


## *Transition to a new paradigm in Education*

# *Universities and Knowledge for Sustainable Urban Futures: as if inter and trans disciplinarity mattered*

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A large crowd of people sitting on the ground in a park-like setting, with trees in the background. The image is overlaid with a semi-transparent red filter.

"This transformation of science is no less revolutionary than Galileo Galilei's. And the resistance from the incumbent knowledge holders will be no less fierce than the one that Galilei met in the Catholic Church. Yet, when looking at the global challenges of our time, we can recognize the call of our time to come up with a new synthesis among science, social change, and the evolution of self (or consciousness)."

Otto Schammer, Introduction to Leading From the Emerging Future



<http://www.intrepid-cost.eu>

### Scope

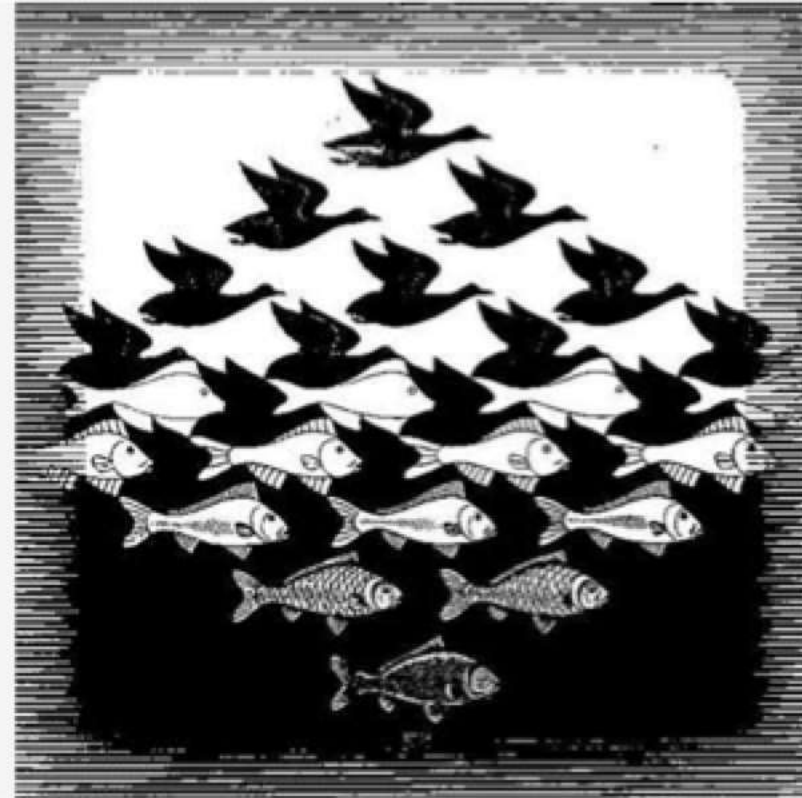
Interdisciplinary research and collaboration are recognized as a precondition to solve the problems and Grand Societal Challenges confronting societies and the planet today. However, although interdisciplinarity is increasingly central to science and research agendas, and is recognised as a precondition for sustainability, its effective implementation in research projects remains an exception to the rule,

