



Expert Group Meeting on Exponential Technological Change, Automation, and their Policy Implications for Sustainable Development

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- Life always present new challenges, but also choices and opportunities.
- How to match the speed, scale and uncertainty of exponential change, automation and their policy implications while guaranteeing an inclusive, prosperous and exciting life to everybody?
- How to do so in a social, economic and ecological sustainable way?

IT IS MORE ABOUT

QUESTIONS

It will affect -directly or indirectly- every single aspect of life.



IMPACT

POTENTIAL

OPPORTUNITY

- Low skill jobs - inequality gap - social discontent
- Trans-humanism
- The future of violence (wrong hands)
- Sustainability
- Our last invention?
(James Barrat)
- Etc.

CHALLENGES AND

UNCERTAINT

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- Jobs will be lost, maybe that is good.

(Boring, dangerous, unhealthy, etc.)

- More services, more prosperity.

There will be always people to supervise, advice, help, take care, help them work together.

- Leap frog.

Easier said than done. Embrace the new and discard the negative old.

- New opportunities

E.G. Aging population will create millions of jobs.

CAUTIOUS

OPTIMISM

What we know is:

“Winter is coming...”

WE NEED

ADAPTATION

(A C A I N I)

How can we transform traditional educational systems into inclusive life-long-knowledge based training programs to prepare all people for extreme adaptability in order to thrive into uncertain future scenarios?

EXPONENTIALLY TRANSFORM

EDUCATION

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The same way we better machines,
we need to educate ourselves in doing
things we can be better than machines (for a while).

FIND WAYS TO

EDUCATE

OURSELVES

- Basic personality / attitude skills
- Basic knowledge and skills
- Basic life skills (values)

1. BASIC EDUCATION

FUNDAMENT

ALSO

- Educate for learning: learn how to learn
- Educate for adaptation: prepare to always learn (any age)
- Educate for creativity: confidence to think
- Educate for citizenship: learn to live together

2. EDUCATING FOR

THE FUTURE

- Connect business and society to education
- Train and retrain
- Expand career options
- Access to everyone (Open Source)
- Labour of the mind

3. TECHNICAL & VOCATIONAL

TRAINING

- Collaboration
- Research
- Innovation
- Entrepreneurship
- Job creation (for humans and machines)

4. HIGHER

EDUCATION

IN THE FUTURE, CREATIVITY WILL BE VERY
IMPORTANT
FIRST THING THAT COMES INTO MIND WHEN YOU THINK ABOUT
CREATIVITY?

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HUMANITIE
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“The results strongly support the intuition that creative occupations are more future-proof to technologies like machine learning and mobile robotics.”

See more at:

- <http://www.nesta.org.uk/publications/creativity-vs-robots#sthash.ru6kpDj7.dpuf>

ROBOTS VS
CREATIVITY

“The research finds that most creative occupations have higher than average levels of life satisfaction, worthwhileness and happiness than employment in general, although most creative occupations also have higher average levels of anxiety.

See more at:

<http://www.nesta.org.uk/publications/creative-occupations-and-subjective-wellbeing#sthash.Z5Hj5AIW.dpuf>

