



# On-line SEMINARS

## Management sciences and the Anthropocene: A new path for innovation studies?

Registration Link



Seminars, will be held on-line via  
Zoom Platform.

**Registration is required.**

**Cédric Gossart**

Institut Mines-Télécom Business School, France

**June 11, 2021 - 12:00-13:00**



Institut Mines-Télécom  
Business School

# Management sciences and the Anthropocene: A new path for innovation studies?

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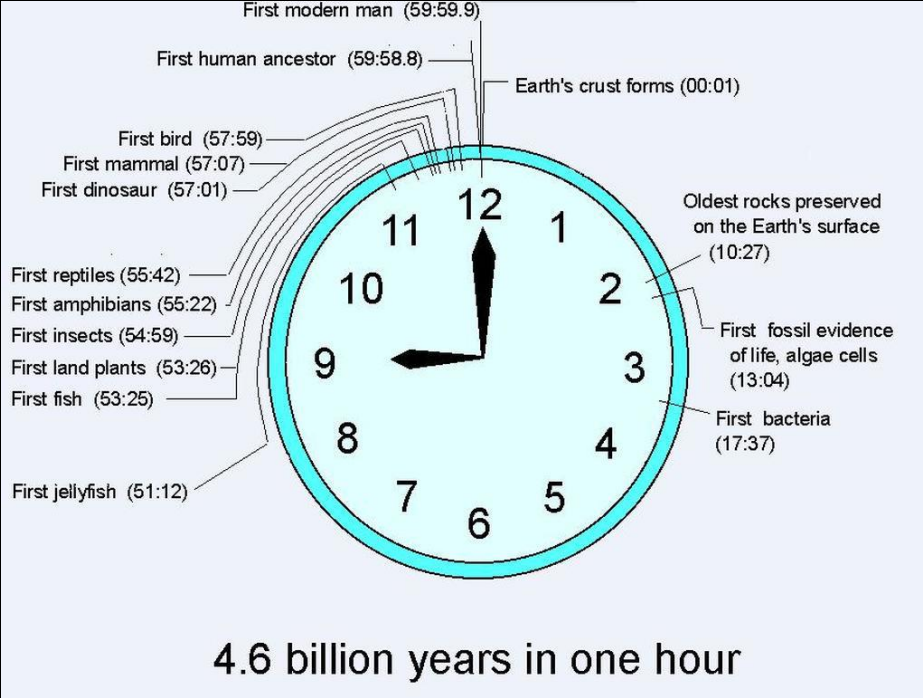
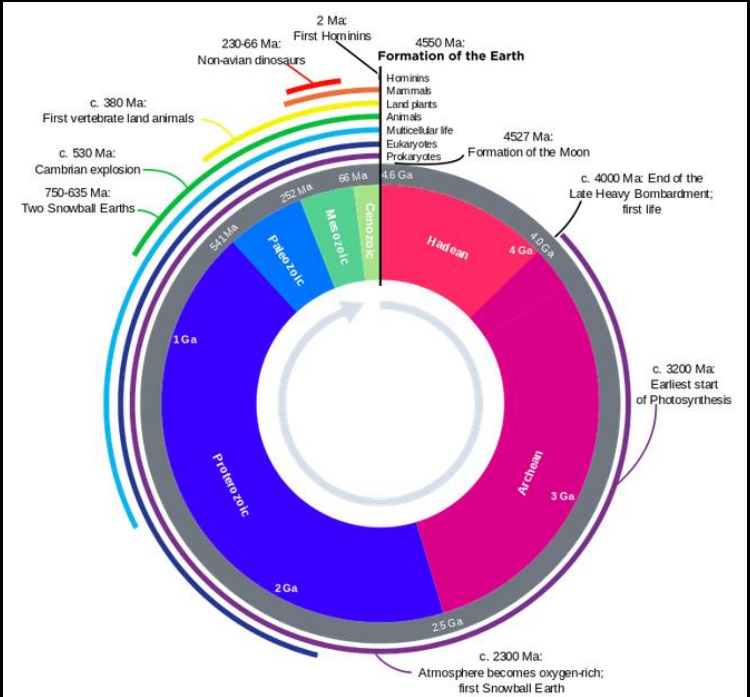


uniting skills<sup>™</sup>

- 1. A word on the context**
- 2. MS & grand challenges**
- 3. Academic practices & the Anthropocene**



# 1. A word on the context



[https://en.wikipedia.org/wiki/History\\_of\\_Earth](https://en.wikipedia.org/wiki/History_of_Earth)

[http://jan.ucc.nau.edu/lrm22/lessons/timeline/24\\_hours.html](http://jan.ucc.nau.edu/lrm22/lessons/timeline/24_hours.html)

# SAPIENS: A LONG HISTORY OF HUNTERS-GATHERERS



Homo sapiens

**-300 000**



<https://en.wikipedia.org/wiki/Hunter-gatherer>

**-10 000** (5 M people)



[https://fr.wikipedia.org/wiki/Histoire\\_de\\_l'agriculture](https://fr.wikipedia.org/wiki/Histoire_de_l'agriculture)

**1784**

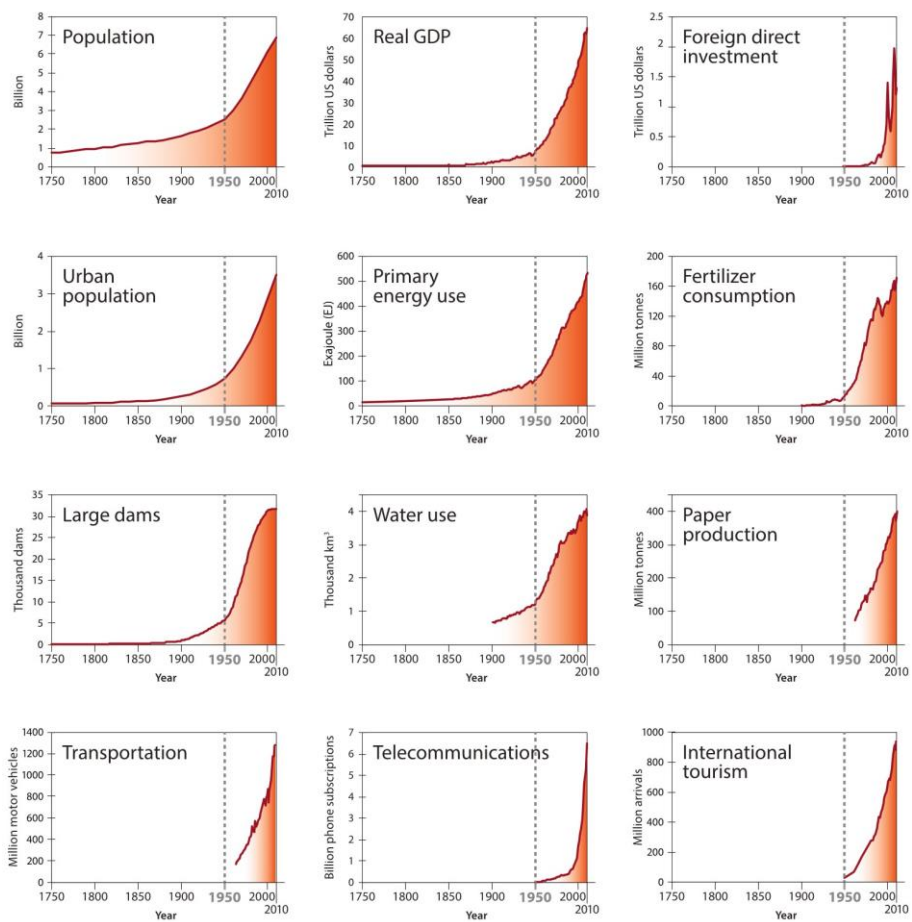


[https://en.wikipedia.org/wiki/Watt\\_steam\\_engine](https://en.wikipedia.org/wiki/Watt_steam_engine)



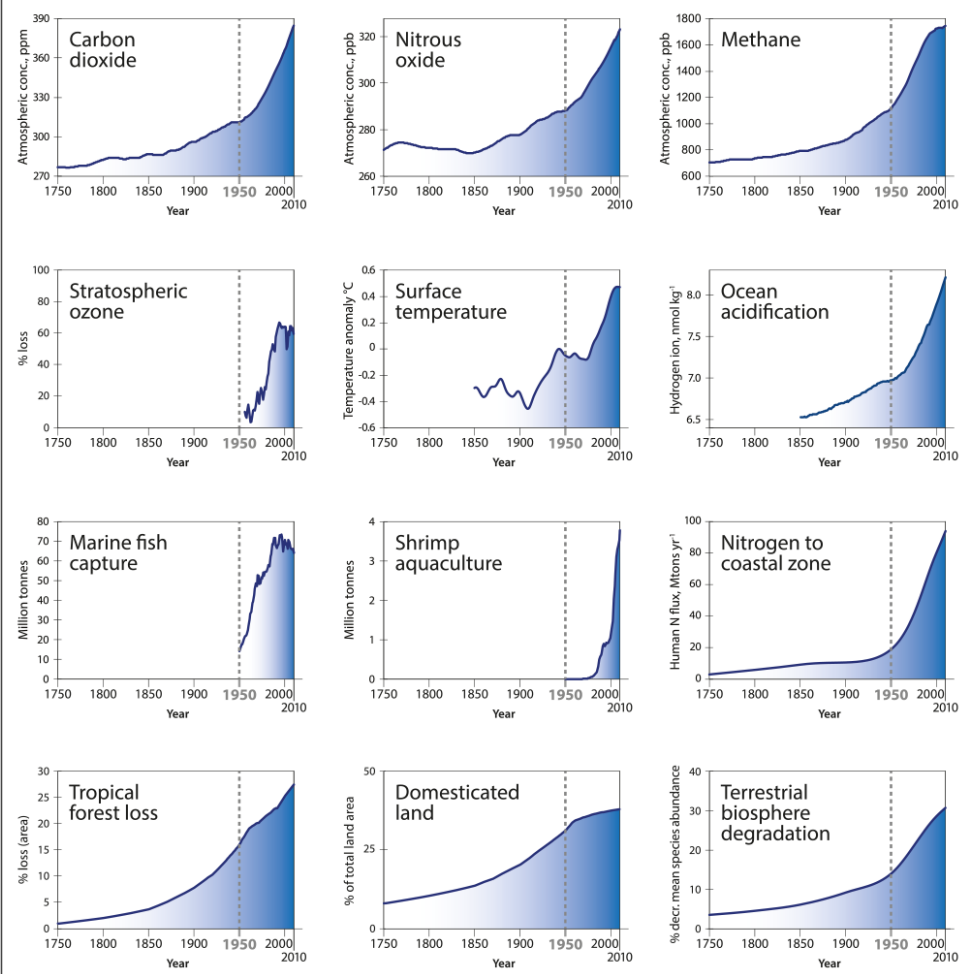
[https://en.wikipedia.org/wiki/Industrial\\_Revolution](https://en.wikipedia.org/wiki/Industrial_Revolution)