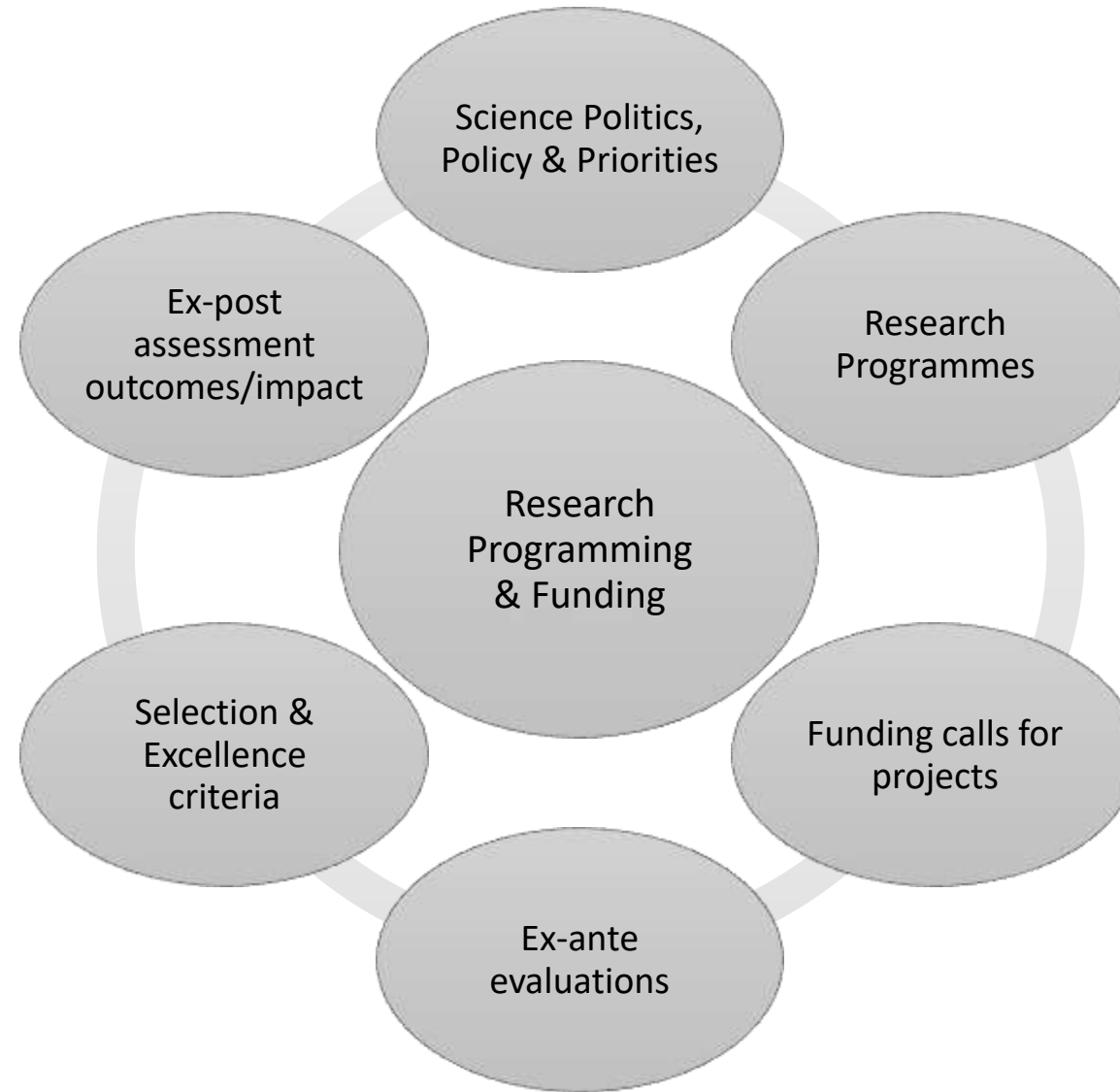
INTREPID is a 27 country network with the overall aim to better understand how to achieve more efficient and effective interdisciplinary research in Europe, in order to enhance our capacity to meet contemporary global (urban) challenges characterised by increasing complexity and uncertainty.

