Paris School of Business

AACSB ACCREDITED · ASSOCIATION AMBA ACCREDITED · EFMD EPAS ACCREDITED

European Academy of Management
EURAM

EURAM
Special interest group
SIG 06 – INNO
SIG 13 – STRAT

THE LEGACY OF MAX BOISOT IN INNOVATION AND STRATEGY RESEARCH

David W. VERSAILLES

chaire **newPIC**

Nouvelles Pratiques pour l'Innovation et la Créativité

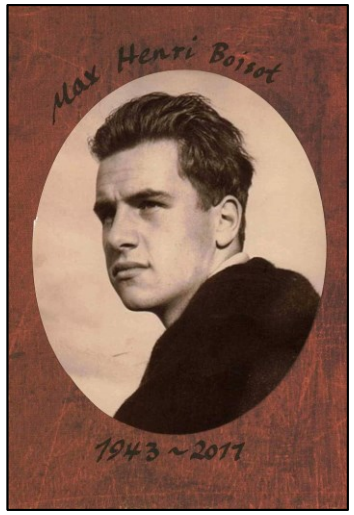
PARIS SCHOOL OF BUSINESS
F-75013 PARIS, France

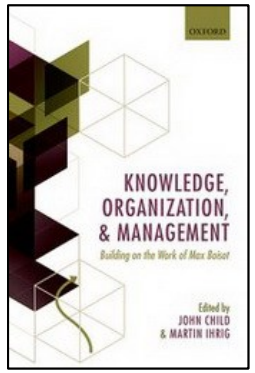
Agenda for the symposium

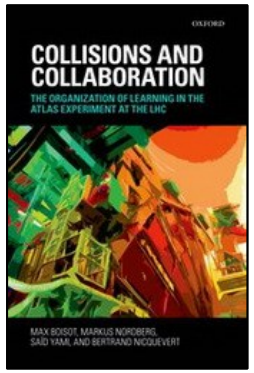
Insights from the I-Space analytical framework…

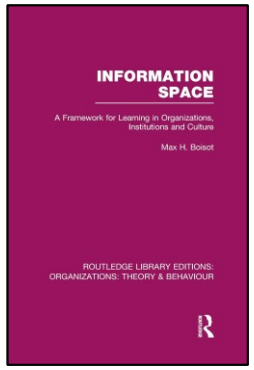
- **…for the management of knowledge in innovation ecosystems**
- **…for the strategic management of knowledge**
- **References**
- **Contact details**

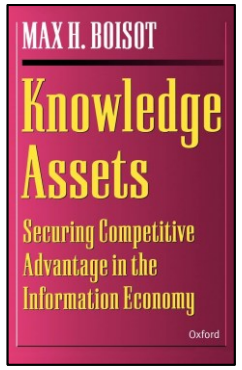
Max H. BOISOT (1943-2011)







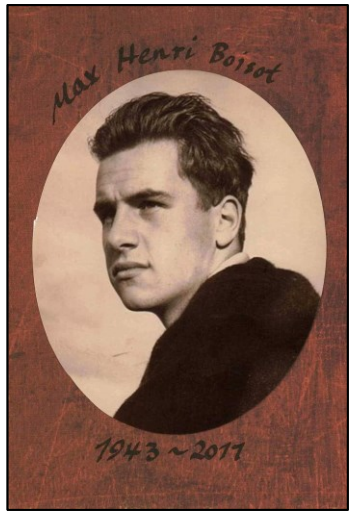


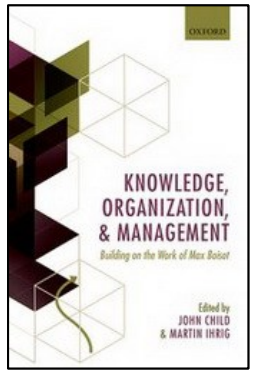


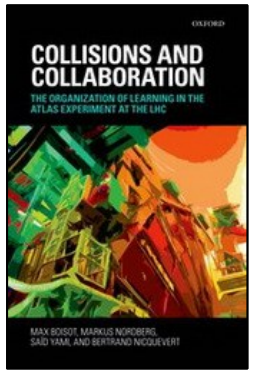
I-SPACE INSTITUTE

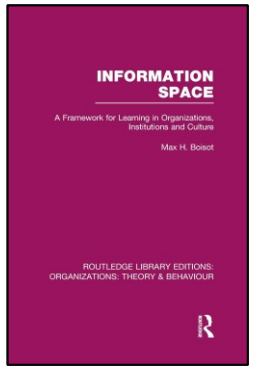
- **Max H. Boisot was first a successful architect between 1972 and 1978 (graduated in architecture from Univ of Cambridge, and in city planning from MIT) and, then a management scientist and consultant (graduated in techno transfer from Imperial College London)**
- **From 1983 to 1989, he was Director and Dean of the China Europe Management Institute in Beijing, China.**
- **Afterwards, Boisot was a Professor of Strategic Management at ESADE Business School in Barcelona. He was also a Senior Associate at the Judge Institute of Management Studies at the Univ of Cambridge and a research fellow at the Sol Snider Center at the Wharton Business School (Univ of Pennsylvania).**
- ***His book Knowledge Assets was awarded the Ansoff Prize for the Best Book in Strategy in 2000.***
- ***The I-Space framework is acknowledged as a seminal foundation for numerous consulting endeavors, most notably Dave Snowden's Cynefin framework.***

