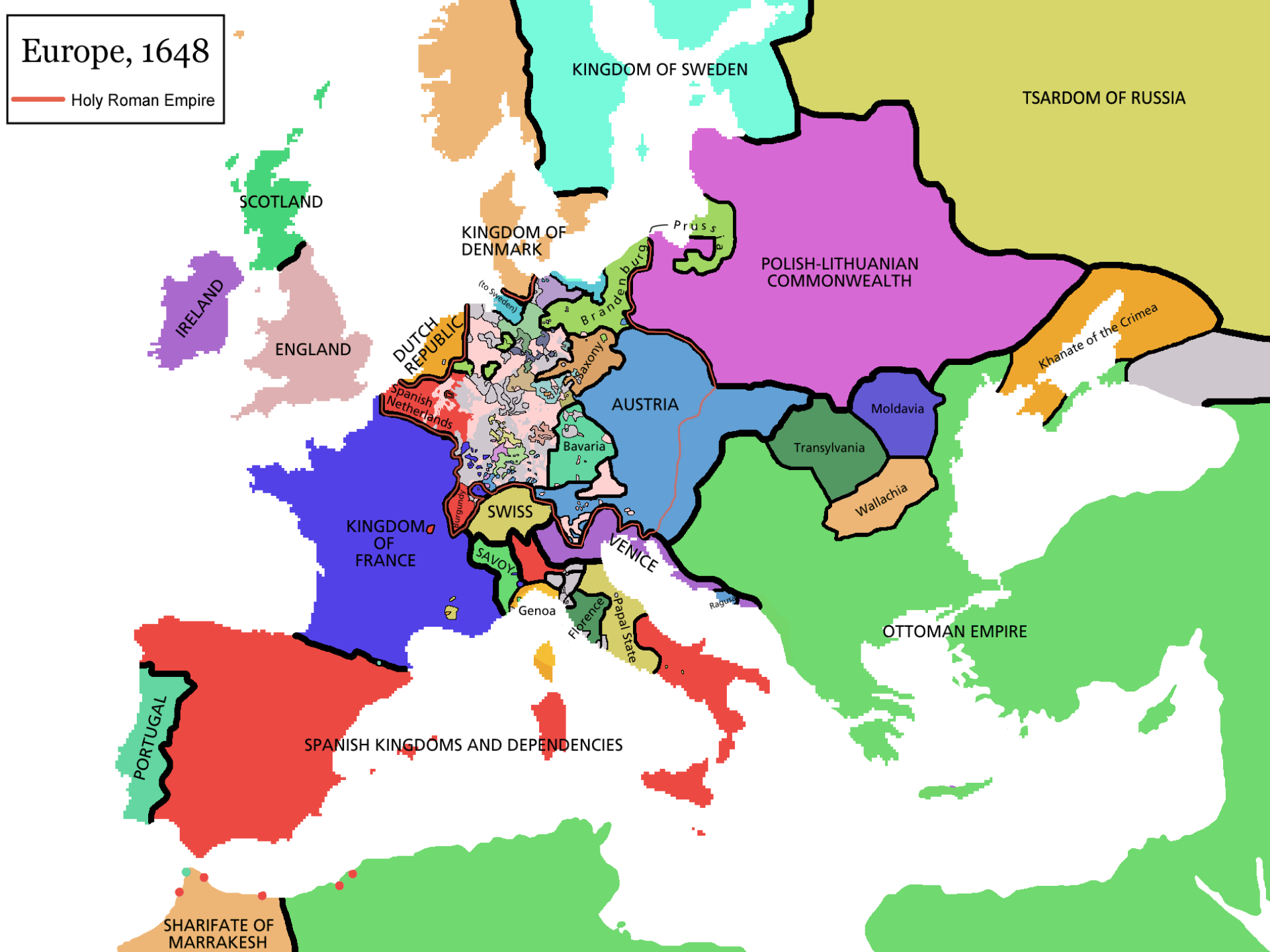
KLM
KLM


Speed
1970
1850
Time

# MEDIEVAL EUROPE
## 13th Century

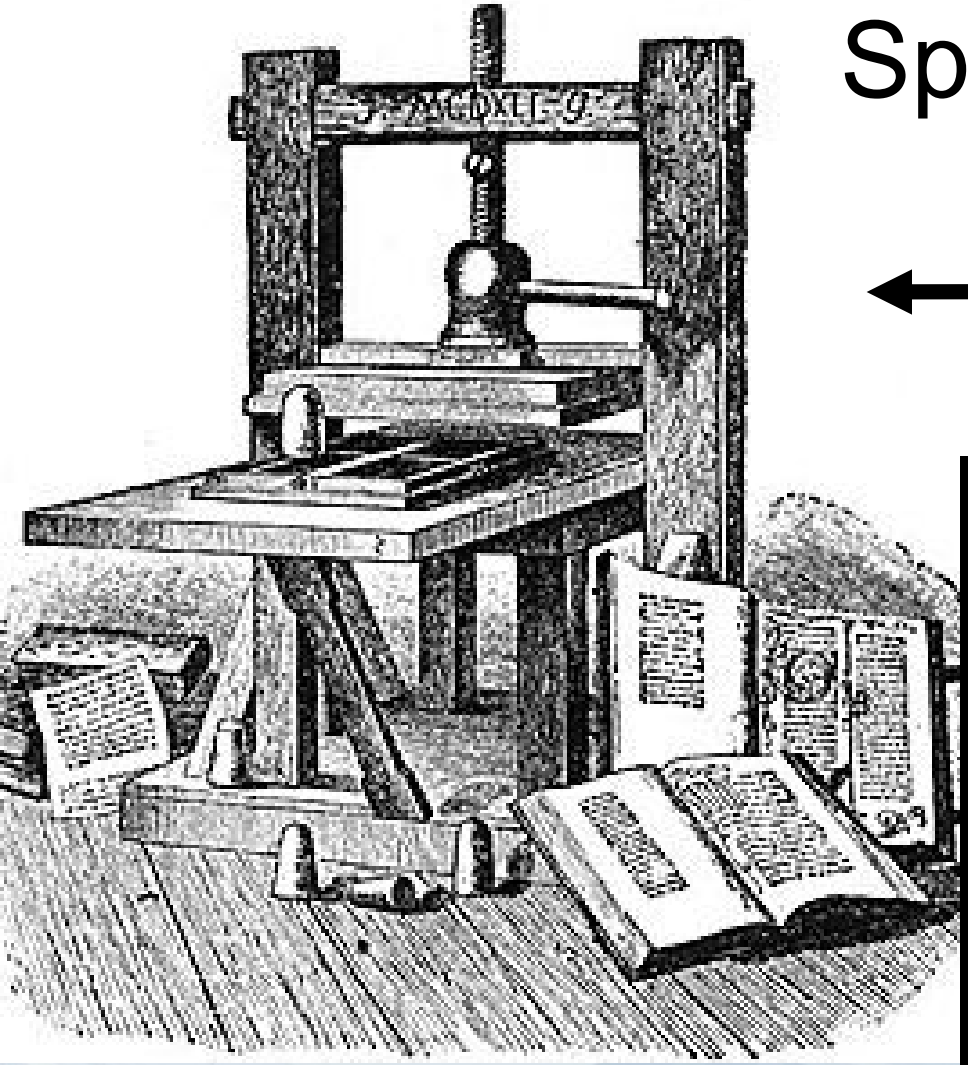
Stubbs Early Plantagenets.

Longmans, Green & Co., London, New York & Bombay.