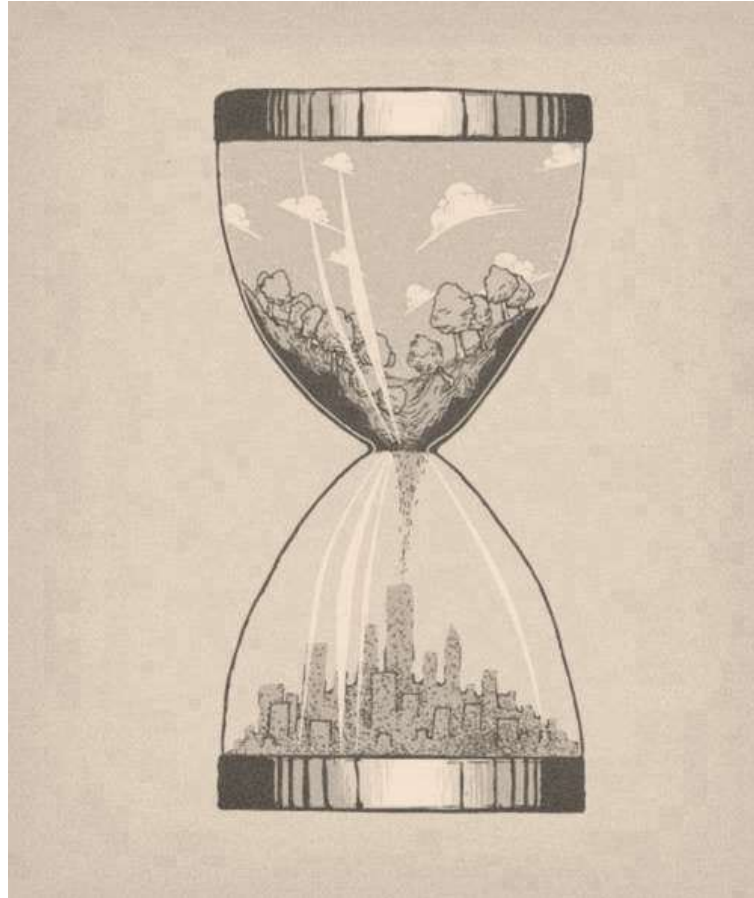




- To better understand how to achieve more efficient and effective interdisciplinary research in Europe,
- To strengthen our ability to address contemporary global challenges characterised by increasing complexity and uncertainty
- Our Focus: urban-related research