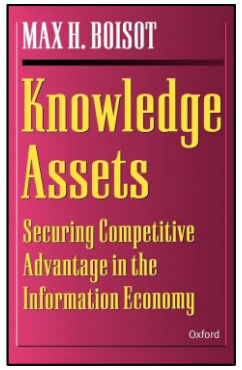
Max H. BOISOT (1943-2011)







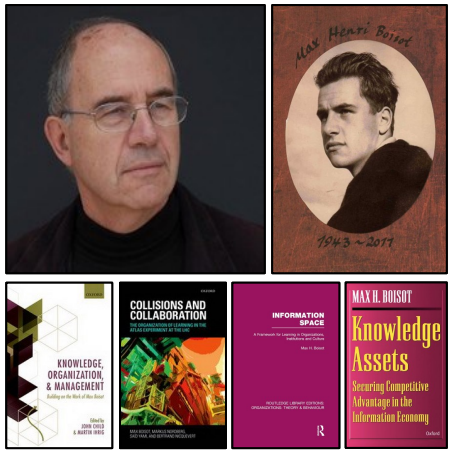




I-SPACE INSTITUTE

"I know that I and many others who knew Max H. Boisot have lost a key part of our lives. He was a giant of the modern renaissance of thinking around the intersection of natural science with social systems."

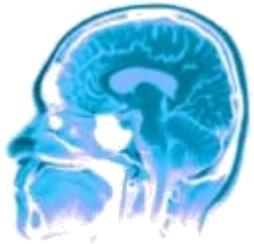
Dave Snowden, published on the Cynefin website on Sept 10th, 2011