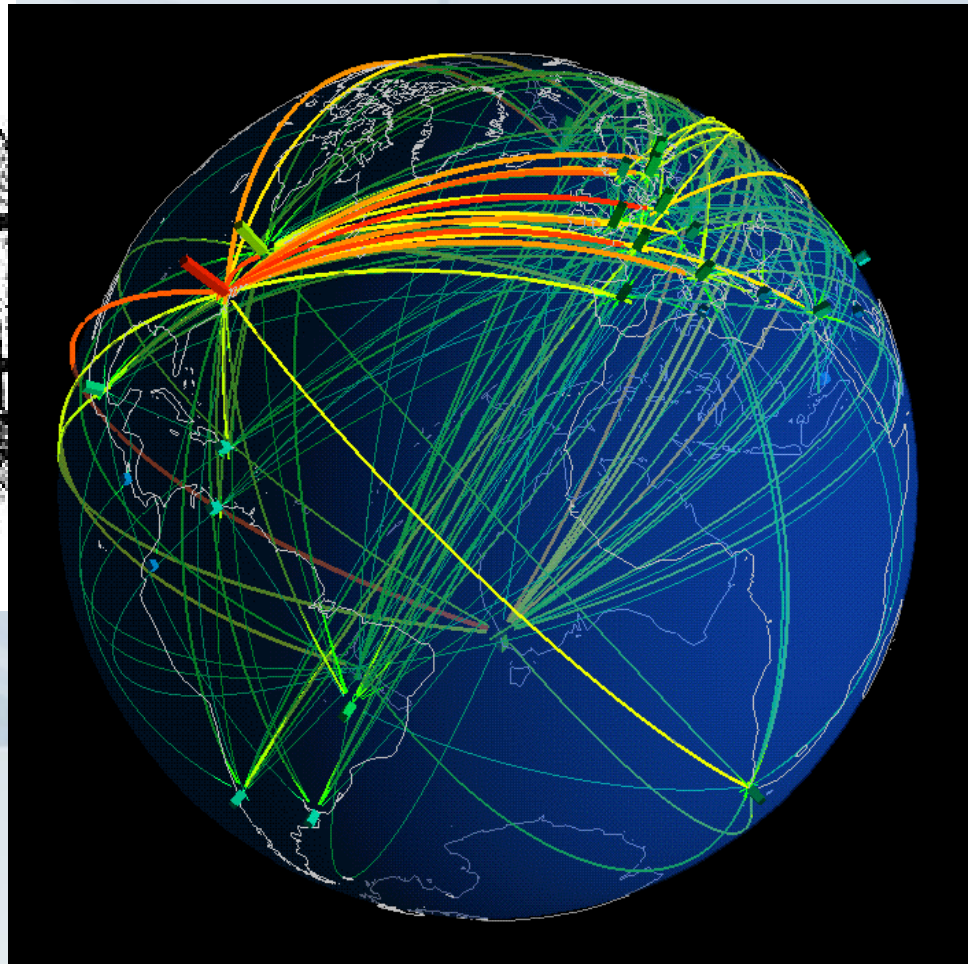

Europe, 1648
Holy Roman Empire
KINGDOM OF SWEDEN
TSARDOM OF RUSSIA
SCOTLAND
KINGDOM OF DENMARK
Prussia
POLISH-LITHUANIAN COMMONWEALTH
IRELAND
ENGLAND
DUTCH REPUBLIC
(to Sweden)
Brandenburg
Saxony
Khanate of the Crimea
Spanish Netherlands
AUSTRIA
Moldavia
Transylvania
Bavaria
Wallachia
SWISS
Burgundy
KINGDOM OF FRANCE
SAVOY
VENICE
Genoa
Florence
Papal State
Ragusa
OTTOMAN EMPIRE
PORTUGAL
SPANISH KINGDOMS AND DEPENDENCIES
SHARIFATE OF MARRAKESH