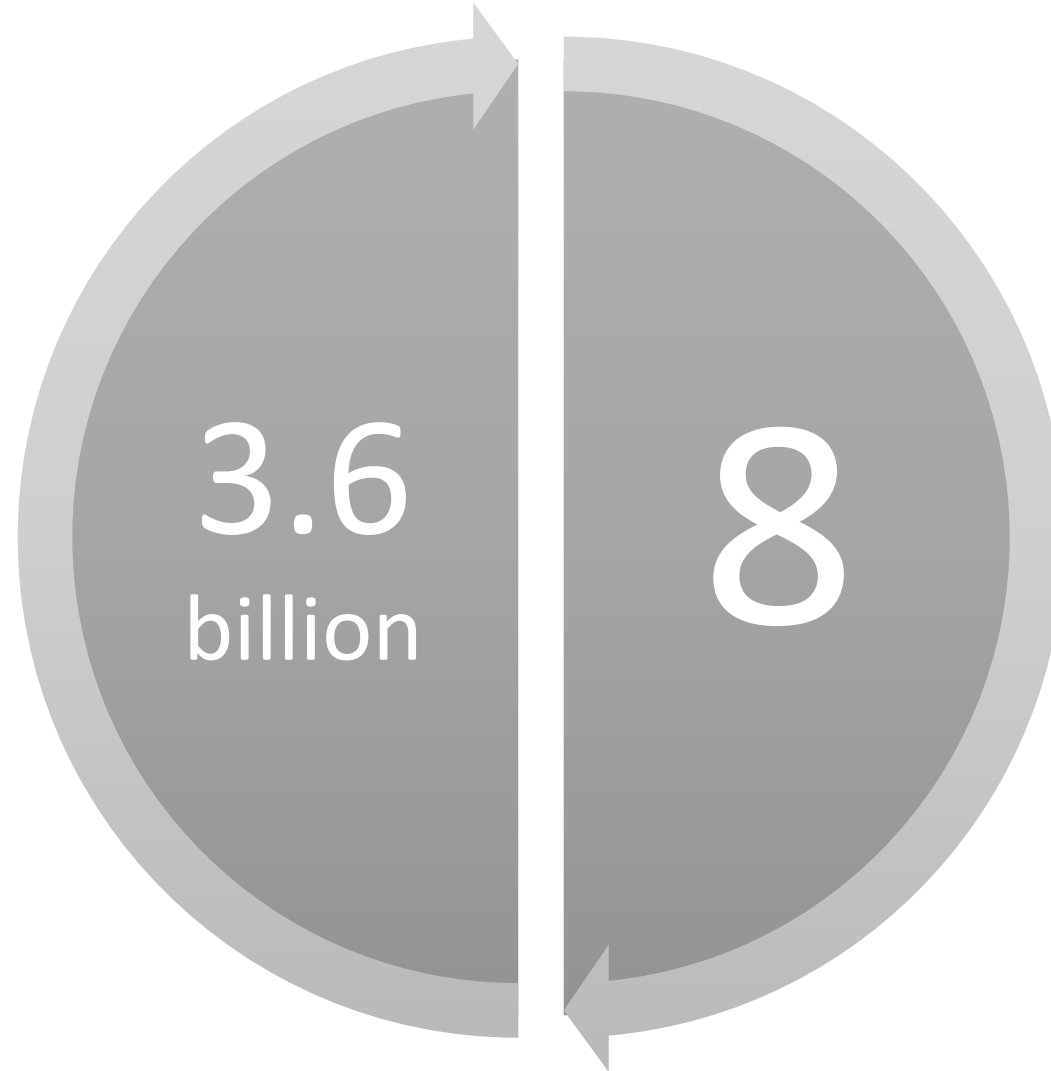




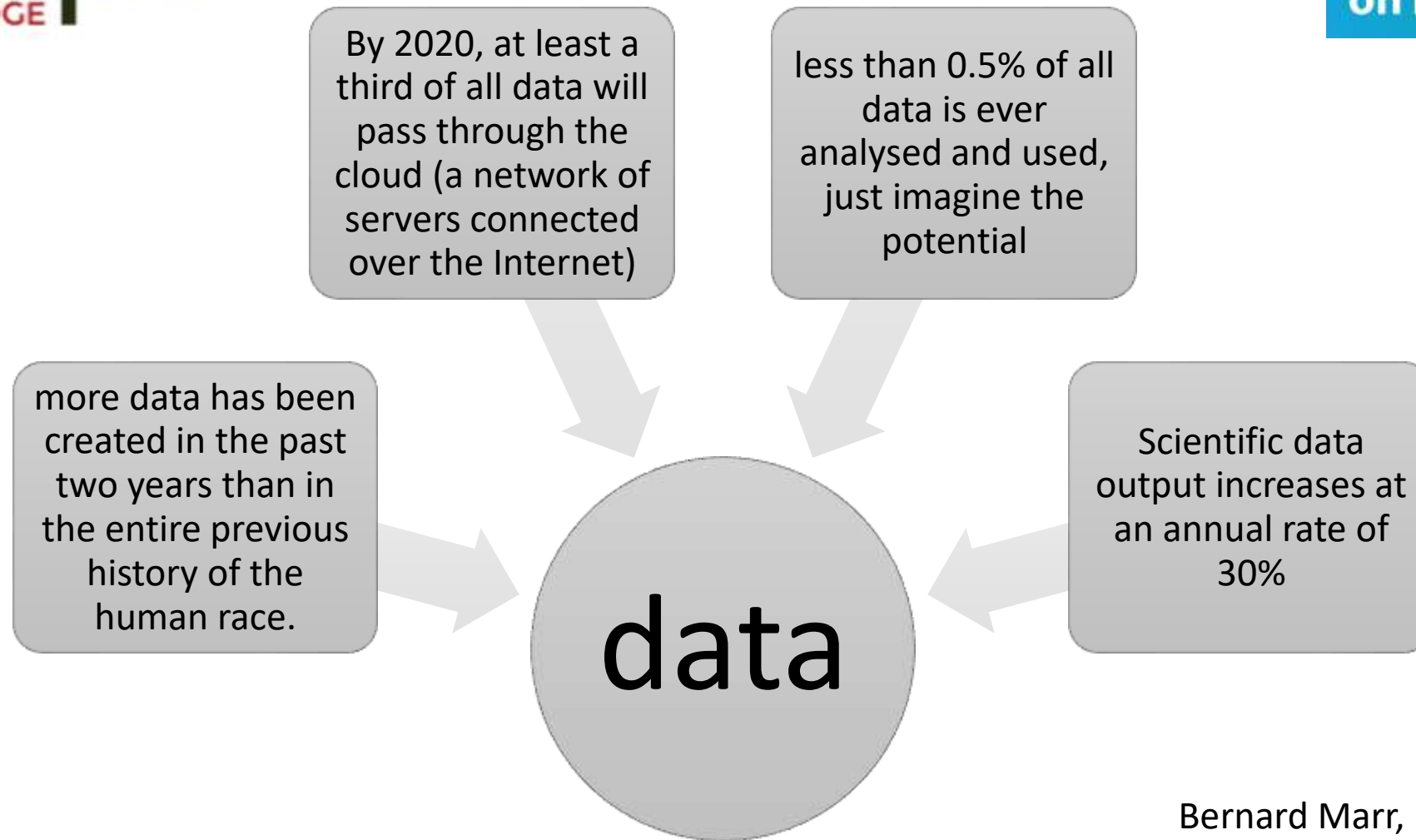


# Anthropocene Age of humans

Becoming “a force of nature”