EURAM 2024

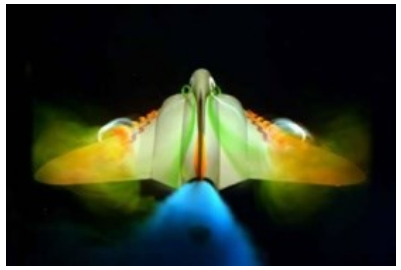
THE I-SPACE ANALYTICAL FRAMEWORK

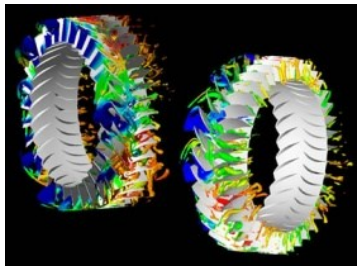
Knowledge

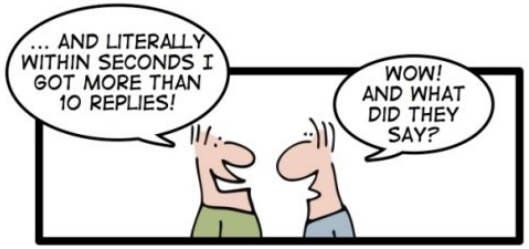


K

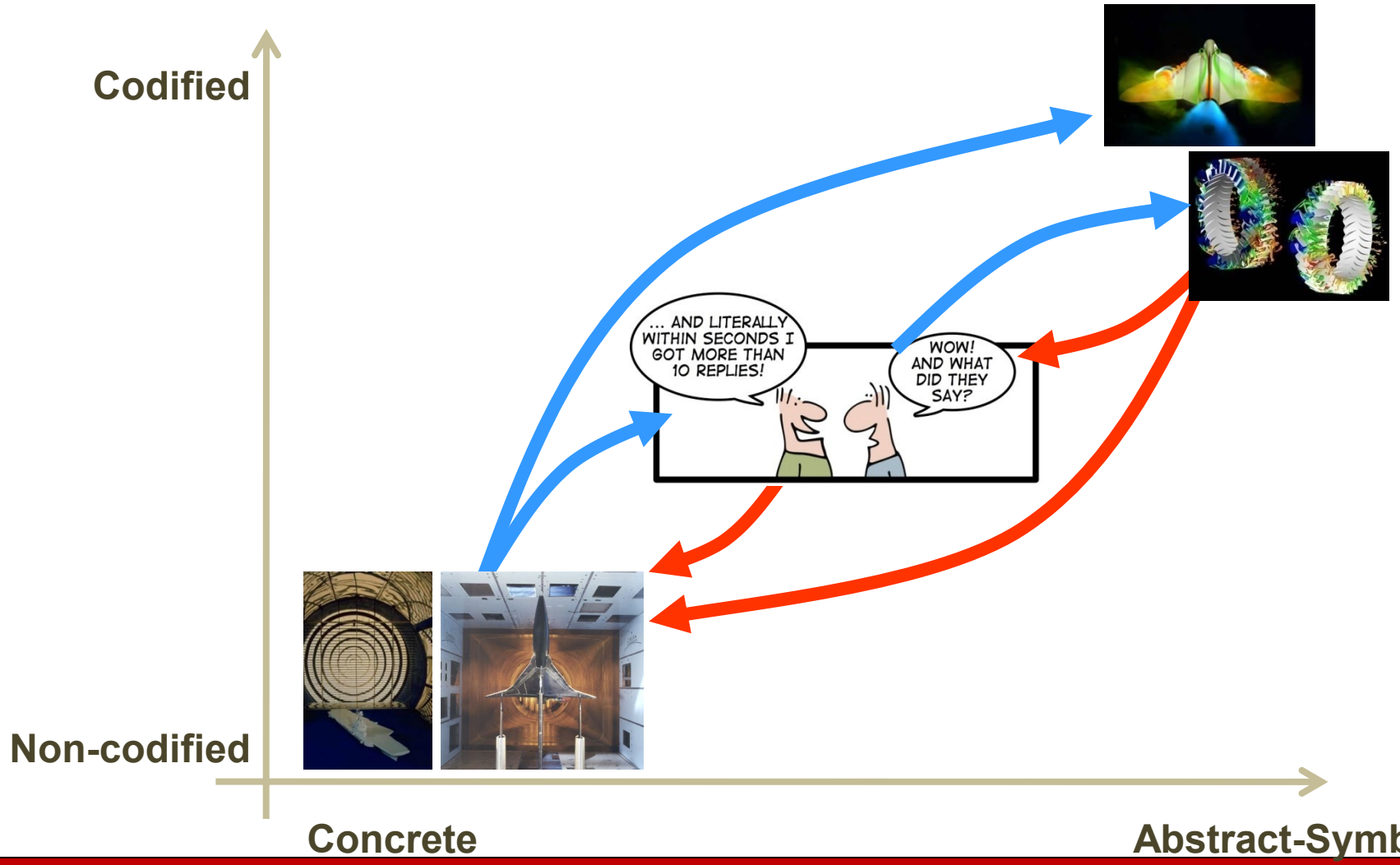
- **Abstract-Symbolic**
- **Narrative**
- **“Embodied”**