# Spreading knowledge

← from 1440



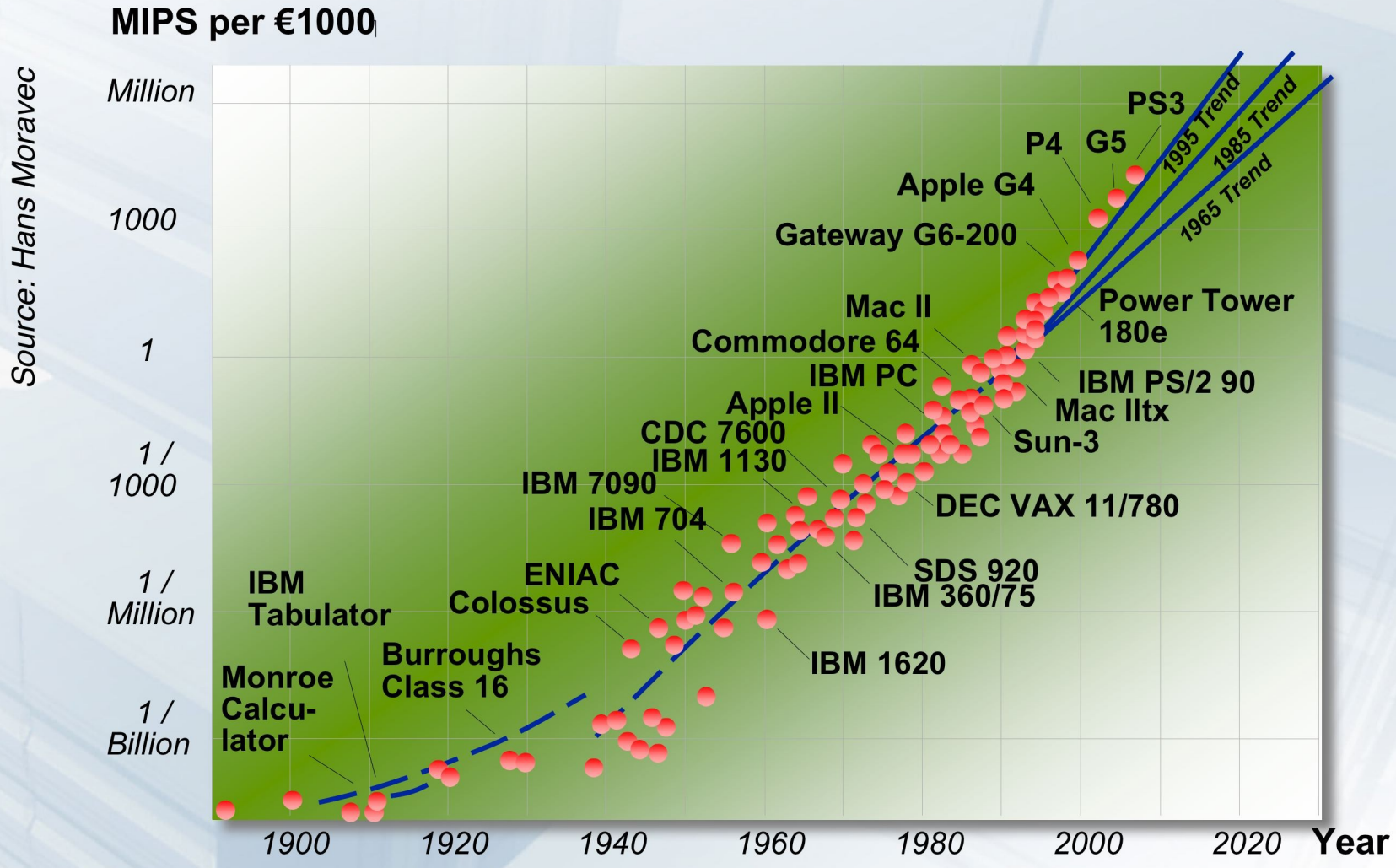
from 1967 →



My first computer ... (1977)

My computer ... (2010)

# Evolution of computers



A MAN, A PLAN, A CANAL...ERIE!
BY MICHELLE
VOCABULARY
JEOPARDY!
The IBM Challenge

