

# 2<sup>nd</sup> Intl. Conference on Future Education



**World Academy  
of Art & Science**

## ***Inhabiting Hypercomplexity: The Challenge of Rethinking Education***

by Prof. Piero Dominici  
email: [piero.dominici@unipg.it](mailto:piero.dominici@unipg.it)

**Complexity is not an option, it is a fact of life  
Complexity = Knowledge = Power**



# Why should we rethink education?







Let's look at this last point first:  
What do we mean by hypercomplexity?

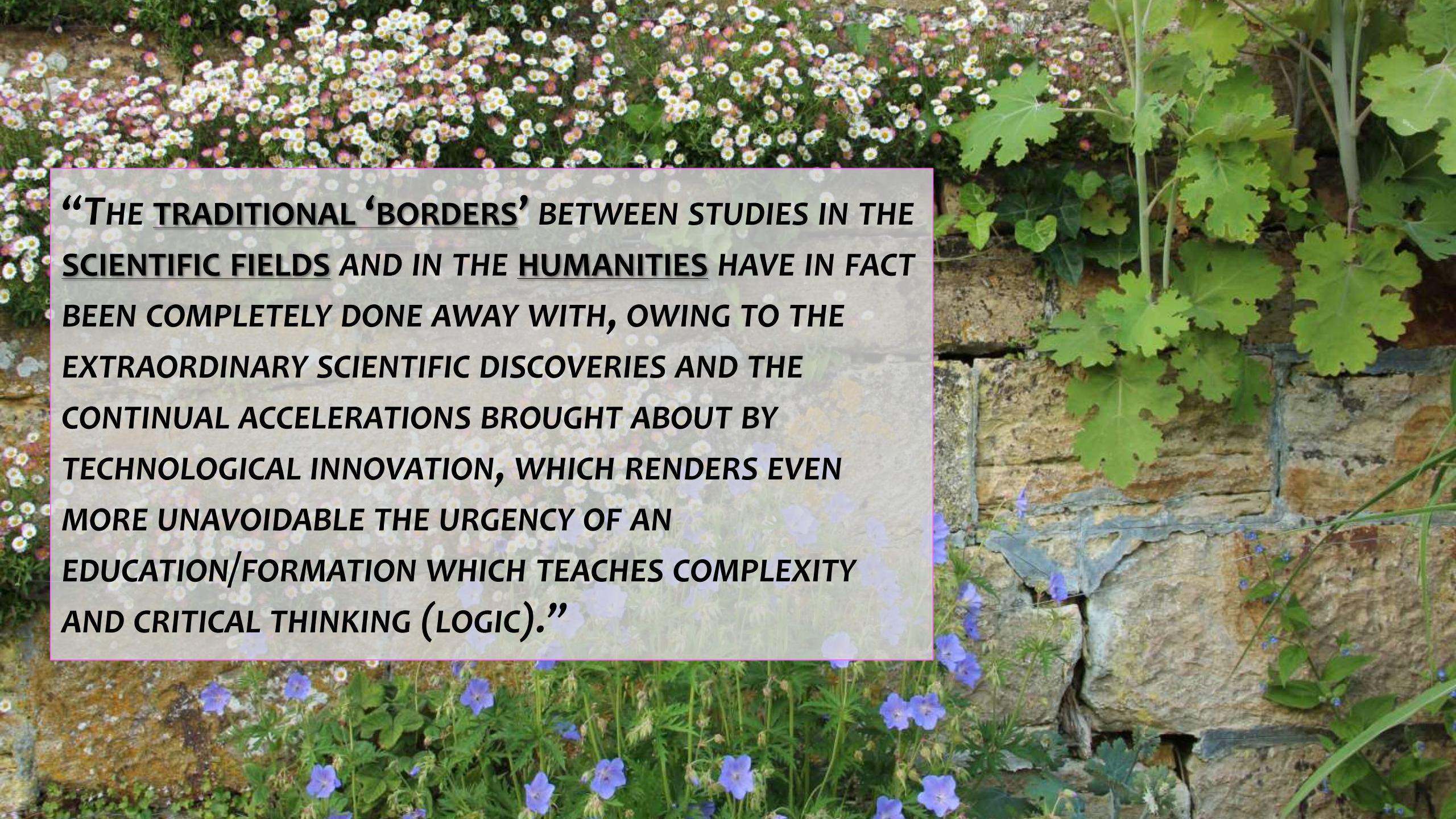


# ***THE PASSAGE FROM COMPLEXITY TO HYPERCOMPLEXITY***

- INCREASE OF VARIABLES AND CONCAUSES
- INCREASE OF THE PARAMETERS TO BE CONSIDERED
- TECHNOLOGICAL (AND DIGITAL) INNOVATION →  
*ACCELERATION OF DYNAMICS AND PROCESSES*
- COMMUNICATION →  
*PLAYING AN EVER MORE STRATEGIC ROLE*





The background image shows a lush garden scene. In the upper left, there is a dense patch of white daisies with yellow centers. To the right, a rustic stone wall is visible, with large green leaves of a plant growing over it. At the bottom, there are several blue flowers, possibly cornflowers, with green foliage. The text is overlaid on a semi-transparent grey rectangular box in the center-left of the image.