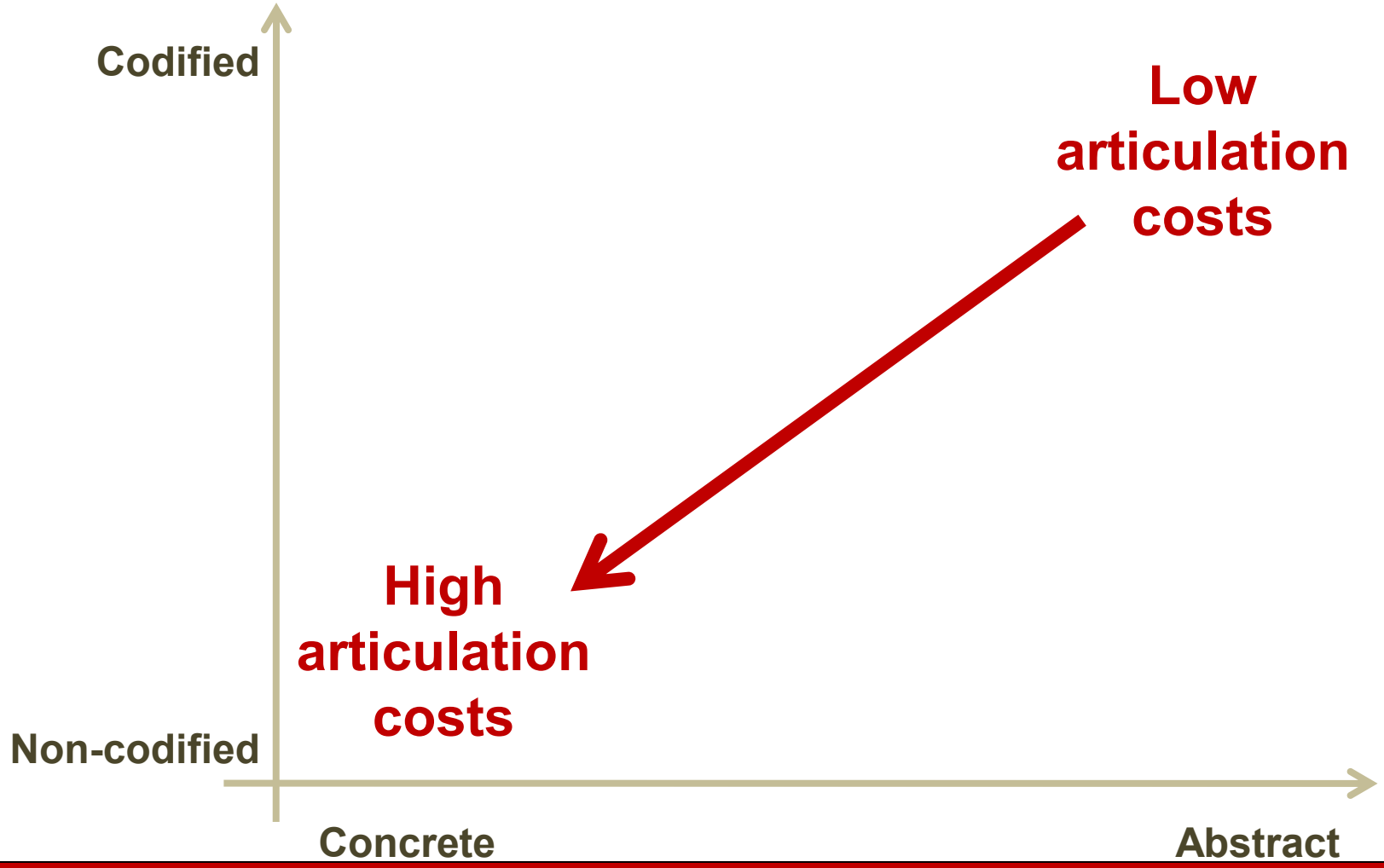




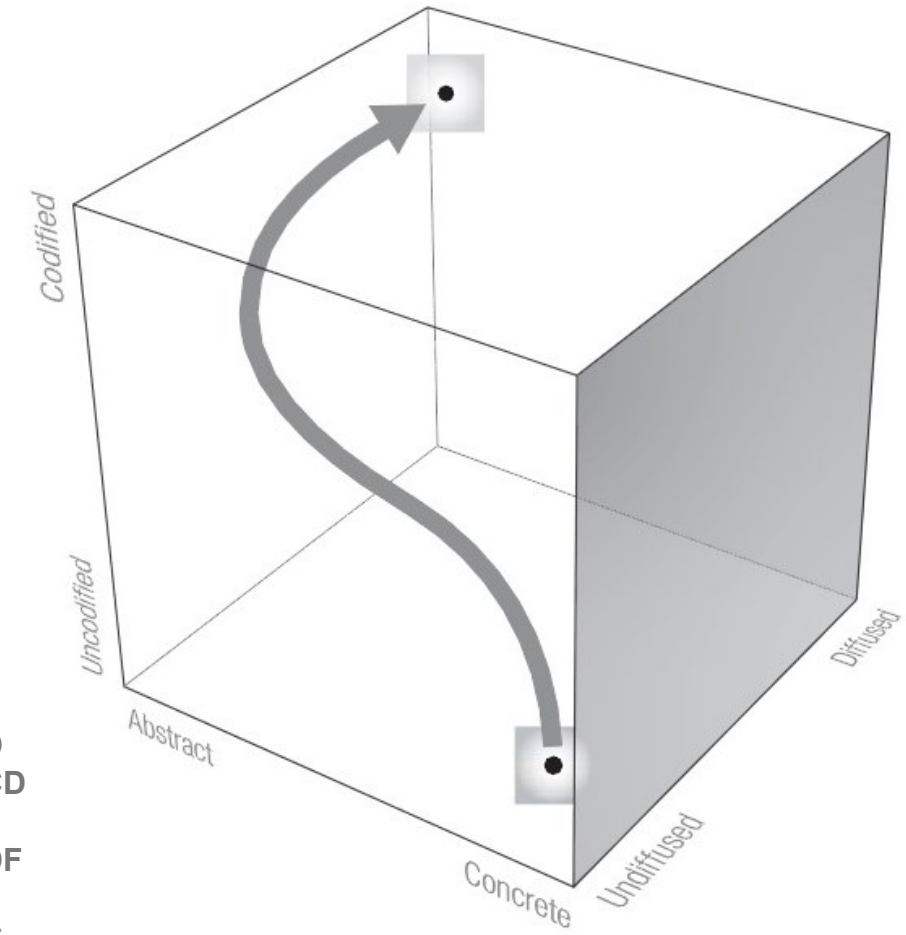
From categories of knowledge to articulation costs 1/2