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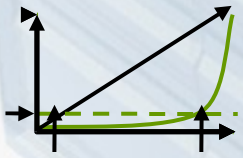

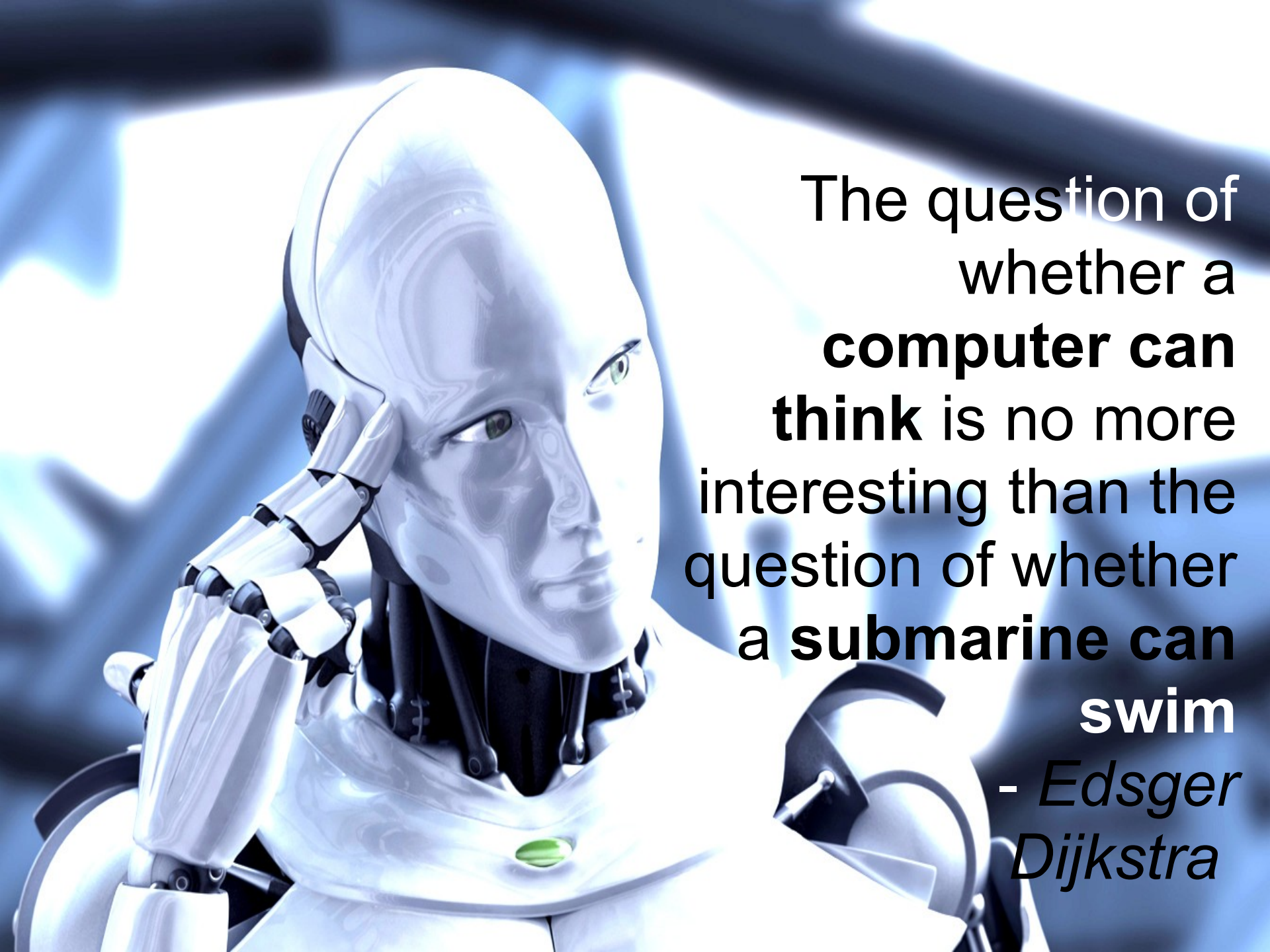
The question of whether a **computer can think** is no more interesting than the question of whether a **submarine can swim**
- *Edsger Dijkstra*