# Socio-economic trends

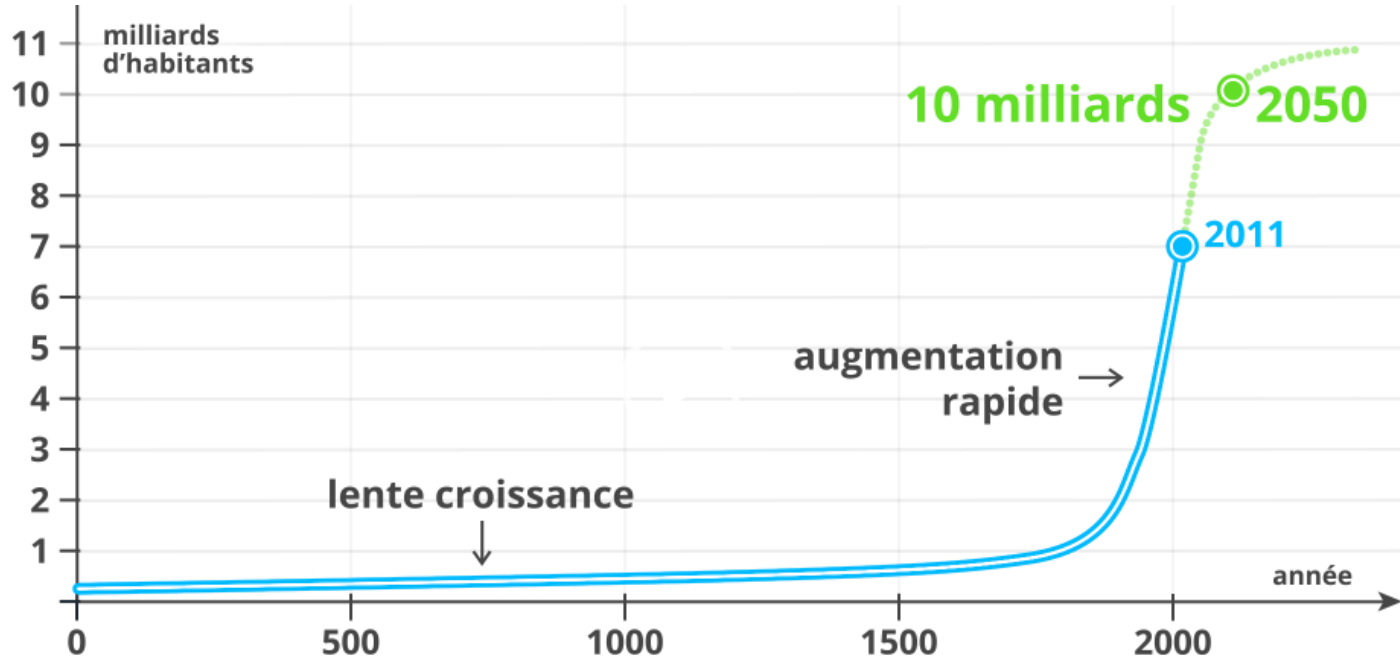


# Earth system trends

Steffen W. et al. (2015). « Planetary boundaries: Guiding human development on a changing planet », *Science* 347(736): 1259855.



# DRAMATIC CHANGES: DEMOGRAPHY

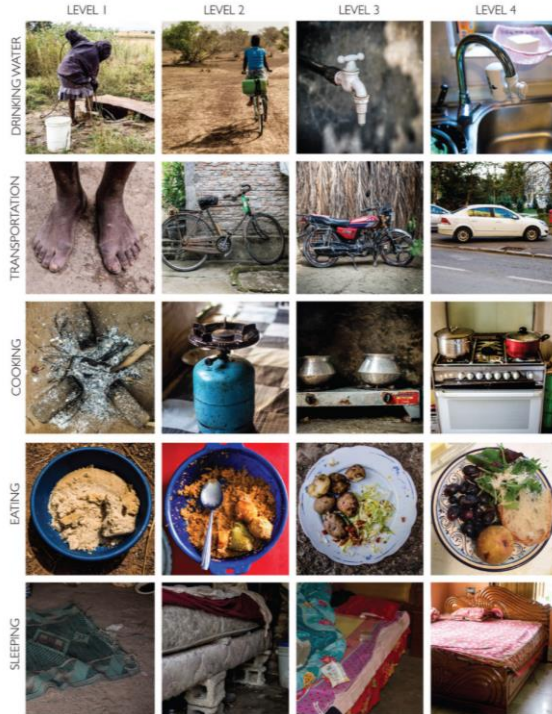


<https://www.ined.fr/fr/tout-savoir-population/jeux/la-population-mondiale/>

# DRAMATIC CHANGES: LIFESTYLES

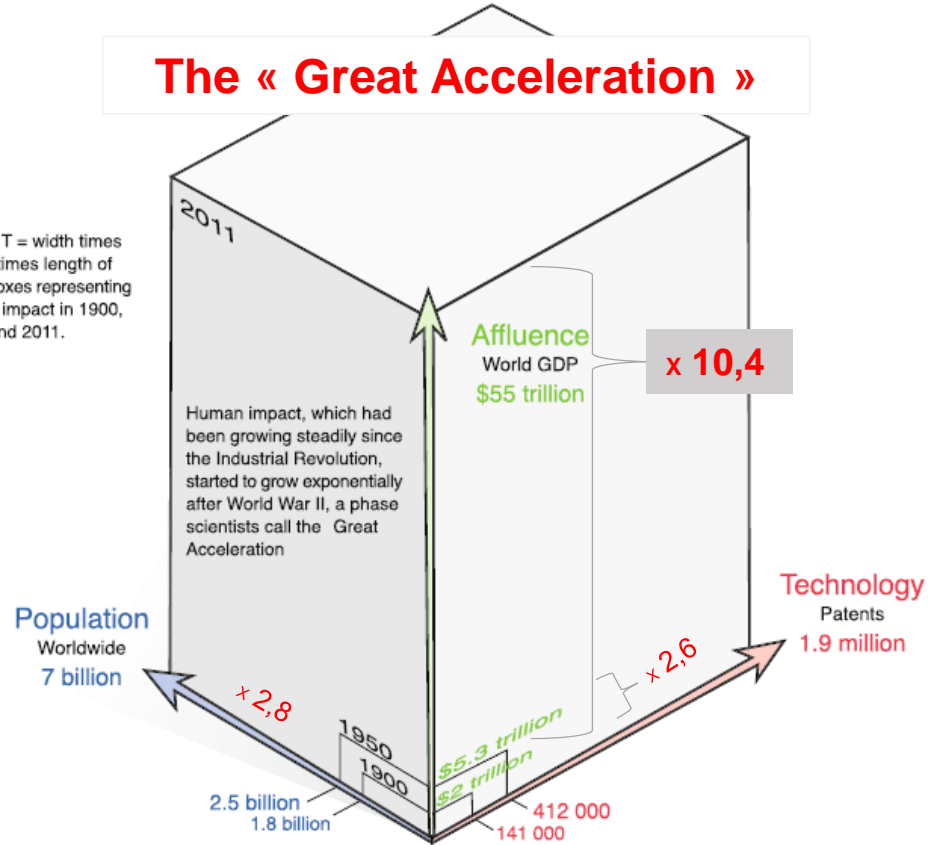


LIFE ON THE FOUR INCOME LEVELS

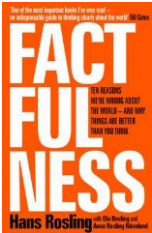


## The « Great Acceleration »

P x A x T = width times height times length of three boxes representing human impact in 1900, 1950 and 2011.



Source : Steffen W. et al. (2011). The anthropocene: from global change to planetary stewardship. *Ambio* 40(7): 739-761.

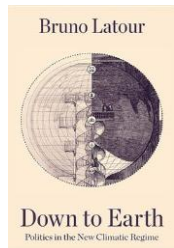
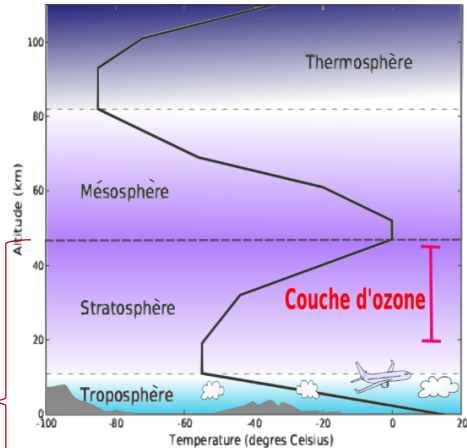
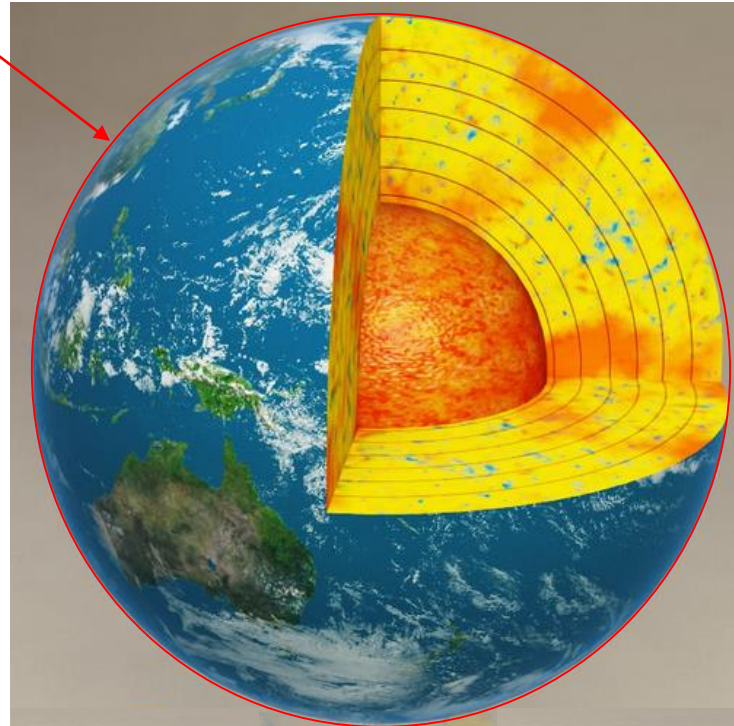




# THE CRITICAL ZONE OF EARTH...



Where we find the **biosphere** [-11000 m. → +6000 m.]  
(Vernadsky, 1929)



<http://www.bruno-latour.fr/node/754>

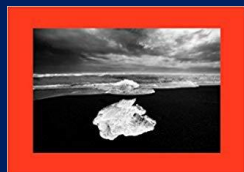
# A new epoch: the Anthropocene

The Anthropocene is the geological epoch when humans have pushed the planet out of its ecological limits.