From categories of knowledge to articulation costs 2/2



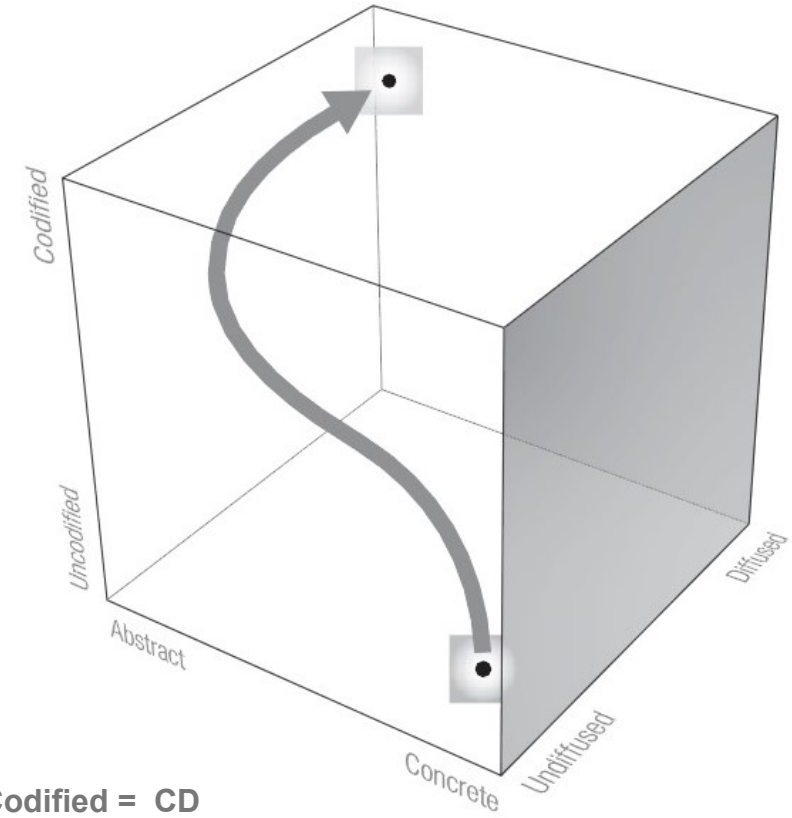
Navigating the social learning cycle



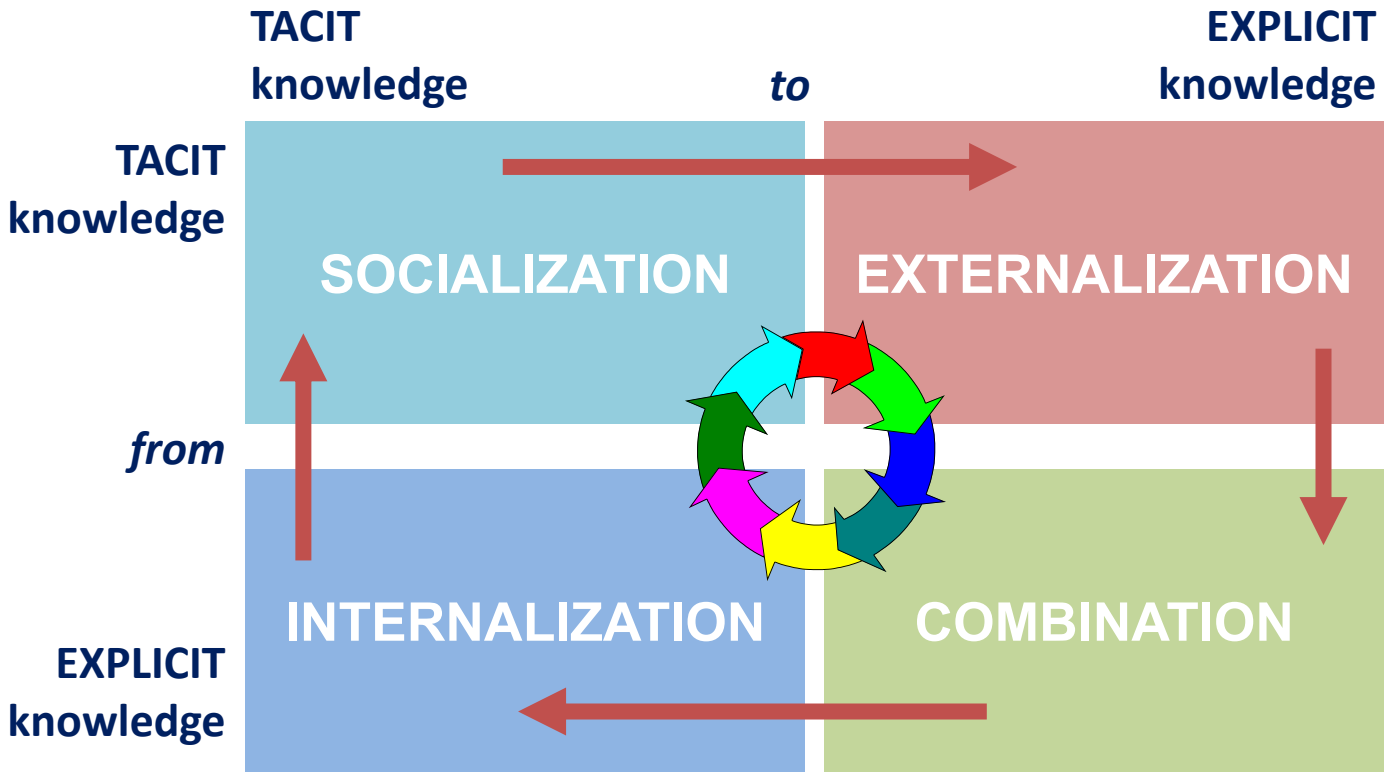
Codified = CD
Uncodified = UCD
Diffused = DF
Undiffused = UDF
Abstract = A
Concrete = CC

- ***What are the most effective ways of working to exchange knowledge in an innovation lab?***
  - **Open labs refer to the dynamics of a community, and mainly elaborate on dynamics based on communities. Inside a community, diffusion develops on CD or UCD + A or CC**
- ***What are the knowledge mechanisms in place when working with a digital vs. physical boundary object for exploration/ innovation?***
  - **Physical boundary objects make it possible to avoid the abstraction phase: CC prevails for DF**
  - **Digital boundary objects require an initial step based on abstraction: A is a temporal antecedent of interaction (discuss *nature* of A)**

