



***New Approaches to Creativity and Innovation:  
the Dynamic Definition of Creativity***

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Where to start from?



## **INDUSTRIAL SOCIETY**

- ◇ STANDARDIZATION
- ◇ CONCENTRATION
- ◇ SYNCHRONIZATION



## **EDUCATIONxIND**

- ◇ ROTE LEARNING
- ◇ SPECIALIZATION
- ◇ CREATIVITY FOR GENIUS

## **INFORMATION SOCIETY**

- ◇ PERSONALIZATION
- ◇ DISTRIBUTION
- ◇ S/T DESTRUCTURING



## **EDUCATIONxINFO**

- ◇ FLEXIBILITY
- ◇ FILTERING
- ◇ CREATIVITY FOR DIGNITY

## **POST-HUMAN SOCIETY**

- ◇ HYPER-INTELLIGENCE
- ◇ HYPER-CONNECTIVITY



## **EDUCATIONxPOST-H**

- ◇ A.I. CONTROL
- ◇ ENTREPRENEURSHIP
- ◇ CREATIVITY FOR SURVIVAL

*Creativity is a necessity  
for our survival !*



[mic.fgm.it](http://mic.fgm.it)



research

education

application



***A brief tour on creativity principles***

- Runco, M.A., Jaeger, G.J. (2012). The standard definition of creativity. *Creativity Research Journal*. 24, 92–96.

### ***Creativity requires originality and effectiveness***

- Runco, M.A., Jaeger, G.J. (2012). The standard definition of creativity. *Creativity Research Journal*. 24, 92–96.

- PR1) *the definition of creativity should encompass the overall phenomenon in all its experiential manifestations*
- PR2) *the definition of creativity should be useful in the pursuit of the goal of general education in creative thinking*
- PR3) *the definition of creativity should scientifically account for the time-dependent and context-dependent subjectivity of judgment.*

### ***Creativity requires potential originality and effectiveness***

- Corazza, G.E. (2016). Potential originality and effectiveness: The dynamic definition of creativity. *Creativity Research Journal*, 28(3), 258–267.

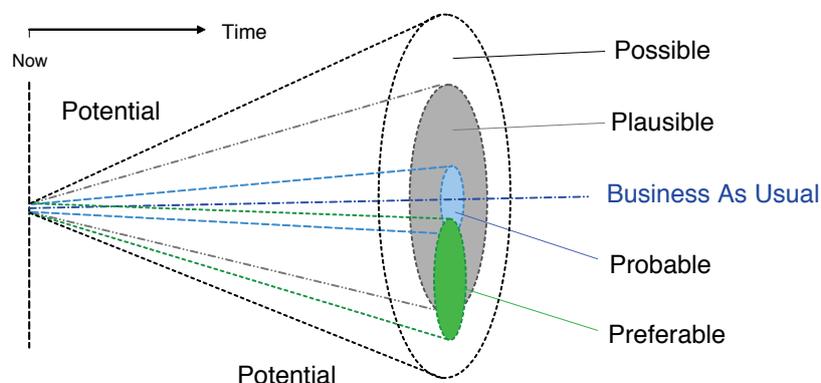
*“Consider what effects, which might conceivably have practical bearings, we conceive the object of our conception to have.*

*Then, our conception of those effects is the whole of our conception of the object.”*

– Peirce, C.S., (1992-1999). *The Essential Peirce*.



***Estimating the value of a creative idea  
is an exercise in anticipating the future(s)***



- G.E. Corazza (2017). Creativity and anticipation. In *Handbook of anticipation*, R. Poli (ed.)

– Figure from Voros (2003)

Why is it so difficult?

## Brain vs. Supercomputer



38 petaflops  
15 W



20 petaflops  
3 MW

## Energy saving: threshold lowering



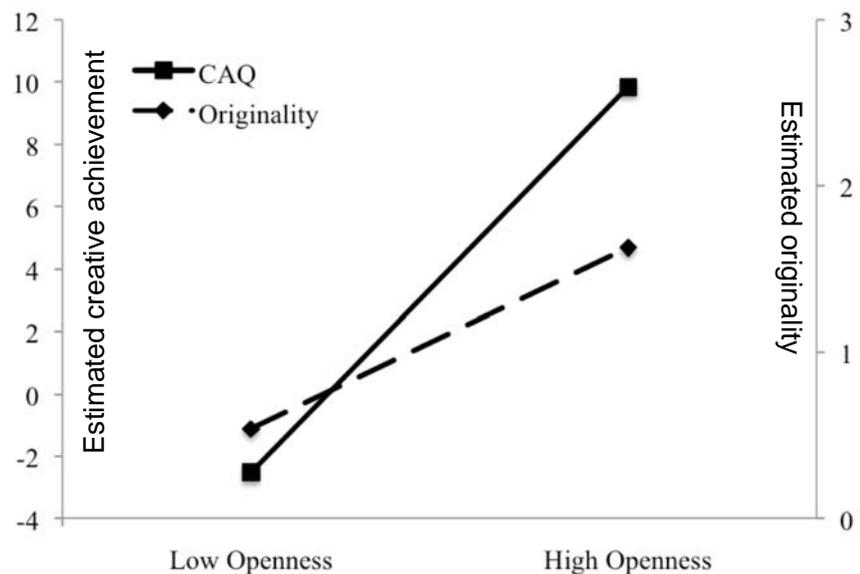
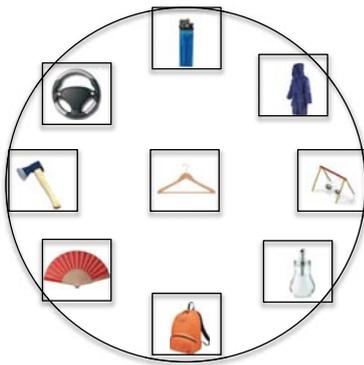
## Unexpected events



# Consequences of energy saving

- Most of the brain processes are automatic and unaware
- Reason works with models, prototypes, heuristics
- Only strictly necessary areas are activated
- This is absolutely great, but it has a few drawbacks...
  - Cultural blocks
  - Perceptual blocks
  - Emotional blocks

# Irrelevant information processing



## PROCESS AND REALITY

### AN ESSAY IN COSMOLOGY

GIFFORD LECTURES DELIVERED IN THE UNIVERSITY  
OF EDINBURGH DURING THE SESSION 1927-28

BY

ALFRED NORTH WHITEHEAD

F.R.S., Sc.D. (Cambridge), Hon. D.Sc. (Manchester),  
Hon. LL.D. (St. Andrews), Hon. D.Sc. (Wisconsin),  
Hon. Sc.D. (Harvard and Yale)



**Thank you!**

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