Paul Crutzen (1933-2021).

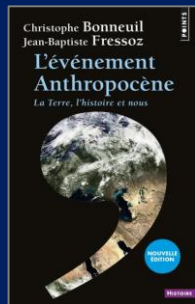
Paul Crutzen (Nobel 1995)



**THE SHOCK OF THE ANTHROPOCENE**

CHRISTOPHE BONNEUIL AND JEAN-BAPTISTE FRESSOZ

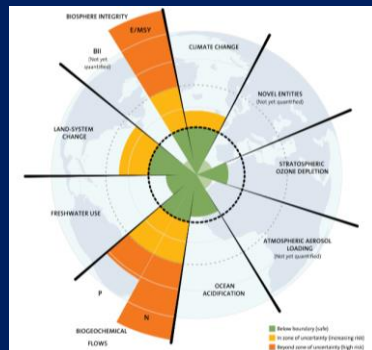
"Où, brillamment abordé, l'histoire de l'Anthropocène - nature"



<http://www.anthropocene.org>



<http://www.metropolefilms.com/index.php/filmlink?id=30638a26-6f1d-e811-9449-0ad9f5e11797>



Planetary boundaries



## 2. MS & grand challenges



Do management  
scientists take the  
Anthropocene  
seriously?

# MANAGEMENT SCIENCES & THE ANTHROPOCENE: GRAND CHALLENGES

**Corporate Social Responsibility**  
=  
**Business as usual**

“In relation to climate change for instance, some **corporations uphold an illusion of compromise** between the environment and the market by adapting the meaning of concepts such as ‘CSR’ and ‘sustainability’ to fit existing corporate agendas and expand the capitalist imaginary.”

## Future imaginings: organizing in response to climate change

**Christopher Wright**

The University of Sydney Business School, Australia

**Daniel Nyberg**

Nottingham University Business School, UK

**Christian De Cock**

Essex Business School, University of Essex, UK

**Gail Whiteman**

Rotterdam School of Management, Erasmus University, Netherlands

Organization  
20(5) 647–658  
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sagepub.co.uk/journalsPermissions.nav  
DOI: 10.1177/1350508413489821  
org.sagepub.com  


# CSR = BUSINESS AS USUAL

© *Academy of Management Journal*  
2017, Vol. 60, No. 5, 1633–1661.  
<https://doi.org/10.5465/amj.2015.0718>

## AN INCONVENIENT TRUTH: HOW ORGANIZATIONS TRANSLATE CLIMATE CHANGE INTO BUSINESS AS USUAL

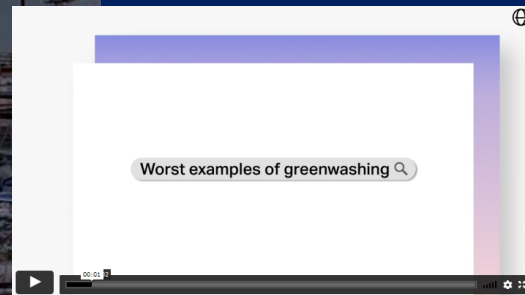
CHRISTOPHER WRIGHT  
University of Sydney

DANIEL NYBERG  
University of Newcastle

- “corporate actions often regress to a **business-as-usual** approach”.
- “corporations are particularly ill-suited to address climate change, since their **short-term objectives** and **reliance on growth** and political interventions inflate the superwickedness of the issue”.
- “**business leadership** on climate change alone is insufficient”.

# CSR = Greenwashing?

## The Greenwashing Files



<https://www.clientearth.org/>

**Uncover the whole truth.**

It's never been more urgent for companies everywhere to be more sustainable.

Yet the 'green' advertising of those companies most responsible for climate change and environmental damage is misleading the public about their sustainability.

Learn more about greenwashing:  
<https://en.wikipedia.org/wiki/Greenwashing>

CSR STUDIES

DISCONNECTED FROM

EARTH SYSTEMS

JOURNAL OF  
**MANAGEMENT STUDIES**

*Journal of Management Studies* 50:2 March 2013

doi: 10.1111/j.1467-6486.2012.01073.x

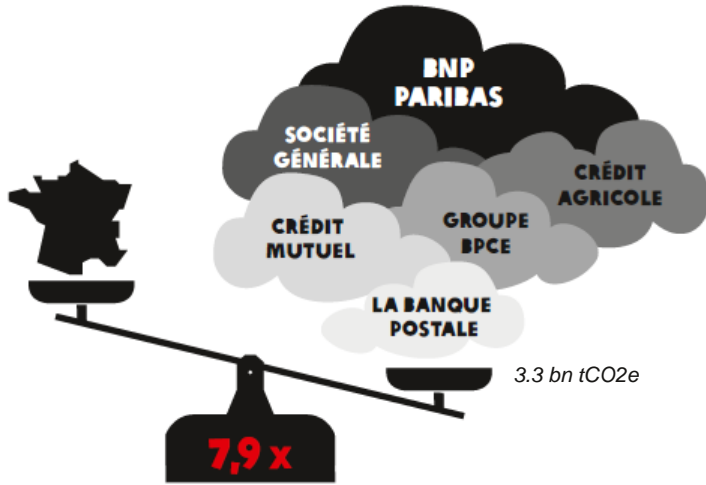
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**Planetary Boundaries: Ecological Foundations for  
Corporate Sustainability**

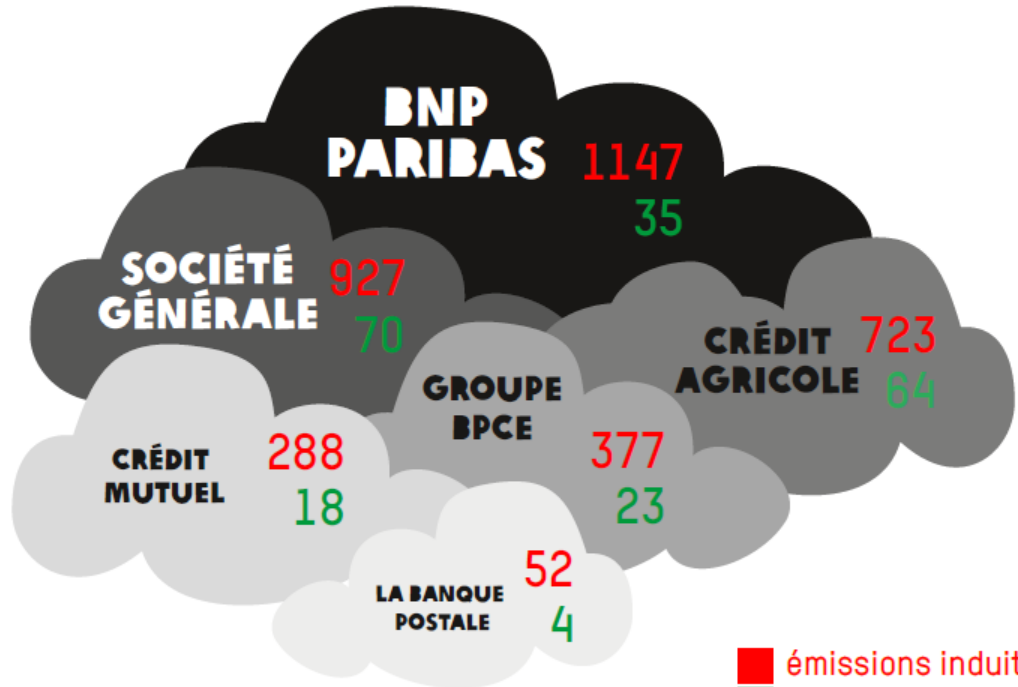
**Gail Whiteman, Brian Walker and Paolo Perego**

Due to the centrality of corporations within modern economies and societies, multinationals have long been conceptualized as important sources of environmental degradation (Hart, 1995). Yet studies on corporate sustainability continue to remain disconnected from the declining state of Earth systems. In this paper, we argue that the scientific framework of Planetary Boundaries provides us with a rich and detailed foundation for management studies on corporate sustainability.