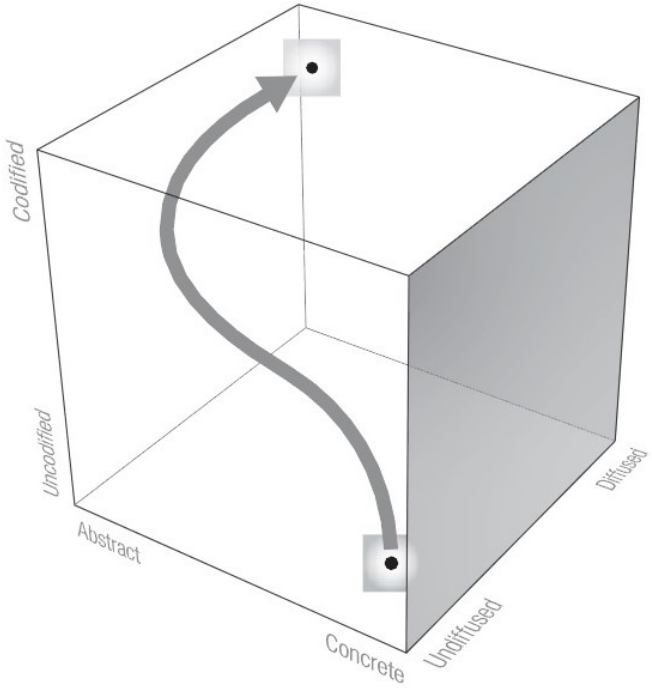
Comparison between Boisot's and Nonaka's models Combination vs. Articulation?



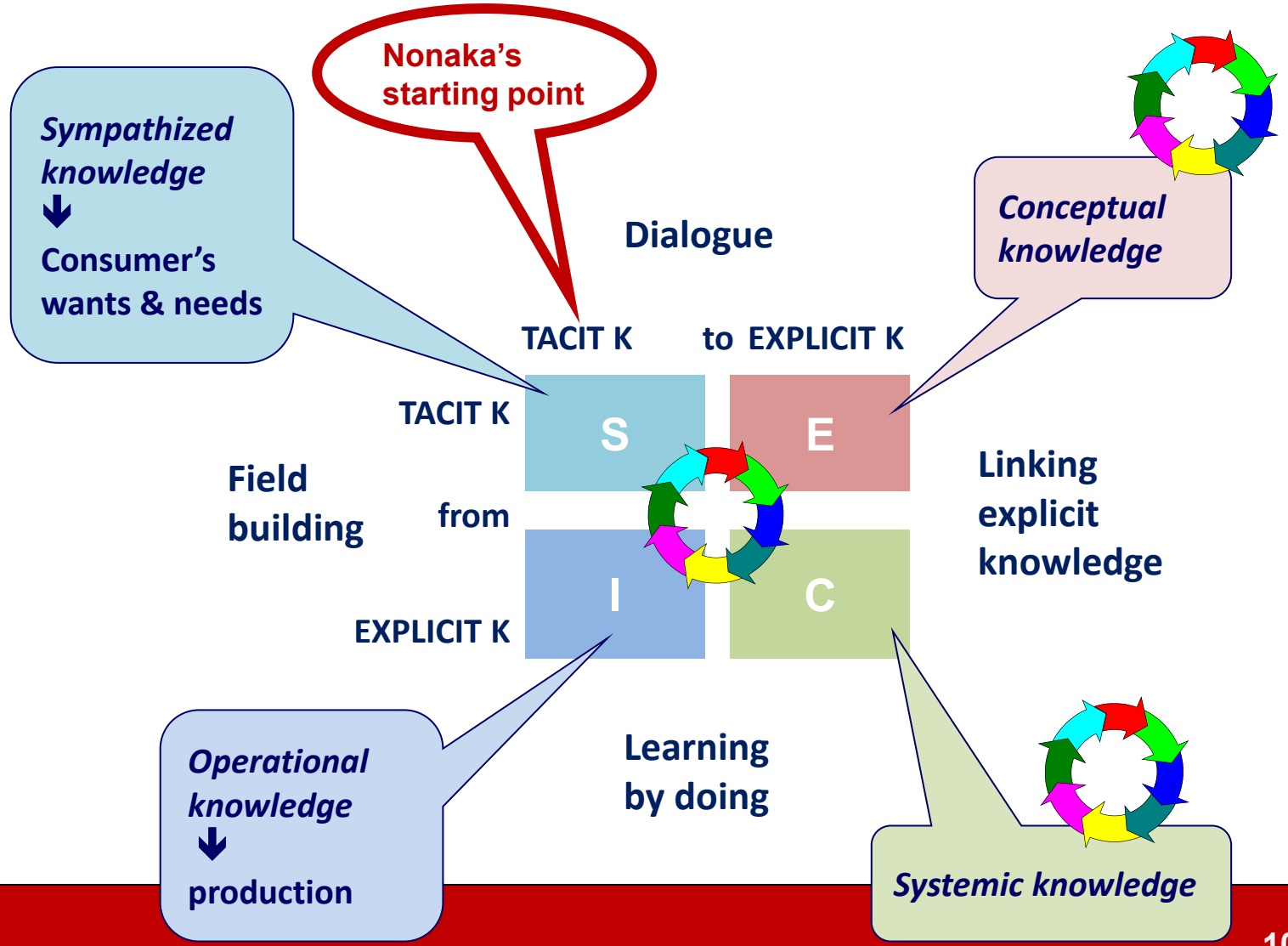
Codified = CD
Uncodified = UCD
Diffused = DF
Undiffused = UDF
Abstract = A
Concrete = CC