2017 Pre-Davos report  
shows gap between  
richest and poor is greater  
than feared (Oxfam 2017)



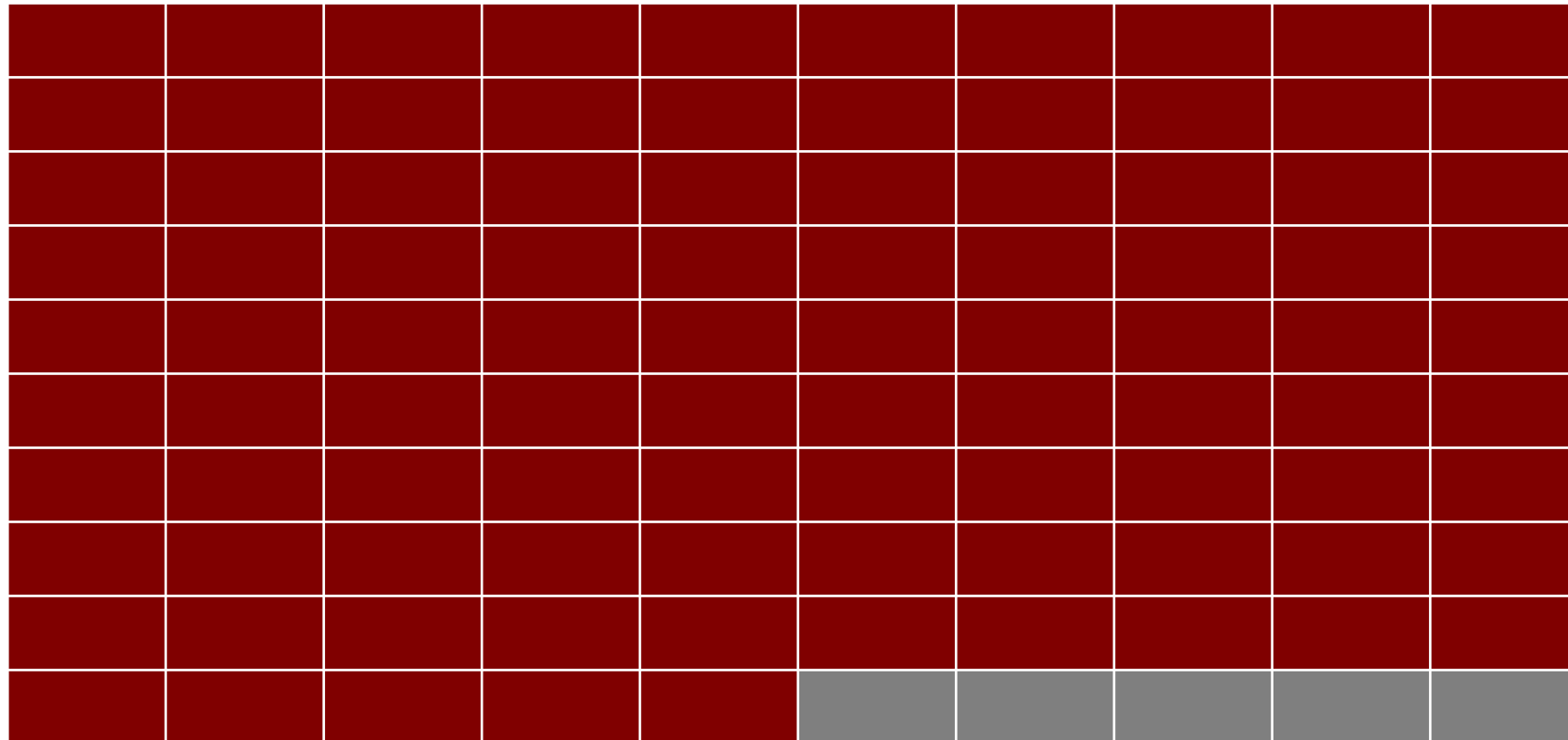
Bernard Marr, Forbes, 2015;  
EC 2014



## Impact, relevance

“Up to 1.5 million peer-reviewed articles are published annually. However, many are ignored even within scientific communities – 82% of articles published in humanities [journals] are not even cited once”

(Biswas and Kirchherr in Heleta 2016)



‘Overall, the share of budget going to SSH partners amounts to 5% of the total 2015 budget of €3.7 billion for SCs and LEITs.’<sup>10</sup>  
Birnbaum et al 2016

## Urbanisation: Its sustainability is a matter of priority



Sustainability &  
Education in this sector,  
must 'align' (UN Habitat  
2014)





Education for

Sustainable Development Goals

Learning Objectives

UNESCO (2017)

## Key Competency for Sustainability

- System thinking
- Anticipatory
- Normative
- Strategic
- Collaboration
- Critical thinking
- Self-Awareness
- Integrated problem-solving

# THE GLOBAL GOALS

For Sustainable Development



- (Goal 4) 'Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all'  
Aspiration that by 2030 'all learners acquire **the knowledge and skills** needed to promote sustainable development'
- (Goal 11) 'Make cities and human settlements inclusive, safe, resilient and sustainable'