# THE FINANCIAL SECTOR & CSR



## ÉMISSIONS DE GAZ À EFFET DE SERRE ANNUELLES EN MILLIONS DE TONNES ÉQUIVALENT CO<sub>2</sub>



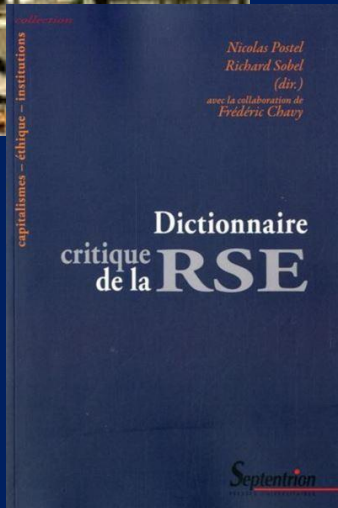
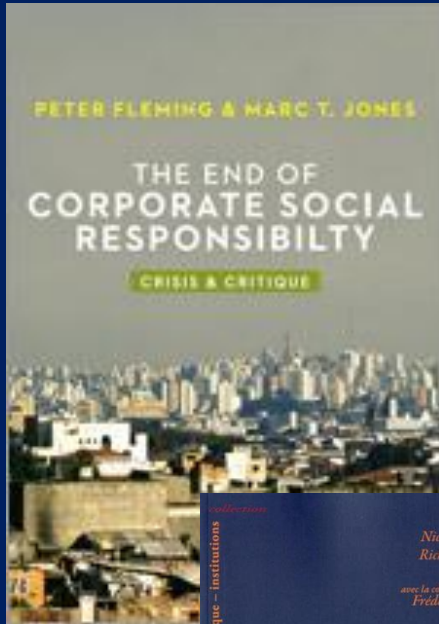
■ émissions induites  
■ émissions économisées

**BANQUES:**  
DES ENGAGEMENTS  
**CLIMAT**  
À PRENDRE AU  
**4<sup>e</sup> DEGRÉ**

<https://www.oxfamfrance.org/rapports/banques-des-engagements-climat-a-prendre-au-4eme-degre/>



# Is CSR dead?



## It's the End of CSR as We Know It, and I Feel Fine

Words by Emily Kane Miller



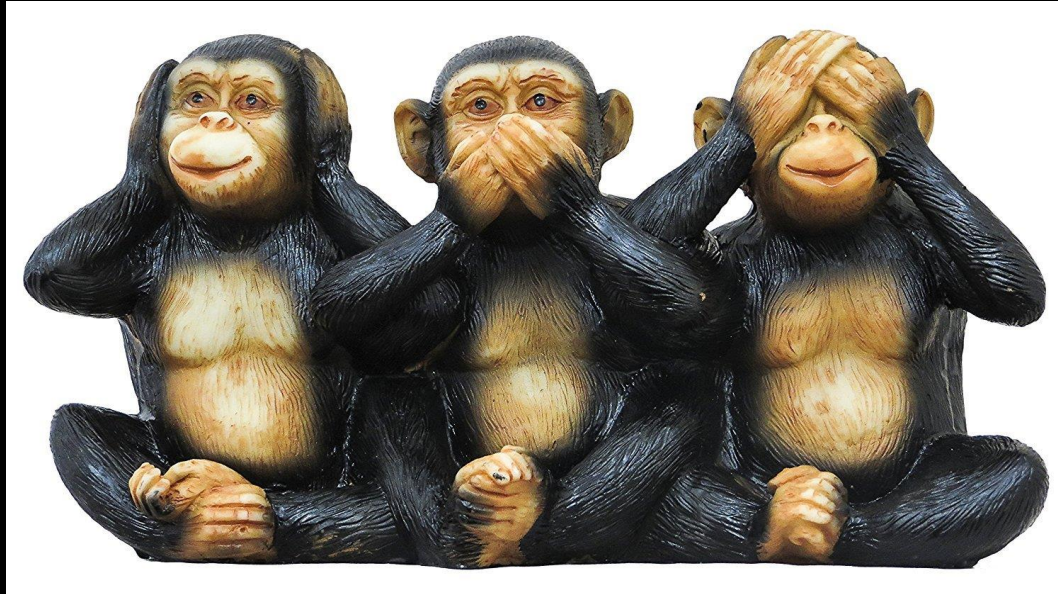
JAN 20, 2020



<https://www.triplepundit.com/story/2020/its-end-csr-we-know-it-and-i-feel-fine/86246/>

“companies should put social responsibility above profit. (...) this statement is only as valuable as the time, focus and (...) money corporate leaders commit to making it true”

### 3. Academic practices & the Anthropocene



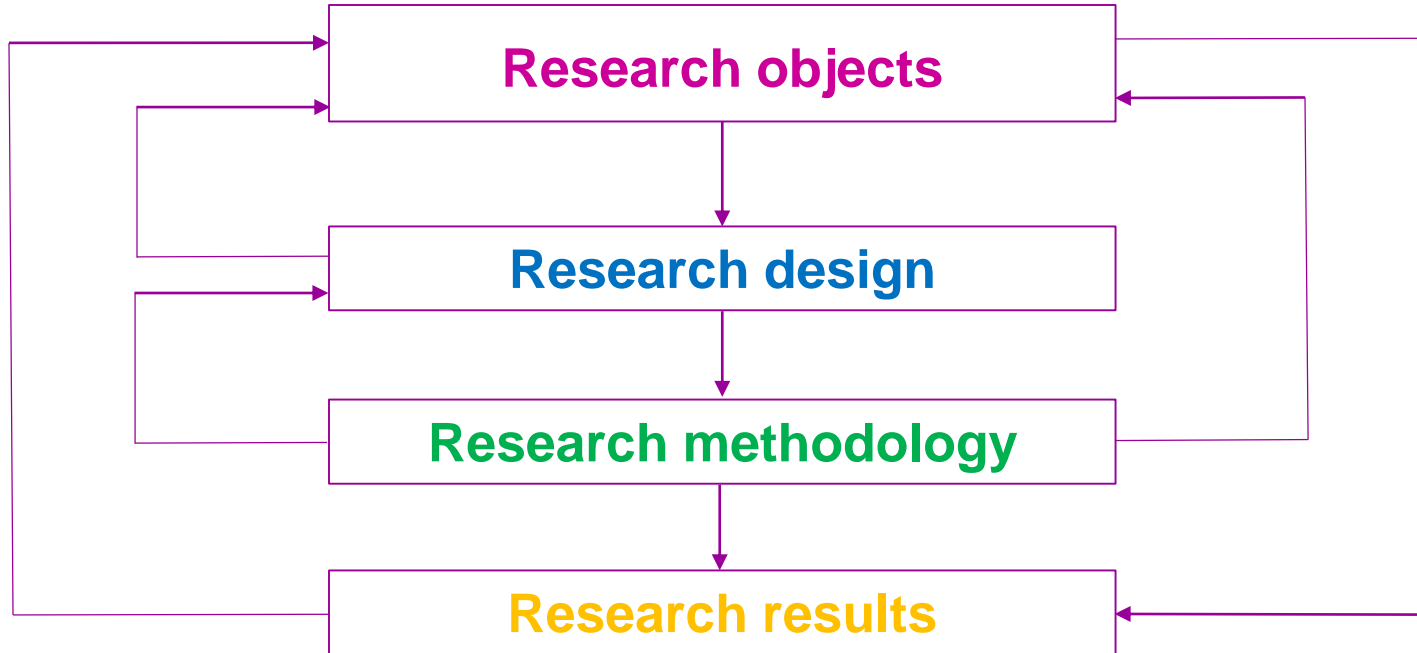
# Do management scientists take the Anthropocene seriously?



- Focus on new research **objects** (grand challenges, planetary boundaries...)
- Deconstruct dominant **concepts** (innovation, entrepreneurship ...)
- Broaden the scope of **stakeholders** in our research (marginal ones, non humans...)

<https://www.youtube.com/watch?v=wcBI9s7KhA8>

# THE RESEARCH PROCESS



**Research objects**

Research design

Research methodology

Research results

# RESEARCH OBJECTS: @GCs!

© *Academy of Management Journal*  
2016, Vol. 59, No. 6, 1880–1895.  
<http://dx.doi.org/10.5465/amj.2016.4007>

## A Framework for Addressing Grand Challenges

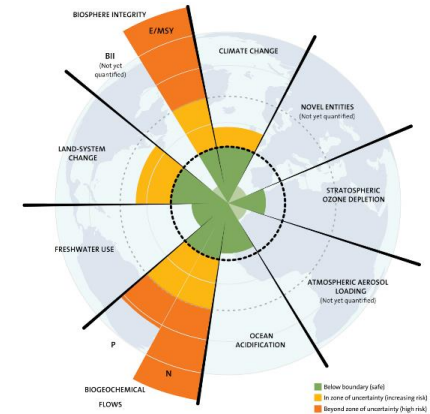
### UNDERSTANDING AND TACKLING SOCIETAL GRAND CHALLENGES THROUGH MANAGEMENT RESEARCH

GERARD GEORGE  
Singapore Management University

JENNIFER HOWARD-GRENVILLE  
University of Cambridge

APARNA JOSHI  
Pennsylvania State University

LASZLO TIHANYI  
Texas A&M University



© *Academy of Management Journal*  
2014, Vol. 57, No. 3, 615–623.  
<http://dx.doi.org/10.5465/amj.2014.4003>

FROM THE EDITORS

CLIMATE CHANGE AND MANAGEMENT

# RESEARCH OBJECTS

“From paper-motivated research to context-sensitive scholarship”

## Editorial

### The Spirit of Science and Socially Responsible Scholarship

Anne S. Tsui<sup>1,2,3,4</sup>

<sup>1</sup>Arizona State University, U.S.A., <sup>2</sup>Fudan University, China

<sup>4</sup>Shanghai Jiao Tong University, China

*Management and Organization Review* 9:3, November 2013, 375–394  
doi: 10.1111/more.12035

“Directing research toward improving school ranking and influencing promotion and tenure decisions without considering whether the research is relevant to practice is no better than corporations and their managers improving the organization’s wealth to benefit only shareholders and themselves. Condoning or engaging in questionable research practices is not only socially irresponsible, it is morally wrong.”