How do the models compare to analyse innovation related processes?

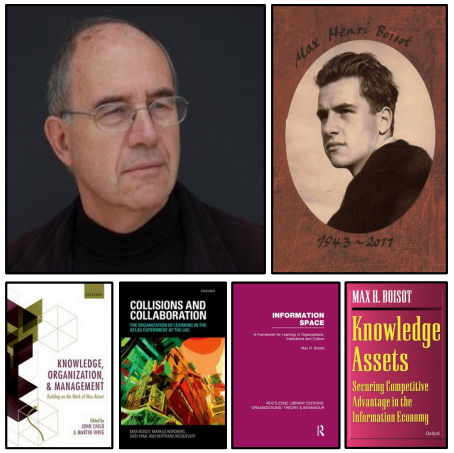


Codified = CD
Uncodified = UCD
Diffused = DF
Undiffused = UDF
Abstract = A
Concrete = CC



Key issues making Boisot's model more effective

- **The SECI process relates to knowledge articulation issues,**
  without considering all categories of knowledge proposed by Boisot,
  and *most notably the possibility for knowledge to be either codified*
  ***with abstract symbolic knowledge, or with concrete knowledge*.**
  The subsequent "social learning cycle" is affected by this important difference
  (*to be compared to the externalization and internalization phases in Nonaka's*).
- **The weak point in the SECI process is the notion of explicit knowledge,**
  (and its counterpart implicit knowledge
  that is more complex than the negative of explicit knowledge).
  Explicit knowledge can have either an abstract or concrete nature,
  thus leading to very different (managerial and cognitive) patterns
  ***explaining the combination phase*.**