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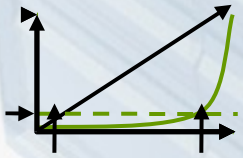
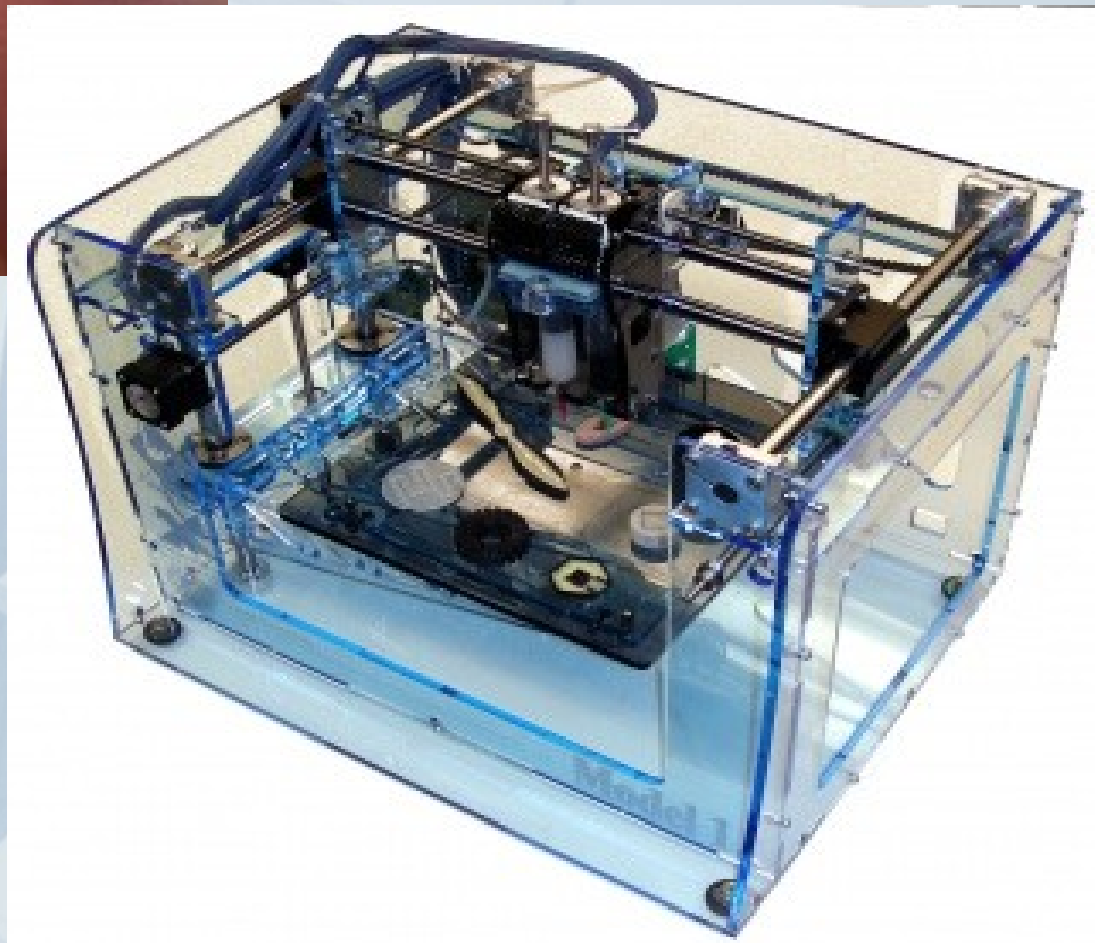
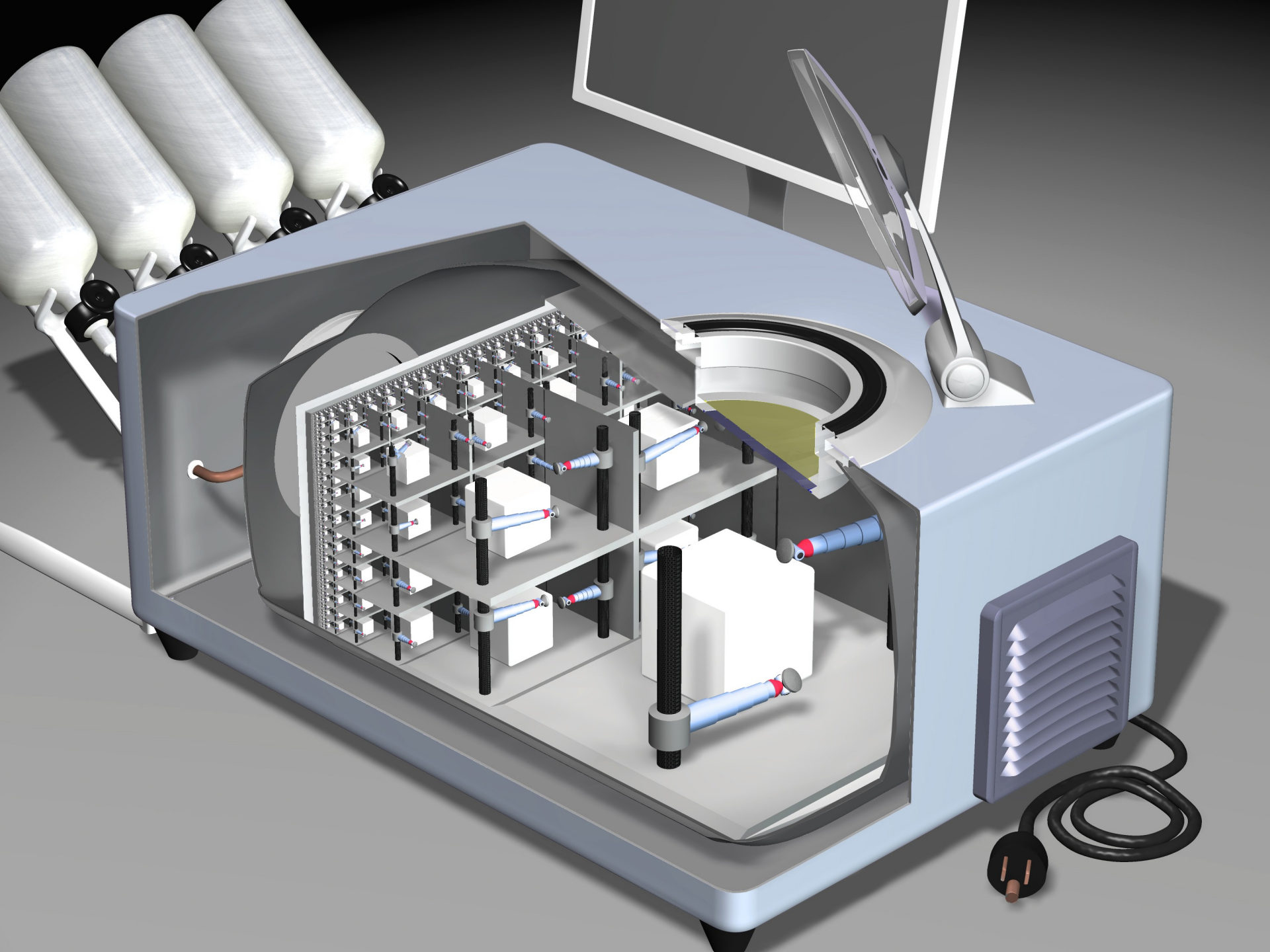
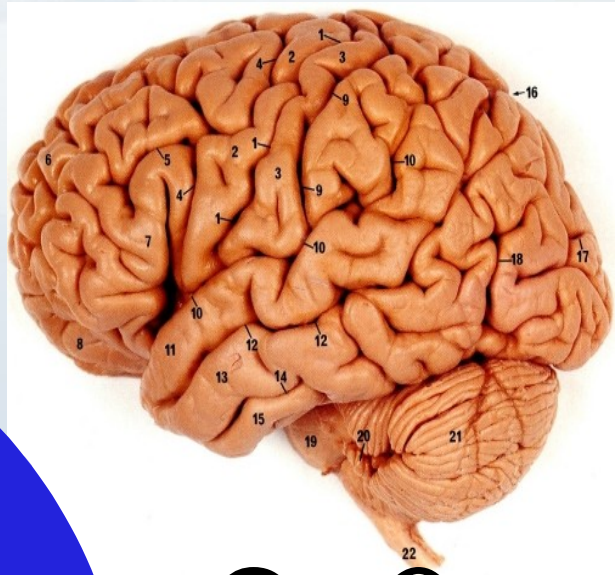