Research objects

**Research design**

Research methodology

Research results



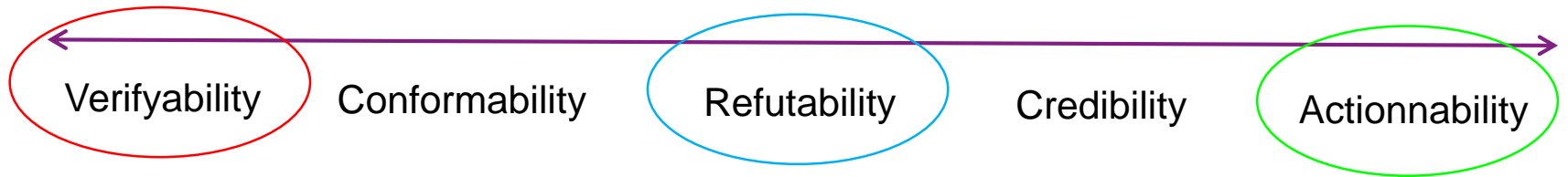
# RESEARCH DESIGN

Diversify epistemological choices

## Conception of truth and validity criteria

Correspondance

Adequacy



# RESEARCH DESIGN

Question the way you view the world

## Future imaginings: organizing in response to climate change

Organization  
32(5) 442-468  
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DOI: 10.1177/136950411348861  
org.sagepub.com  
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Erasmus Business School, University of Erasm, UK

**Gail Whiteman**

Rotterdam School of Management, Erasmus University, Netherlands

## Organizing in the Anthropocene

Organization  
2014, Vol. 34(5) 464-491  
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DOI: 10.1177/13695041135079649  
journals.sagepub.com/home/org  
SAGE

**Christopher Wright** 

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**Lauren Rickards**

RMIT University, Australia

**James Freund**

Lancaster University, UK

- “climate change not only presents real, physical threats but also challenges the way we conceive of **the broader economic, political and social order**”
- “need to view climate change as a social and politically embedded phenomenon, fundamentally linked to patterns of production and consumption and the **ideological assumptions** that underpin the economic system and our collective sensemaking processes”
- “the Anthropocene is the crucial issue for organizational scholars to engage with in order to not only understand on-going anthropogenic problems but also help create alternative forms of organizing based on **realistic Earth-human relations.**”
- **5 key organizing narratives:** business-as-usual, ecomodernism, social movements, systemic changes, organising culture.

# QUESTION THE ROLE OF DOMINANT ACTORS

## E PLURIBUS UNUM: IMPACT ENTREPRENEURSHIP AS A SOLUTION TO GRAND CHALLENGES

|                |   |
|----------------|---|
| Journal:       | Academy of Management Perspectives  |
| Manuscript ID  | AMP-2019-0130.R2  |
| Document Type: | Symposium   |
| Keywords:      | Entrepreneurship (General) < Entrepreneurship < Topic Areas, Social Issues in Management < Topic Areas, Ecological economics < Theoretical Perspectives, Theories of sustainable development < Theoretical Perspectives |

## EXEMPLE 1 : « IMPACT ENTREPRENEURS »

- MS need to go « beyond the generation of economic returns for firms and their **primary stakeholders**”
- “**entrepreneurs lack the knowledge**, skills, authority and resources necessary to resolve grand challenges”
- “most research examines phenomena at the individual, group and/or organizational **level of analysis**”
- “citizens from the communities being helped are not just **passive beneficiaries**”
- “reliance on **heroic actors** [...] who seem to singlehandedly and swiftly change big institutions”
- “in many sustainability contexts, **no single actor** has the scale, skills, resources or even the authority to be the catalytic leader”

# ADOPT A MULTISTAKEHOLDER VIEWPOINT => INCLUDE MARGINALISED ONES

## EXAMPLE 2 : « FRINGE STAKEHOLDERS »

- “traditional literature on business models paid only **limited attention to social and environmental challenges**”
- “Emerging research highlights the **importance of studying social and environmental consequences of new business models**”
- “business models are generally perceived from ‘a value creation perspective that focuses on satisfying **customer needs**, economic return and compliance”
- **interactive business models** create new sources of revenue & enhance the living conditions of the poor (...) “which requires an **intense implication of fringe stakeholders** and interactions with them”
- When a credit officer asked her to go to the market to sell their products, she responded with some shock: “**How can I go to the market? I am a woman!**”

Journal of Business Ethics (2018) 152:965–976  
<https://doi.org/10.1007/s10551-018-3824-3>

ORIGINAL PAPER

### Transformational Business Models, Grand Challenges, and Social Impact

Ignasi Marti<sup>1,2,3</sup> 

# INTERDISCIPLINARITIES

## Organizations, Climate Change, and Transparency: Reviewing the Literature on Carbon Disclosure

Organizations & Environment  
2013, Vol. 24(1) 88–102  
© 2013 SAGE Publications  
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sagepub.com/journalsPermissions.nav  
DOI: 10.1177/1088726613505542  
oae.sagepub.com  
SAGE

Rüdiger Hahn<sup>1</sup>, Daniel Reimsbach<sup>2</sup>, and Frank Schiemann<sup>2</sup>

- Study carbon disclosure field
- Variety of theories (sociopolitical, economics, institutional, ...)
- MS literature: focus on factors driving CD
- Few links to theories in CD literature
- CD research could use the financial disclosure literature

## JOURNAL OF MANAGEMENT STUDIES

*Journal of Management Studies* 50:2 March 2013  
doi: 10.1111/j.1467-6486.2012.01073.x

### Planetary Boundaries: Ecological Foundations for Corporate Sustainability

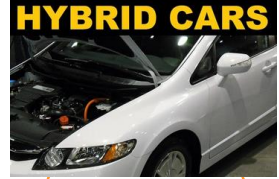
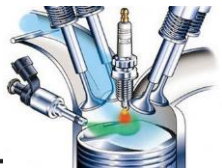
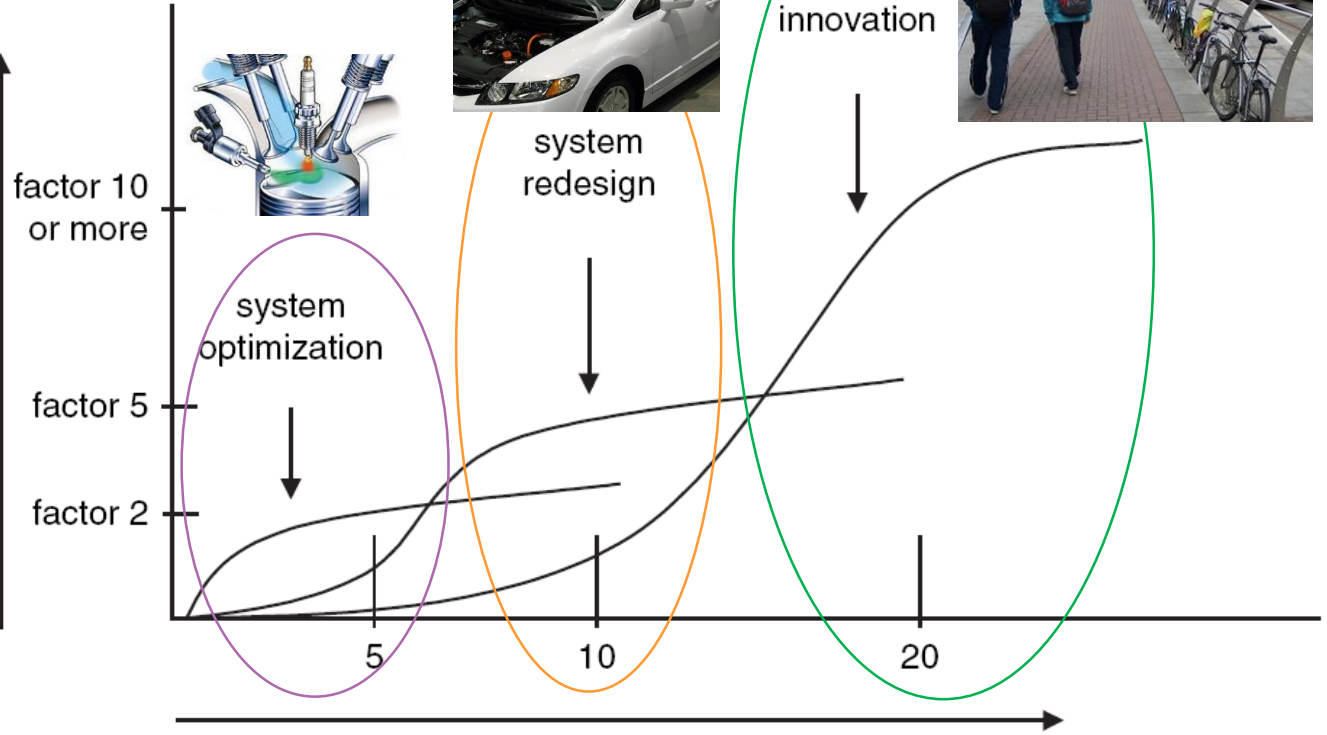
Gail Whiteman, Brian Walker and Paolo Perego

“it is time for corporate sustainability  
scholars to reconsider the ecological  
and systemic foundations for  
sustainability, and to integrate our work  
more closely with the natural sciences”

# A LACK OF SYSTEM INNOVATIONS



Improvement of environmental efficiency



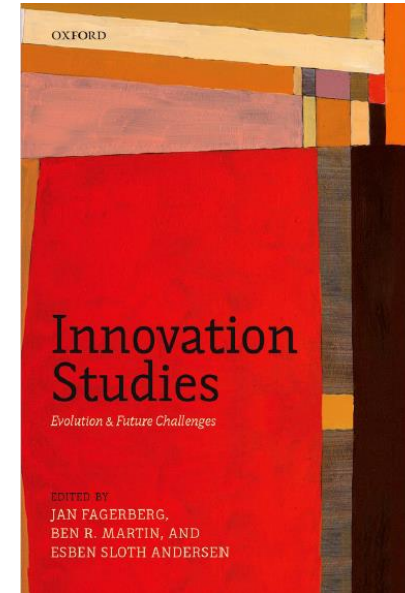
Time horizon (years)

Source: Tukker, A. and M. Butter (2007). Governance of sustainable transitions: about the 4(0) ways to change the world. *Journal of Cleaner Production* 15(1): 94-103.

# INNOVATION STUDIES & GRAND CHALLENGES

Table 8.1. Twenty advances in science policy

|    |   |
|----|---|
| 1  | From individual entrepreneur to corporate innovators            |
| 2  | From <i>laissez faire</i> to government intervention            |
| 3  | From two factors of production to three                         |
| 4  | From single division to multidivisional effects                 |
| 5  | From technology adoption to innovation diffusion                |
| 6  | From science push to demand pull?                               |
| 7  | From single factor to multifactor explanations of innovation    |
| 8  | From a static to a dynamic model of innovation                  |
| 9  | From the linear model to an interactive 'chain-link' model      |
| 10 | From one innovation process to several sector-specific types    |
| 11 | From neo-classical to evolutionary economics                    |
| 12 | From neo-classical to new growth theory                         |
| 13 | From the optimizing firm to the resource-based view of the firm |
| 14 | From individual actors to systems of innovation                 |
| 15 | From market failure to system failure                           |
| 16 | From one to two 'faces' of R&D                                  |
| 17 | From 'Mode 1' to 'Mode 2'                                       |
| 18 | From single technology to multitechnology firms                 |
| 19 | From national to multilevel systems of innovation               |
| 20 | From closed to open innovation                                  |



Source : Ben Martin, « Innovation studies: An emerging agenda », in *Innovation studies*, Fagerberg et al. (2013), chapter 8.