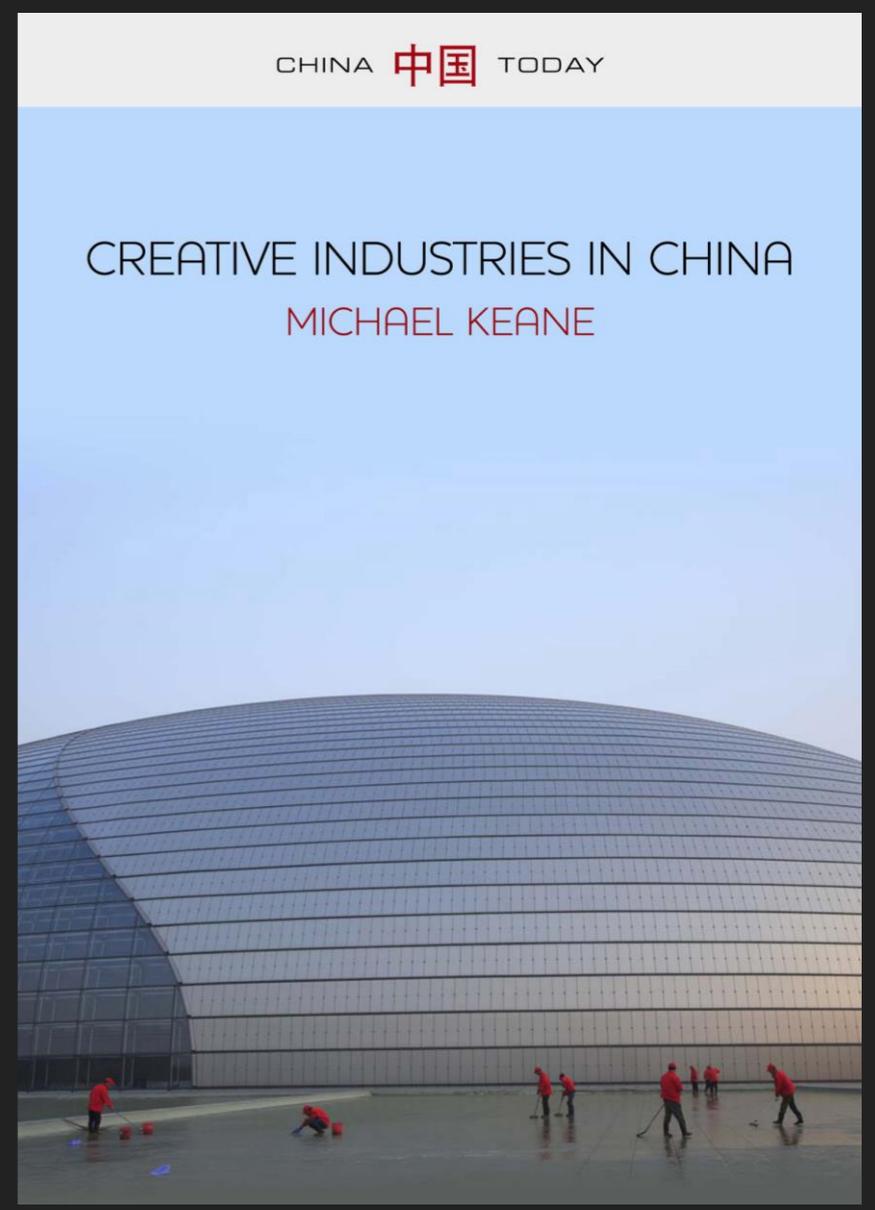
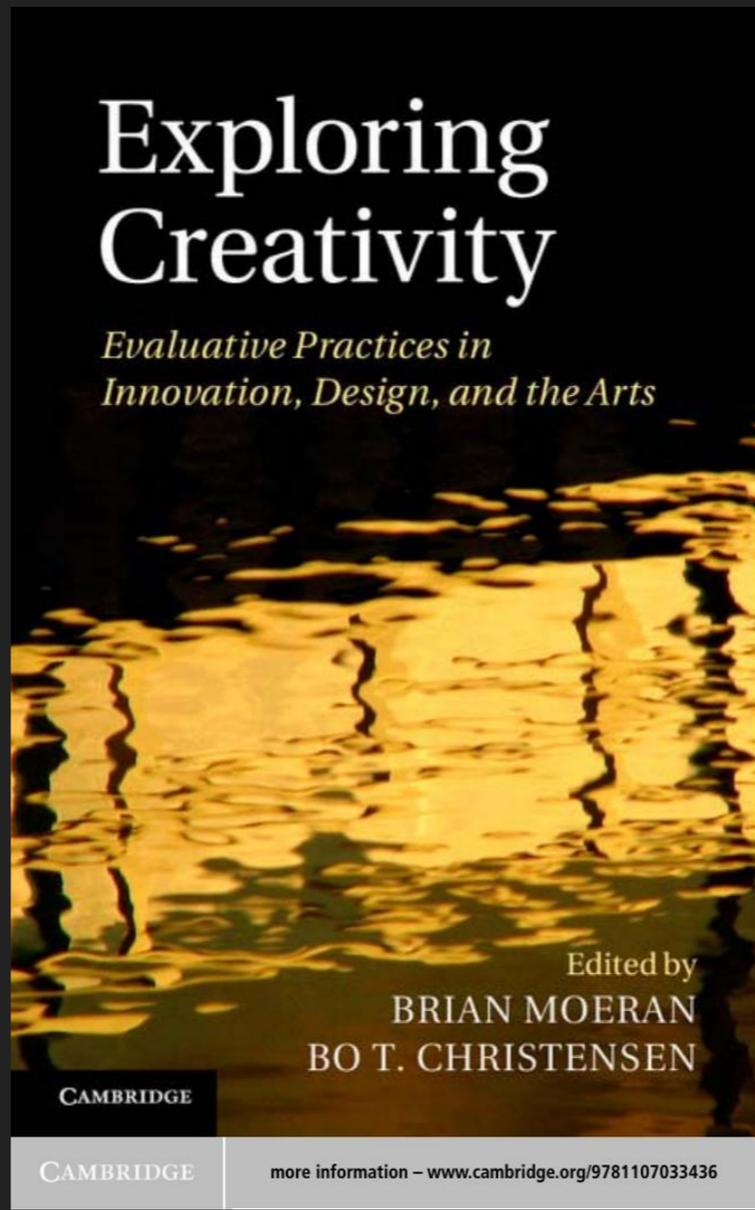
ROBOTS VS
CREATIVITY



Piotr Golonka
CERN

TECHNOLOGICAL & SCIENTIFIC
CREATIVITY

ART / SCIENCE /
TECHNOLOGY



INNOVATION AND THE

CREATIVE

INDUSTRIES

How can we collaborate in a truly transdisciplinary global manner to create stronger systems that understand sustainability as a collective goal?

GLOBAL TRANSDISCIPLINARY

COLLABORATION



Connect knowledge with purpose.



PUBLIC

ENTREPREN
EUROS

How can we promote inclusive-participatory citizenship and community building to learn how to live together in diverse societies aiming for round, peaceful and meaningful lives for everybody?

ENABLE LOCAL & GLOBAL

CITIZEN(SHIP



INCLUSIVE CO-CREATION OF

SUSTAINABLE
SYSTEMS

Thanks!

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