# university, urban futures inter and trans-disciplinarity

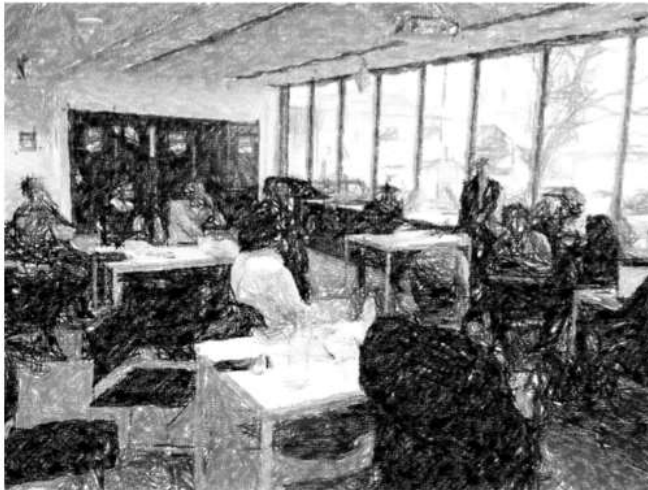
INTREPID futures initiative

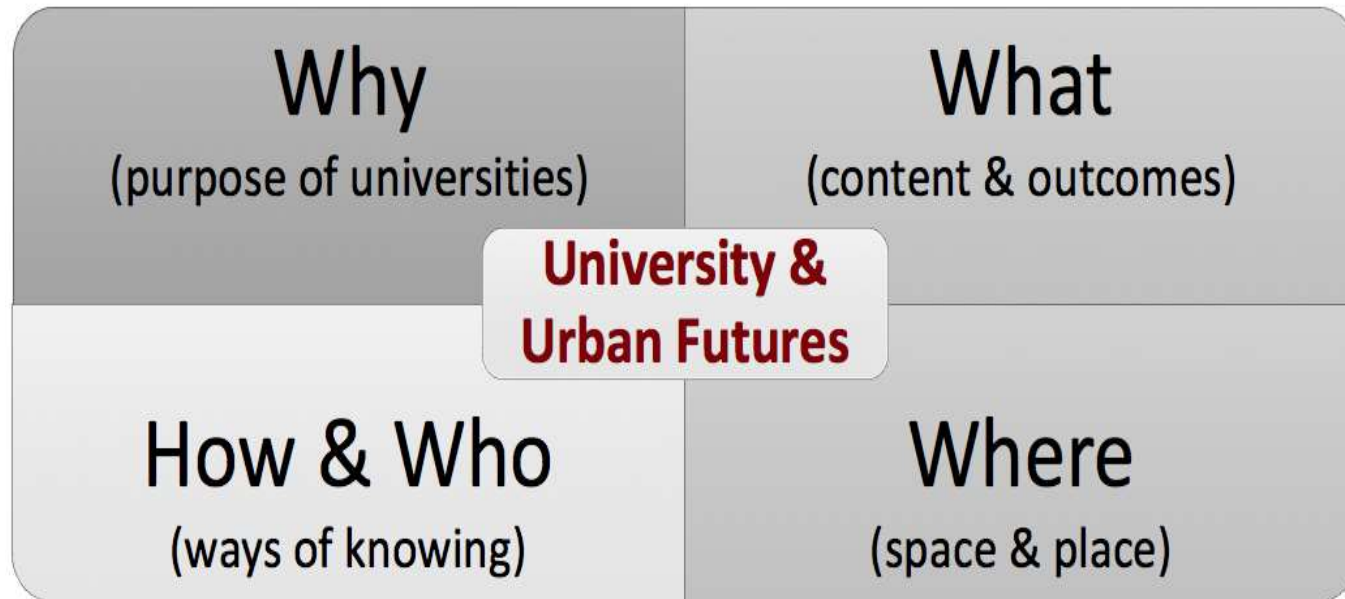
4<sup>th</sup> INTREPID Report  
**INTREPID Futures Initiative**  
Universities and Knowledge for Sustainable Urban  
Futures: as if inter and trans-disciplinarity mattered

Olivia Bina, Giulio Verdini, Andy Inch, Marta Varanda,  
Marite Guevara, and Prue Chiles

11 May 2017

<http://www.intrepid-cost.eu/london-workshop/>





**Warming Up:**

- Where is the challenge?
- Why change is needed and how it can happen?

**Topics to be discussed:**

- Characterizing the status quo
- Drivers of/for change
- Values for change
- Uncertainties, obstacles, opportunities

Sept 12-13/2011 at Sport in the  
 at University of Toronto

- fortress <sup>very</sup> <sub>highly</sub> <sub>defensive</sub> <sub>to the</sub>
- porous
- Overload <sub>of data</sub>
- Anomaly <sub>more</sub> <sub>also</sub> <sub>same</sub> <sub>as</sub> <sub>an</sub> <sub>outlier</sub>
- Nimble <sub>flexible</sub> <sub>adaptable</sub> <sub>agile</sub> <sub>responsive</sub> <sub>quick</sub> <sub>on</sub> <sub>their</sub> <sub>feet</sub>

STATUS: Bad

- Strong <sub>link</sub> <sub>to</sub> <sub>outside</sub> <sub>context</sub> <sub>in</sub> <sub>the</sub> <sub>middle</sub> <sub>of</sub> <sub>the</sub> <sub>line</sub>
- Naturally defined <sub>emphatically</sub>
- Get so comfortable <sub>to</sub> <sub>be</sub> <sub>in</sub> <sub>the</sub> <sub>middle</sub>
- Risk navigation <sub>the</sub> <sub>role</sub> <sub>in</sub> <sub>query</sub>
- Problem-solving <sub>substitution</sub>
- selective? <sub>some</sub> <sub>opening</sub>
- Multiplication <sub>where?</sub> <sub>spatial</sub> <sub>dimension</sub>

Self-motivated & internal support Drives  $\nabla \Delta$

- Society needs input of Acad/Univ
  - but is Univ capable of Reorganizing beyond education?
- Crisis - opportunity? *University in context of the*
- How do engage all outside Univ?
  - $\neq$  9 days of school
  - allow "continuation"
- Open Access - democratize? *is a common question?*
- Job market & Acceleration & AI
- Funding *sources mechanisms*  $\rightarrow$  *yes or no?*

Opportunity

ENV.  $\Delta$

ECON.  $\Delta$

Economic reality

Positive Values

Quality?