Research objects

Research design

**Research methodology**

Research results



# RESEARCH METHODOLOGY

Diversify research methods

## What is the aim of my research?

Explain

Predict

Understand

Change

*Academy of Management Perspectives*

## Bridging the Research–Practice Gap

by Pratima Bansal, Stephanie Bertels, Tom Ewart, Peter MacConnachie, and James O'Brien

*Action Research*

Volume 1(1): 9–28: 034201[1476-7503(200307):1]  
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www.sagepublications.co.uk

AR

EDITORIAL | Why action research?

Mary Brydon-Miller

University of Cincinnati, USA

Davydd Greenwood

Cornell University, USA

Patricia Maguire

Western New Mexico University, USA

and members of the editorial board of *Action Research*<sup>1</sup>

# THE CONCEPT OF INNOVATION

Question existing concepts

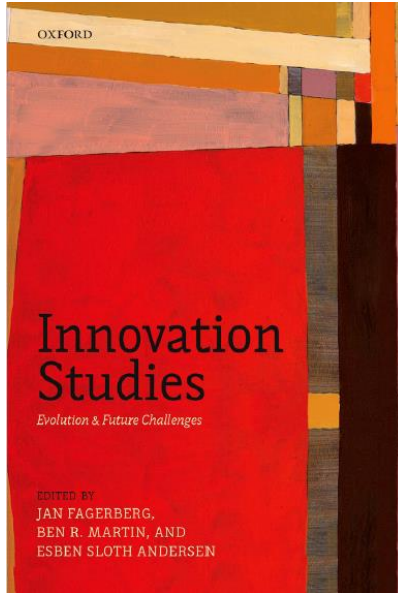


Table 8.2. Fifteen challenges for innovation studies

- 1 From visible innovation to 'dark innovation'
- 2 From 'boy's toys' to mundane but liberating innovations
- 3 From national and regional to global systems of innovation
- 4 From innovation for economic productivity to 'green innovation'
- 5 From innovation for economic growth to innovation for sustainable development
- 6 From risky innovation to socially responsible innovation
- 7 From innovation for wealth creation to innovation for wellbeing (or from 'more is better' to 'enough is enough')
- 8 From 'winner takes all' to 'fairness for all'?
- 9 From government as fixer of failures to the entrepreneurial state
- 10 From faith-based policy (and policy-based evidence) to evidence-based policy?
- 11 Pricking academic bubbles
- 12 Avoiding disciplinary sclerosis
- 13 Identifying the causes of the current economic crisis
- 14 Helping to generate a new paradigm for economics—from Ptolemaic economics to ???
- 15 Maintaining our research integrity, morality, and collegiality

Source : Ben Martin, « Innovation studies: An emerging agenda », in *Innovation studies*, Fagerberg et al. (2013), chapter 8.

## THE LIMITS OF ECO-INNOVATIONS

Rennings (2013):

*“consist of new or modified processes, techniques, practices, **systems** and products to avoid or to reduce environmental harms.”*

J Evol Econ (2014)  
DOI 10.1007/s00191-014-0381-5

REGULAR ARTICLE

**Lock-in and path dependence: an evolutionary approach to eco-innovations**

Grazia Cecere • Nicoletta Corrocher •  
Cédric Gossart • Muge Ozman

# RESPONSIBLE INNOVATION: THE NEW NORM?

(1) explicitly aims at solving grand challenges, and ...

(2) follows responsible innovation principles.



Stilgoe & al. (2013)'s framework: **'ARIR'**

- **Anticipation**
- **Reflexivity**
- **Inclusion**
- **Responsiveness**

Research Policy 42 (2013) 1568–1580

Contents lists available at ScienceDirect

**Research Policy**

journal homepage: [www.elsevier.com/locate/respol](http://www.elsevier.com/locate/respol)

Developing a framework for responsible innovation<sup>☆</sup>

Jack Stilgoe<sup>a,\*</sup>, Richard Owen<sup>b,1</sup>, Phil Macnaghten<sup>c,d</sup>

<sup>a</sup> University of Exeter Business School/Department of Science and Technology Studies, University College London, Gower Street, London WC1E 6BT, UK  
<sup>b</sup> University of Exeter Business School, Rennes Drive, Exeter EX4 4PU, UK  
<sup>c</sup> Department of Geography, Science Laboratories, Durham University, South Road, Durham DH1 3LE, UK  
<sup>d</sup> Department of Science and Technology Policy, Institute of Geosciences, P.O. Box 6152, State University of Campinas – UNICAMP, 13083-970 Campinas, SP, Brazil


Source: Stilgoe, J., Owen, R., Macnaghten, P., 2013. Developing a framework for responsible innovation. *Research Policy* 42, 1568-1580.

# TOWARDS NEW (TRANSFORMATIONAL) BUSINESS MODELS

Journal of Business Ethics (2018) 152:965–976  
<https://doi.org/10.1007/s10551-018-3824-3>

ORIGINAL PAPER

Transformational Business Models, Grand Challenges, and Social Impact

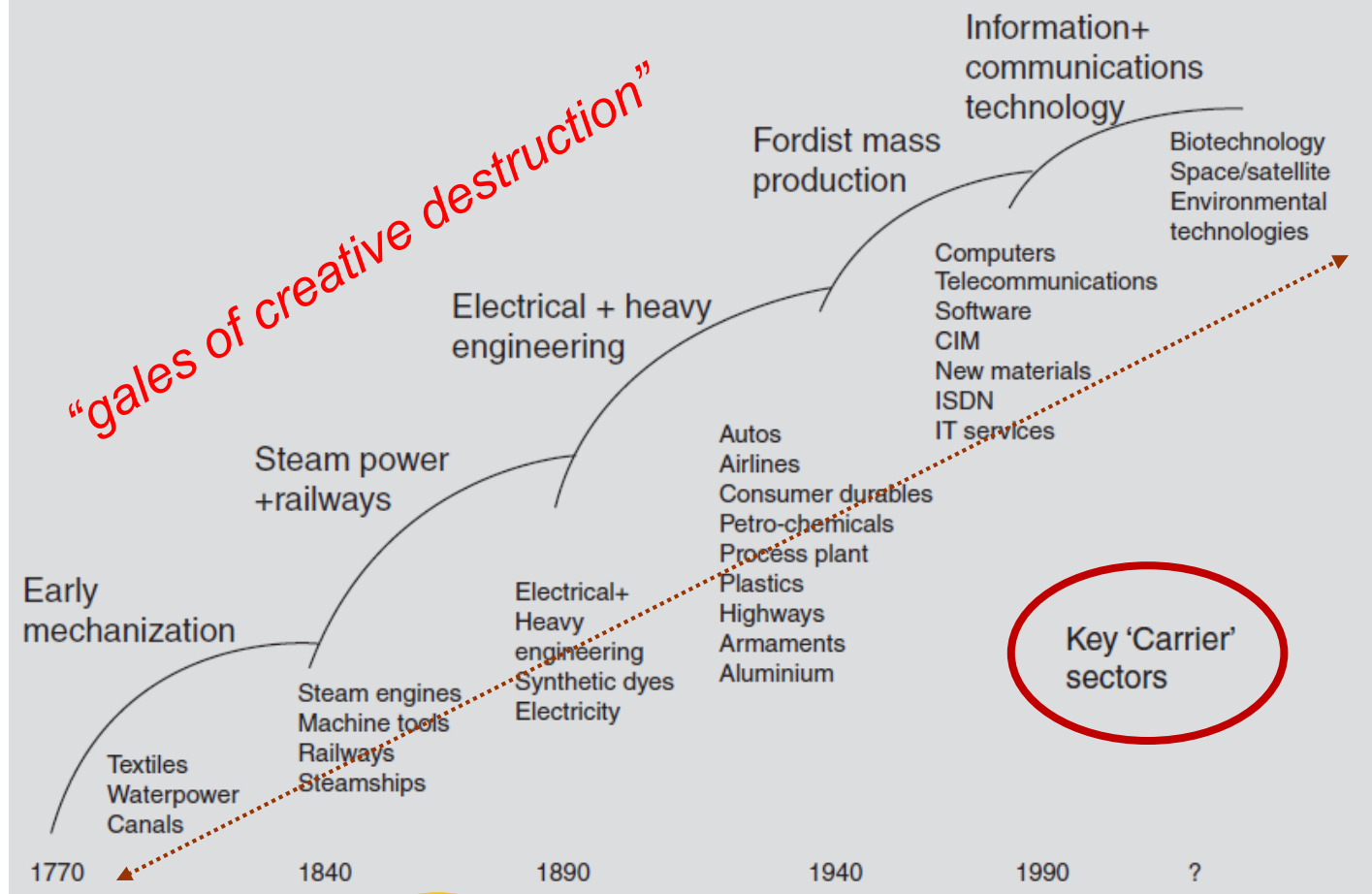
Ignasi Martí<sup>1,2,3</sup> 

- “interpretations of business models remain diverse”
- “while some may regard this as a problem, we see it as an opportunity for researchers -especially those interested in entrepreneurship, strategy, and innovation- to **challenge, question, and rethink concepts and assumptions** from different fields of management research.”
- “**how business models (...) may impact the quality of life of the poor, the disenfranchised, the marginalized, and even on nonhuman stakeholders**”
- Ex.: “the dominant microfinance business model was **too rigid** in design and institutionalized practices to help the neediest.”
- “one way to enrich current discussions about the design and implementation of business models (...) is to **build on the rich literature on ‘grand challenges’**”

# The limits of creative destruction



JAS



## Key production factors

Cotton, pig iron      Coal, transport      Steel      Energy (especially oil)      Microelectronics

## Key factor industries

Source: Dodgson et al. (2008). *The Management of Technological Innovation*. Oxford University Press, 2d ed., p. 27, Fig. 2.1.