**“THE TRADITIONAL ‘BORDERS’ BETWEEN STUDIES IN THE SCIENTIFIC FIELDS AND IN THE HUMANITIES HAVE IN FACT BEEN COMPLETELY DONE AWAY WITH, OWING TO THE EXTRAORDINARY SCIENTIFIC DISCOVERIES AND THE CONTINUAL ACCELERATIONS BROUGHT ABOUT BY TECHNOLOGICAL INNOVATION, WHICH RENDERS EVEN MORE UNAVOIDABLE THE URGENCY OF AN EDUCATION/FORMATION WHICH TEACHES COMPLEXITY AND CRITICAL THINKING (LOGIC).”**



# The challenges and dilemmas of (hyper)complexity:

- **PARADIGM SHIFT** and approach to COMPLEXITY →

CULTURAL EVOLUTION  
DETERMINES BIOLOGICAL  
EVOLUTION

- **INTERDISCIPLINARITY**  
**MULTIDISCIPLINARITY**

(the urgency of a **SYSTEMIC PERSPECTIVE**)

- Person/organisms – Environment – vital spaces –

The **ECOLOGICAL PERSPECTIVE**  
(interpenetration/osmosis/  
contamination)

- **INFORMATION** (Big Data, open data etc.) and **KNOWLEDGE SOCIETY** (knowledge sharing?) →

(but) **LIMITED RATIONALITY**

- **INTERPRETATIVE RISKS** → **REDUCTIONISM** E  
**DETERMINISM** → ...and «shortcuts»



## Other risks ... (of not rethinking education)



- «**Simulation** of communication» (Dominici, 1996)
- «**SIMULATION OF PARTICIPATION**» (Dominici, 2000 and further works)
- «Citizenship without citizens»
- «Technological innovation without culture»
- **CULTURAL GAP** (irreversible)

The so-called *digital revolution*, at the moment, is an opportunity for **élites** → open architecture(s) and «closed» networks.

# FALSE DICHOTOMIES

|                       |                      |
|-----------------------|----------------------|
| NATURE ←              | → CULTURE            |
| NATURAL ←             | → ARTIFICIAL         |
| HUMAN ←               | → TECHNOLOGICAL      |
| MIND ←                | → ENVIRONMENT        |
| CULTURE ←             | → TECHNOLOGY         |
| HUMANISTIC STUDIES ←  | → SCIENTIFIC STUDIES |
| ART ←                 | → SCIENCE            |
| COMPLEXITY ←          | → SPECIALIZATION     |
| INTERDISCIPLINARITY ← | → SPECIALIZATION     |
| IMAGINATION ←         | → RATIONALITY        |
| EMOTION ←             | → RATIONALITY        |
| CREATIVITY ←          | → RATIONALITY        |
| THEORY ←              | → PRACTICE/RESEARCH  |
| KNOWLEDGE ←           | → COMPETENCES        |
| SOFT SKILLS ←         | → HARD SKILLS        |
| FORM ←                | → CONTENT/SUBSTANCE  |

*False Dichotomies:*  
Dominici P., 1998  
and further works



How can we rethink education?







## THE GREAT MISTAKE...

**THE GREAT MISTAKE:** although we acknowledge the strategic relevance of **digital skills**, these are NOT sufficient for the building of new professional profiles.

**DIGITAL TRANSFORMATION** is a complex and multidimensional function → *the risk that the “human” (social, relational) factors have once more been neglected or underestimated is very high.*



Speaking of “risks  
and opportunities”:

***When the winds  
of change blow,  
some people build  
walls and others  
build windmills.***

-- Chinese proverb





**Thank you very much for your attention. I look forward with great pleasure to further collaboration in the future.**

**Piero Dominici (PhD)**

**Dept. of Philosophy, Social and Human Sciences & Education, University of Perugia**

**[piero.dominici@unipg.it](mailto:piero.dominici@unipg.it)**

**Scientific Director – Complexity Education Project**

**Director (Scientific Listening) at GLOBAL LISTENING CENTER**

**<http://www.globallisteningcentre.org/member/piero-dominici/>**

**Member of World Complexity Science Academy**

**Member of Complexity Education Program**

**Linkedin: [https://www.linkedin.com/in/piero-dominici-](https://www.linkedin.com/in/piero-dominici-6a596545?trk=nav_responsive_tab_profile_pic)**

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**UNIPG : <http://bit.ly/1EsGvRb>**

**SGI: <http://www.statigeneralinnovazione.it/online/>**

**Pubblicità Progresso: <http://bit.ly/1EsGP2r>**

**Il Sole 24 Ore: <http://pierodominici.nova100.ilsole24ore.com/>**

**TechEconomy: <http://www.techeconomy.it/author/piero-dominici/>**