6 5 4 3 2

# Fab @ home







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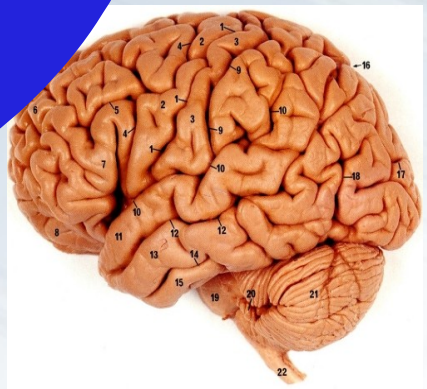

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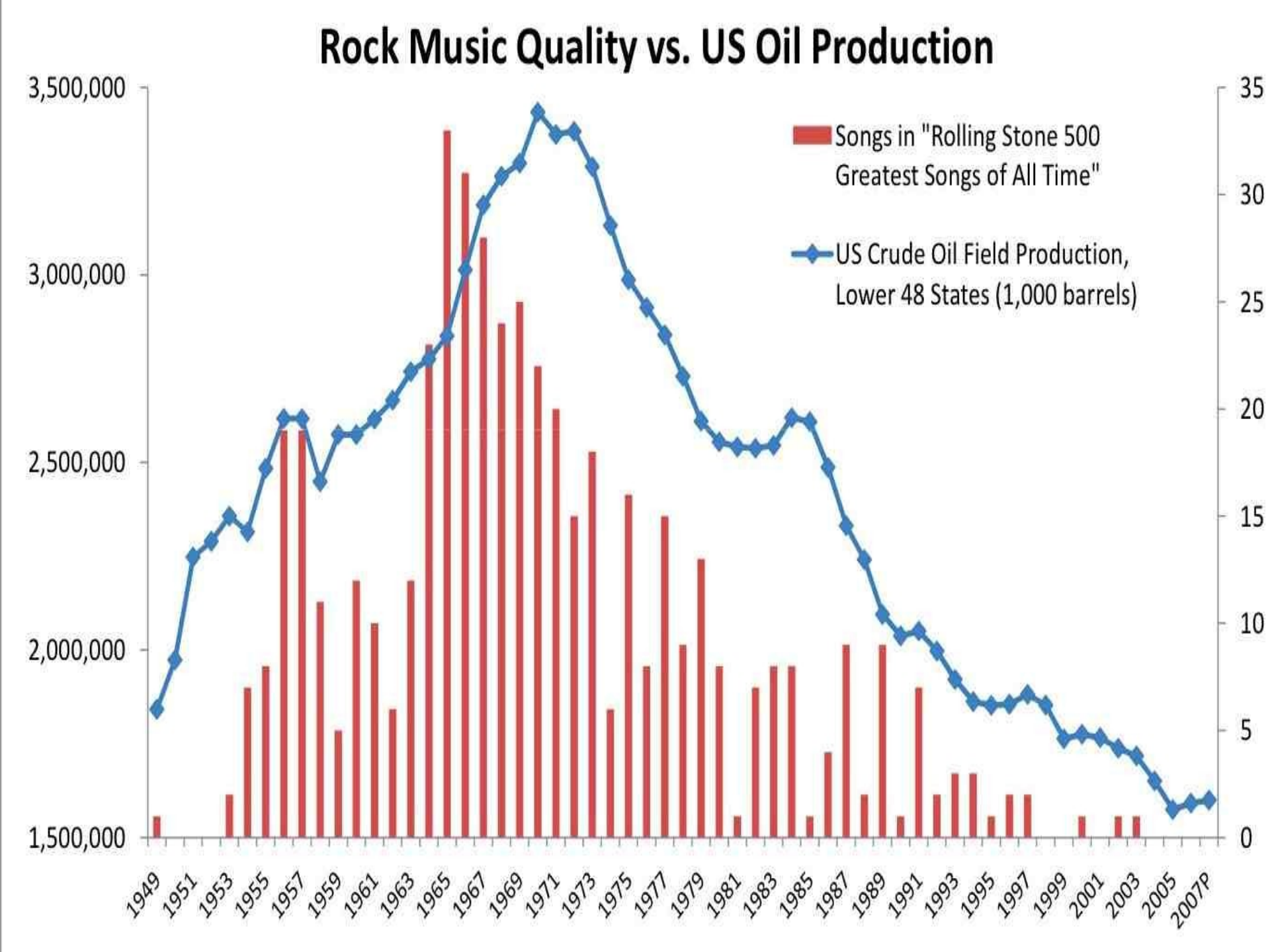
Rock Music Quality vs. US Oil Production
3,500,000
3,000,000
2,500,000
2,000,000
1,500,000
35
30
25
20
15
10
5
0
Songs in "Rolling Stone 500 Greatest Songs of All Time"
US Crude Oil Field Production, Lower 48 States (1,000 barrels)
1949
1951
1953
1955
1957
1959
1961
1963
1965
1967
1969
1971
1973
1975
1977
1979
1981
1983
1985
1987
1989
1991
1993
1995
1997
1999
2001
2003
2005
2007P