# DESTRUCTIVE CREATION?



Philippe Aghion :

"L'innovation,  
c'est le progrès"



« A society that no longer innovates is a society that stagnates, that is Albania »

Prof. Luc Soete, UNU-MERIT



**Science, technology and innovation:  
From creative destruction to destructive  
creation**

"Innovation is good for you" appears a common feature of most science, technology and innovation studies over the last decades. In many ways this is surprising given the fact that innovation failure rather than innovation success appeared a much more common feature in micro innovation studies as highlighted amongst others in the early SAPHO project from SPRU. Hence the simple, but straightforward question which will be central in this Marie Jahoda lecture: could it be that innovation is not always good for you? That at a societal level, innovation rather than representing a Schumpeterian process of "creative destruction" renewing society's dynamics and hence leading to higher levels of economic development and welfare – destroying a few incumbents to the benefit of many newcomers – presents now and then the

Research objects

Research design

Research methodology

**Research results**



# RESEARCH RESULTS

FROM THE EDITORS

## MANAGEMENT RESEARCH IN *AMJ*: CELEBRATING IMPACT WHILE STRIVING FOR MORE

### Scholarly Impact: A Pluralist Conceptualization

HERMAN AGUINIS  
Indiana University

DEBRA L. SHAPIRO  
University of Maryland

ELENA P. ANTONACOPOULOU  
GNOSIS, University of Liverpool

THOMAS G. CUMMINGS  
University of Southern California

### Revue Française de Gestion

Volume 43 / Numéro 267 (août-septembre 2017)

Recherche en gestion : retrouver du sens

#### Introduction

Recherche en gestion, le sens mis en pièces p. 67

Jean-Luc Moriceau, Hervé Laroche et Rémi Jardat

Face à la tyrannie des étoiles : révoltons-nous ! p. 133

Aurélien Rouquet

“researchers doing **engaged scholarship** must surmount the “**double hurdle**” of scholarly and practical impact, a difficult task that generally requires treating engaged research as a **vocation** or **calling**, not simply an episodic event leading to a publishable outcome.”

# SCIENCE & SCIENTISTS *IN* SOCIETY

## World Scientists' Warning to Humanity: A Second Notice FREE

William J. Ripple, Christopher Wolf, Thomas M. Newsome, Mauro Galetti, Mohammed Alamgir, Eileen Crist, Mahmoud I. Mahmoud, William F. Laurance, 15,364 scientist signatories from 184 countries

*BioScience*, Volume 67, Issue 12, December 2017, Pages 1026–1028, <https://doi.org/10.1093/biosci/bix125>

**Published:** 13 November 2017



Le 08 juillet 2019

### TRIBUNE

**Urgence climatique : universités et grandes écoles mobilisées aux côtés des étudiants pour la réalisation des 17 Objectifs de Développement Durable**

## In the Face of the Ecological Crisis, Rebellion is Necessary

Recognising governmental inaction in the face of the ecological and climatic emergency, more than 1,000 scientists from all disciplines call for citizens' civil disobedience and their development of alternatives *in (top French newspaper) Le Monde*. They urge political leaders to radically change our economic and production model and to take the proposals of the Citizens' Convention on Climate Change seriously.

This call is inspired by similar initiatives in *The Guardian* and *Le Temps*.

# CÉDRIC GOSSART & THE ANTHROPOCENE



Entendre l'Anthropocène

**INESS** À PROPOS D'INESS  
 Le laboratoire d'idées "Innovations, Numérique, Économie Sociale et Solidaire"



<https://iness.wp.imt.fr/>



- OPIKNOW
- PRANED



Fablabs & SDGs (with the French Fablabs Network)



**FONDATION MGEN**  
pour la santé publique

# Thank you.

**Cédric GOSSART**

Professor in Management sciences

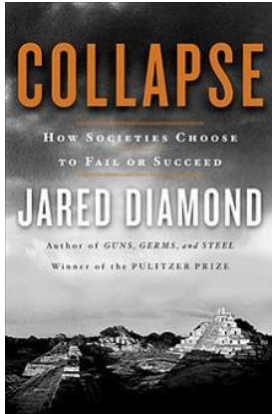
<https://gossart.wp.imt.fr/>



INESS IDEA lab: <https://iness.wp.imt.fr>

**Backup slides**

# RISK OF ECOLOGICAL COLLAPSE ?



Source:

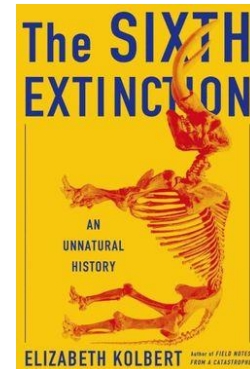
[http://en.wikipedia.org/wiki/Collapse: How Societies Choose to Fail or Succeed](http://en.wikipedia.org/wiki/Collapse:_How_Societies_Chose_to_Fail_or_Succeed)



Source: [http://www.ted.com/talks/jared\\_diamond\\_on\\_why\\_societies\\_collapse](http://www.ted.com/talks/jared_diamond_on_why_societies_collapse)  
(18 minutes; 2,6 million views)



[https://en.wikipedia.org/wiki/Elizabeth\\_Kolbert](https://en.wikipedia.org/wiki/Elizabeth_Kolbert)



<https://www.newyorker.com/magazine/2019/05/20/climate-change-and-the-new-age-of-extinction>

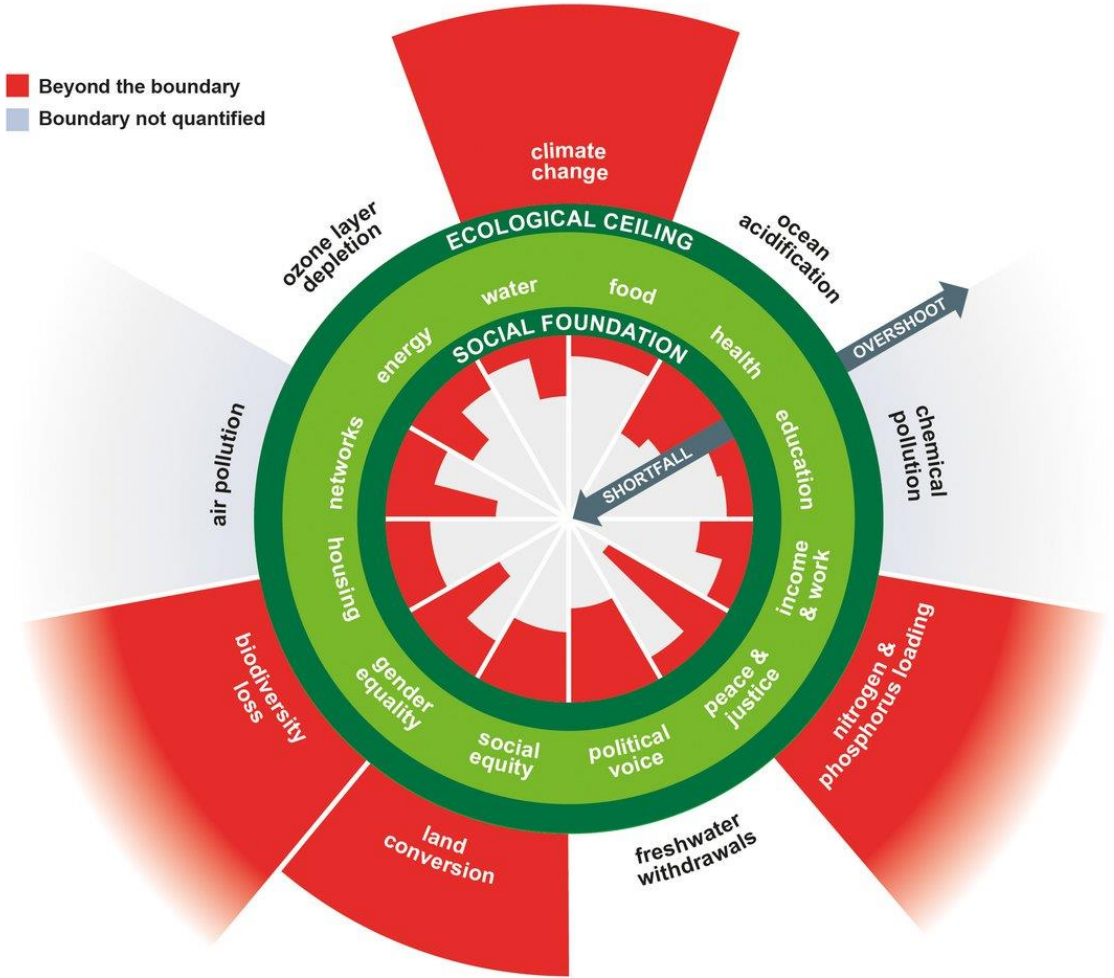
# PLANETARY BOUNDARIES

“The planetary boundaries framework defines a **safe operating space for humanity** based on the intrinsic biophysical processes that regulate the stability of the Earth System.”