Open Access - democratize? *is a common question?*

Job market & Acceleration & AI

Crisis - opportunity? *University in context of the*

How do engage all outside Univ?  $\neq$  9 days of school

allow "continuation"

Society needs input of Acad/Univ

but is Univ capable of Reorganizing beyond education?

Self-motivated & internal support Drives  $\nabla \Delta$

values

Care  
Conviviality  
Imagination  
Undo geometry  
Porous  $\rightarrow$  independent critical space  
Responsibility  
Democratisation  $\rightarrow$  Publicness  
CRITIQUE  $\rightarrow$  accountability  $\rightarrow$  responsibility  
 $\rightarrow$  Right to research  
Right to know how to frame questions  
who sets agenda of Educ Research  
Mass Ellie Urr  $\leftarrow$  pose as critical & open from  
Hendel gives Power of Human Tool  
 $\rightarrow$  gfr "employability will not be a driver?"  
Local Embedding of Act

- Interface
- Reference
- Open access (+) Degrees
  - Flexibility
  - Certification
- Jobs + AI
- Precariat (new proletariat)
- Technology
- Service-oriented + civic Un.?
- Using/solving vs sharing
  - Probs. Framing
  - Appt. Solving

"linear is dead"

linked probs. multi-layers



## The 'OPEN' QUESTION

How open and porous the University should be?

How to envision 'The Future-of-U'?

The ethos of the 'The Future-of-U:

- Care (of Self; others; the whole; world)
- Just and Sustainable Worlds
- Conviviality
- Imagination
- Life-Long Learning

## **Two Possible Ways Forward**

- The Urban Curriculum of the Future  
(Civic University and Civic Design)
- Co-creating scenarios for the Future-of-U  
(contents and space)



## After the London Workshop (March 2017)

- **Lisbon Workshop** (July 17): *‘Transformative Knowledge for an era of Planetary Urbanization? Questioning the role of social sciences and humanities from an interdisciplinary perspective’*
- **Gagliato (Calabria, Italy) Workshop** (July 17): *‘The future of Academia and trans-disciplinary knowledge production in the urban field’*
- **INTREPID @TDNet Conference Lüneburg, Germany** (September 17): *‘Transdisciplinary Research and Education’*

## **Agenda for 2018 (Dubrovnik outcome)**

- 1) March: 2nd Action Training School in **Barcelona** (on TD, co-production and civic Universities). Topics TBC;
- 2) August: Training School in **Edinburgh** on ID/TD and Early Career Researchers;
- 3) September: Training School in **Göteborg** for Practitioners on ID/TD Facilitators;
- 4) September: Training School-Studio Event in **Newcastle** on Space and Place;
- 5) September: Training School in **Lisbon**- Enabling organizational change and human development in the context of ESD/SDGs
- 6) October: Workshop in **Berlin** – Re-imagine Urban Curricula





## 2<sup>nd</sup> Action Workshop (Barcelona)

On **interdisciplinarity** and **co-creation of knowledge** as defining quality of the **Future University**. Keywords: Transformative knowledge, interdisciplinarity and co-creation, science and art experience, embodied knowledge, creative knowledge, Sustainable Development Goals-SDGs, futures, porous university, civic university.

4 days training + 1 day workshop. Open call soon to be opened.

## Summary

From ID/TD, particularly in urban-related research to the Future-of-U, reimagining an Urban Curriculum for the Future (as if ID/TD mattered).

Some Key challenges:

- Breaking the silos of knowledge (and their associated power structures);
- Universities open to the outside world, avoiding the trap of a narrow service-learning (or narrow interpretation of employability) but enabling real co-creation processes with the society;

## Final Conference in March 2019 on **'INTREPID KNOWLEDGE'** in PARIS

... thanks!

For further info:

<http://www.intrepid-cost.eu>