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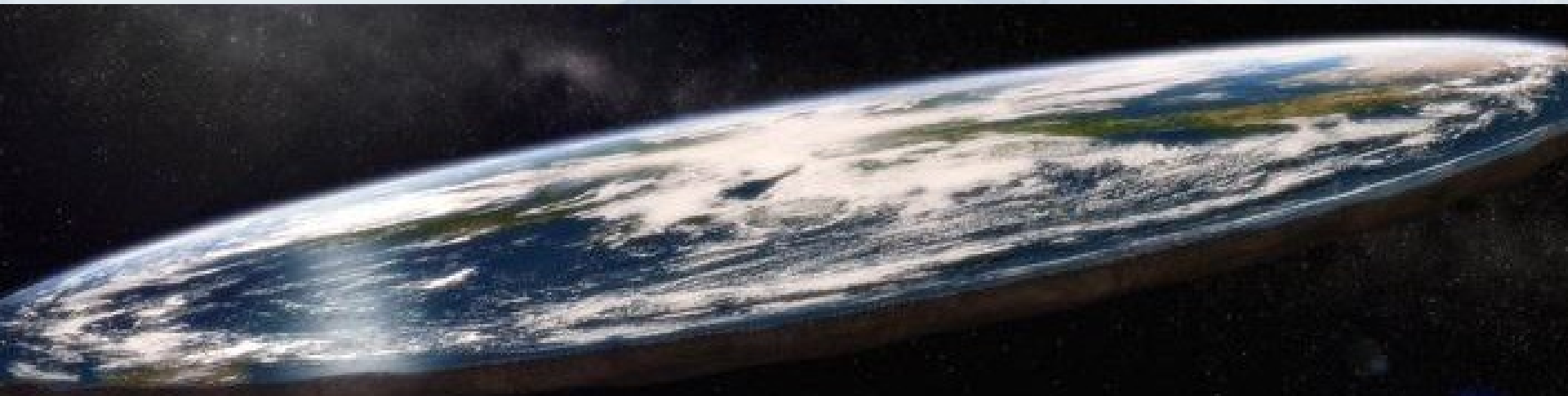
# Do not confuse!

- The **possible** scenarios leading to a technological singularity and their **probability**
- The possible **(un)wanted effects** of such scenario's on individuals, society at large, the eco-system and the planet(s)
- **(Un)wanted does not make (un)likely**



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