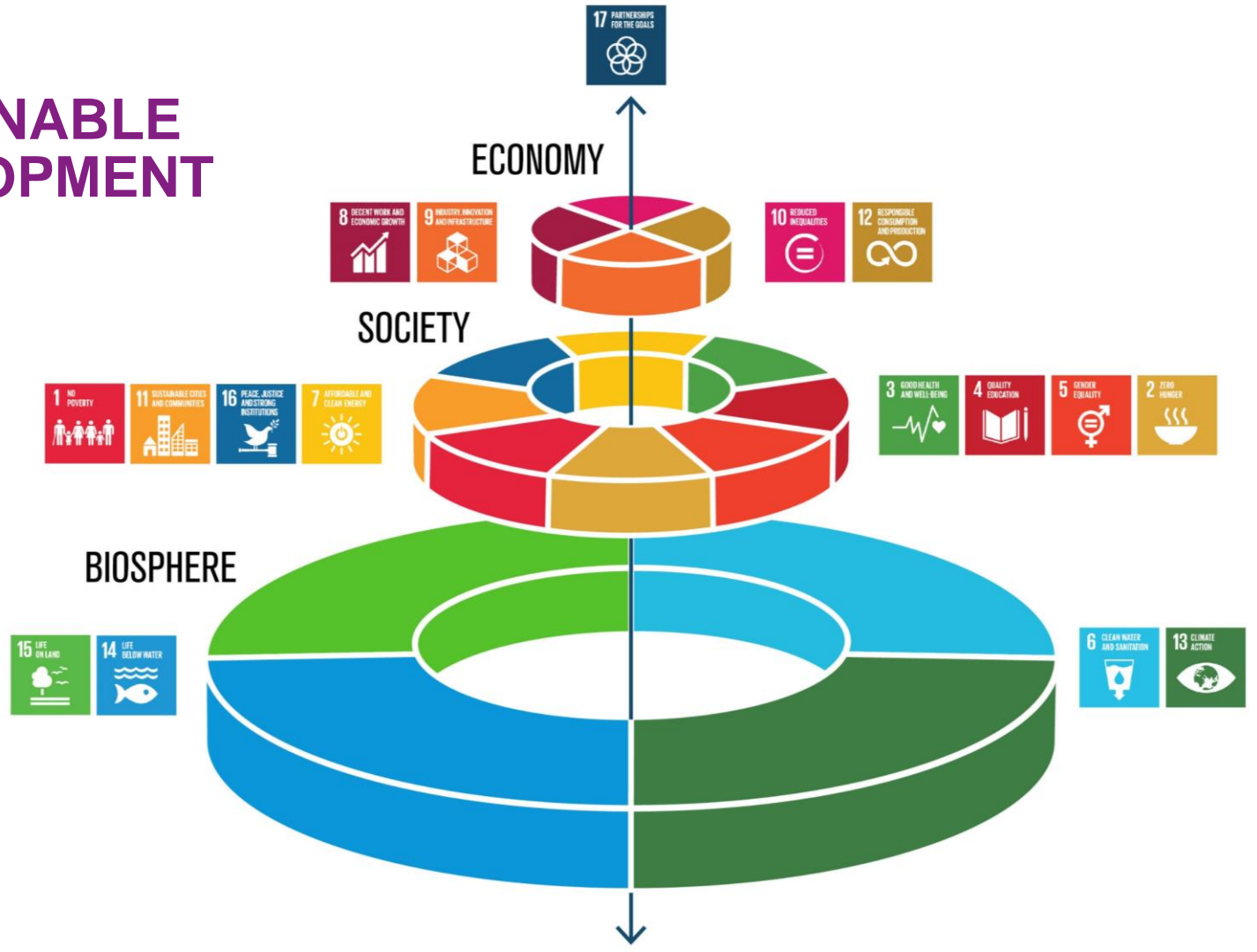
# PLANETARY HEALTH

Kate Raworth's  
"Doughnut of social  
and planetary  
boundaries"





# 17 SUSTAINABLE DEVELOPMENT GOALS



# RESPONSIBLE INNOVATION

Table 40.1 Actions for implementing responsible innovation

| Dimension                      | Tools   |
|--------------------------------|---|
| Anticipation                   | Scenario thinking   |
|                                | Value mapping   |
|                                | Ideation for business modelling                             |
|                                | Translating vision into mission (target setting)            |
|                                | Game theory/perspective                                     |
|                                | Crowdsourcing   |
|                                | Crowdsourcing (via software)                                |
|                                | Living lab structures                                       |
|                                | Collaborative business modelling                            |
|                                | Inclusion and deliberation                                  |
| Consultancy of experts         |   |
| Focus groups                   |   |
| Integrating views and opinions |   |
| Formal evaluations             |   |
| Third party critical appraisal |   |
| Reflexiveness                  | Informal (self-) assessment culture                         |
|                                | 'Knowledge -concept-process' mechanisms                     |
|                                | Empowered and open communication                            |
|                                | Customising or mainstreaming                                |
|                                | Preventing organisational inertia                           |
| Responsiveness                 | Adjust/withdraw innovation                                  |
|                                | Monitor external environment post introducing of innovation |

Sources: Adapted from Lubberink et al. (2017); Burget et al. (2017); Blok et al. (2015); Long and Blok (2017).

En savoir + :

Owen, R., et al. (2012). [Responsible research and innovation](#): From science in society to science for society, with society. *Science and Public Policy* 39(6): 751-760.

Owen, R., et al. (2021). Organisational institutionalisation of responsible innovation. *Research Policy* 50(1): 104132.

# ECO-INNOVATIONS: A NEED FOR A SYSTEMIC VIEW



## Lock-in and path dependence: an evolutionary approach to eco-innovations

Grazia Cecere · Nicoletta Corrocher ·  
Cédric Gossart · Muge Ozman

Continuous improvements in a given technology strengthens its market => lock-in.

**Internal combustion engine (ICE):** environmentally improved by efficiency inventions (direct fuel injection, particle filters, new combustion concepts). (*Oltra & Saint Jean, 2009*)

**ICE:** strong and persistent dominant design, most engine innovations still focused on incremental changes within this design, supported on the consumer side by a demand for incremental changes.

# MS ORGANISATIONS



## 35th EGOS Colloquium



**Sub-Plenary 1-2: Grand Challenges: Organizations and the Anthropocene ---> FULLY BOOKED!**

- Panelists: P. Devereaux (Dev) Jennings [Chair], University of Alberta School of Business, Canada; Andrew (Andy) Hoffman, University of Michigan, USA; Gail Whiteman, Lancaster University School of Management, UK; Judith Walls, University of St. Gallen, Switzerland

## 67 Critical Organizational Anthropocene Studies

**Session VI: Saturday, July 06, 09:00 to 10:30, Organizational Practices I/II**

Hervé Corvellec | Alison Stowell | Steffen Böhm

Chair: Hervé Corvellec  
Marcus Wagner

*Governance and institutions in new public environmental management: An international and intertemporal comparison of voluntary standards' impacts*

Discussant(s): Alexandre Monnin, Emmanuel Bonnet and Diego Landivar  
Alexandre Monnin, Emmanuel Bonnet and Diego Landivar

*What the Anthropocene does to organizations*

Discussant(s): Cédric Gossart

Cédric Gossart

*Organisational practices and grand challenges: The case of large digital firms*

Discussant(s): Marcus Wagner



SWG 15: Organization Studies in the Anthropocene: System Change, Not Climate Change

<https://www.egosnet.org/jart/prj3/egos/>

Coordinators [main.jart?content-id=1585149883954](https://www.egosnet.org/jart/prj3/egos/main.jart?content-id=1585149883954)

- Paul S. Adler, University of Southern California, USA
- Bobby Banerjee, City University of London, UK
- Zlatko Bodrožić, University of Leeds, UK
- Ekaterina Chertkovskaya, Lund University, Sweden
- John M. Jermier, University of South Florida, USA
- Ana Maria Peredo, University of Victoria, Canada

**Sub-theme 41: Organizing Innovation and Entrepreneurship in and for a Sustainable Society**

**Digital technologies and sustainable development: How do digital social innovations scale up?**

Müge Ozman<sup>1</sup> & Cédric Gossart<sup>2</sup>

**RRBM** Responsible Research in Business & Management

<https://rrbm.network/>



**Principle 1. Service to Society:** Business research aims to develop knowledge that benefits business and the broader society, locally and globally, for the ultimate purpose of creating a better world.



# A WORD ON TEACHING & GRAND CHALLENGES

J Bus Ethics (2016) 139:737–754  
DOI 10.1007/s10551-015-2896-6

## Beyond the Curriculum: Integrating Sustainability into Business Schools

Mollie Painter-Morland<sup>1,2</sup> · Ehsan Sabet<sup>3</sup> · Petra Molthan-Hill<sup>4</sup> · Helen Goworek<sup>5</sup> · Sander de Leeuw<sup>3,6</sup>

Course « Organisations & grand challenges » (L3) + Sulitest + ... IG :

<https://www.sulitest.org>

|                         | <i>Existing Structures</i>  | <i>New Structures</i>   |
|-------------------------|---|---|
| <i>Narrow curricula</i> | <p><i>Quadrant I</i></p> <p>Piggybacking</p> <p>Integration of sustainability within existing structures by adding sustainability to individual sessions of courses or modules</p>                  | <p><i>Quadrant II</i></p> <p>Digging deep</p> <p>Integration of sustainability through new stand-alone modules</p>  |
| <i>Broad curricula</i>  | <p><i>Quadrant III</i></p> <p>Mainstreaming</p> <p>Integration of sustainability within existing structures but with the emphasis on a broader cross-curricular perspective (entire curriculum)</p> | <p><i>Quadrant IV</i></p> <p>Focusing</p> <p>Integration of sustainability through new cross-disciplinary offerings such as sustainability-related courses which are required for all business school students and new programmes</p> |

# MANAGEMENT SCIENCES & THE ANTHROPOCENE

- **STRAT**: Hamann et al. (2019). Strategic Responses to Grand Challenges: Why and How Corporations Build Community Resilience. *Journal of Business Ethics*.  
Martí (2018). Transformational Business Models, Grand Challenges, and Social Impact. *JBE*.
- **ORG**: Wright et al. (2018). Organizing in the Anthropocene. *Organization*.
- **FIN**: Shrivastava et al. (2019). Finance and Management for the Anthropocene. *Organization & Environment*.
- **IS**: van der Velden (2018). ICT and Sustainability: Looking Beyond the Anthropocene. *Conf. ICT & Climate Change*, Springer.  
Winter & Butler (2011). Creating bigger problems: Grand challenges as boundary objects and the legitimacy of the information systems field. *Journal of Information Technology*.
- **HR**: Schad & Smith (2019). Addressing Grand Challenges' Paradoxes: Leadership Skills to Manage Inconsistencies. *Journal of Leadership Studies*.
- **ETP**: Doh et al. (2019). Adapting to Grand Environmental Challenges Through Collective Entrepreneurship. *AMP*.  
Markman et al. (2019). E Pluribus Unum: Impact Entrepreneurship as a Solution to Grand Challenges. *AMP*.
- **IB**: Buckley et al. (2017). Towards a renaissance in international business research? Big questions, grand challenges, and the future of IB scholarship. *Journal of International Business Studies*.
- **ECON**: Sol J. (2019). Economics in the anthropocene: Species extinction or steady state economics. *Ecological Economics*.