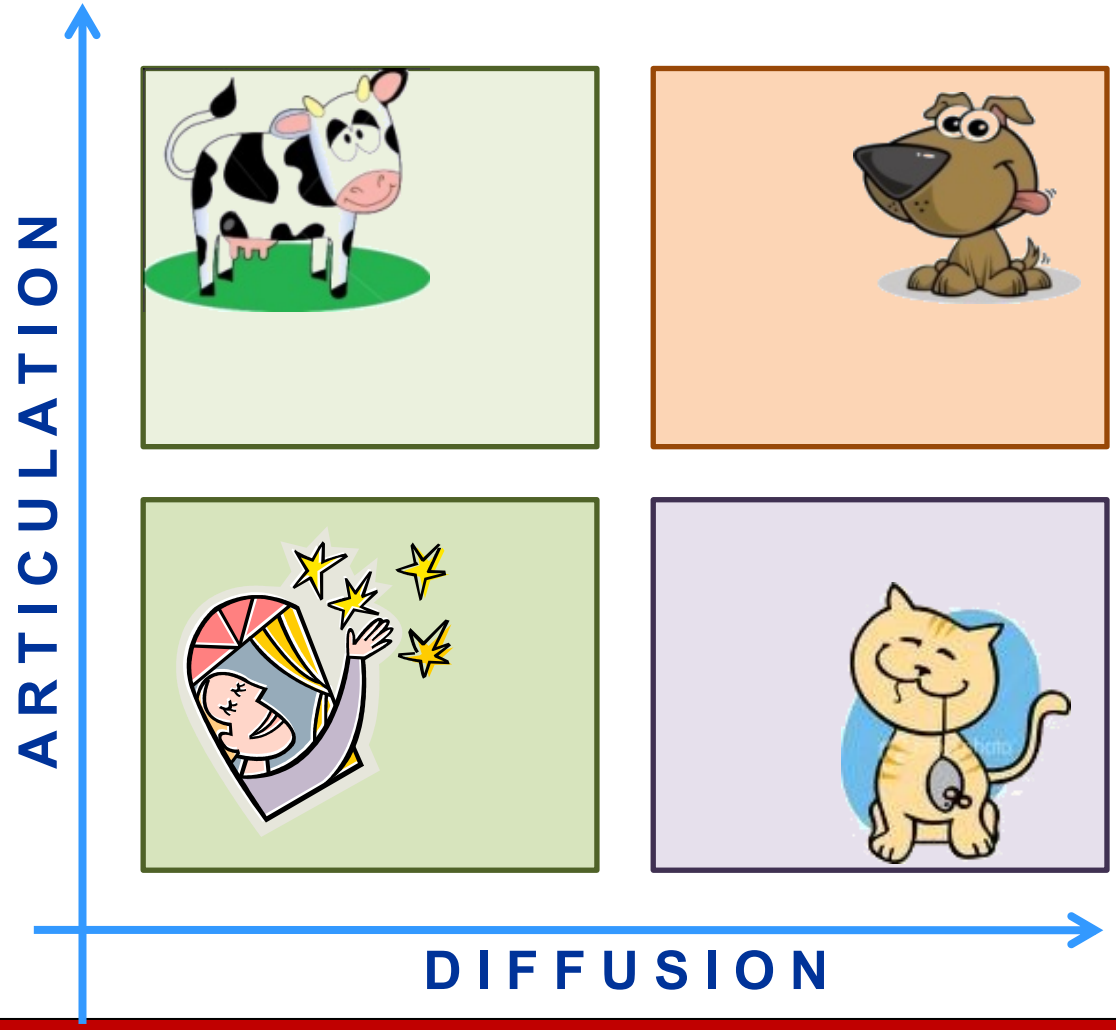


EURAM 2024

FROM THE I-SPACE FRAMEWORK TO STRATEGIC MAPPING OF KNOWLEDGE ASSETS

Knowledge “value”

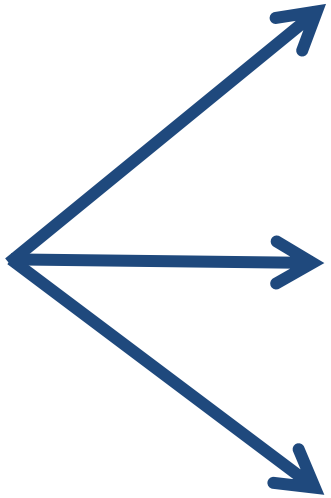
- **“Value” =**
  Articulation costs +
  Scarcity of Knowledge
- **When codification and abstraction increase, articulation costs decrease**
- **When the diffusion of K assets increases**
  knowldedge assets are not “distinctive” anymore



From the I-Space to Corporate strategy

I-SPACE INSTITUTE

3 categories of investigations



Investigation of DYNAMIC CAPABILITIES
Identification of core compétences, and translation into ad-hoc HR strategies

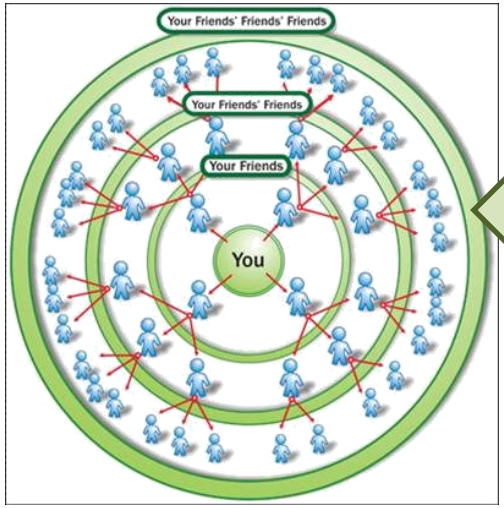
FRONTIERS of ORGANIZATIONS
Definition of in-house activities vs. externalization
Why? When? How? Underlying processes?

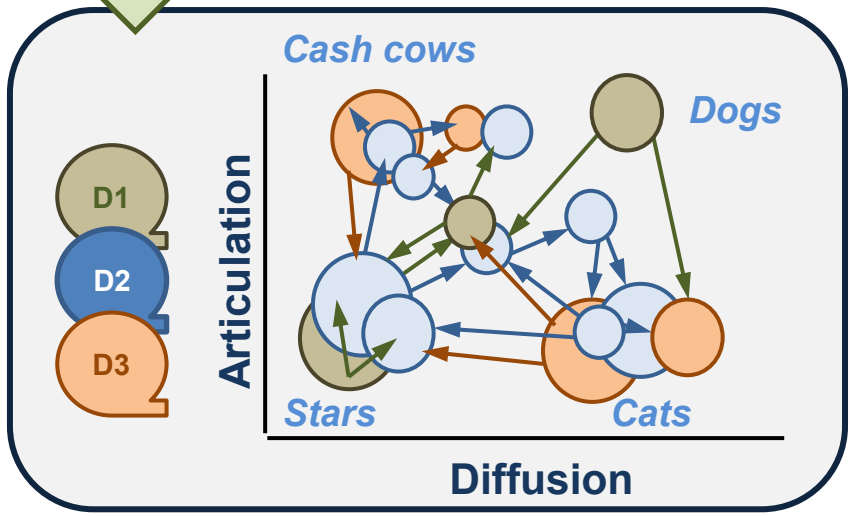
“BUSINESS GEOGRAPHY”
Investigation of distinctive intangible assets preparing a firm for competition and/ or cooperation, based on its distinctive assets and its dynamic capabilities

Codification towards knowledge mapping

- Internal and external “informants” respond to interviews or questionnaires to provide data about skills, individual competencies, collective competences, and the firm’s performance.
- Open question: boundaries of the network investigated when processing field research to collect data

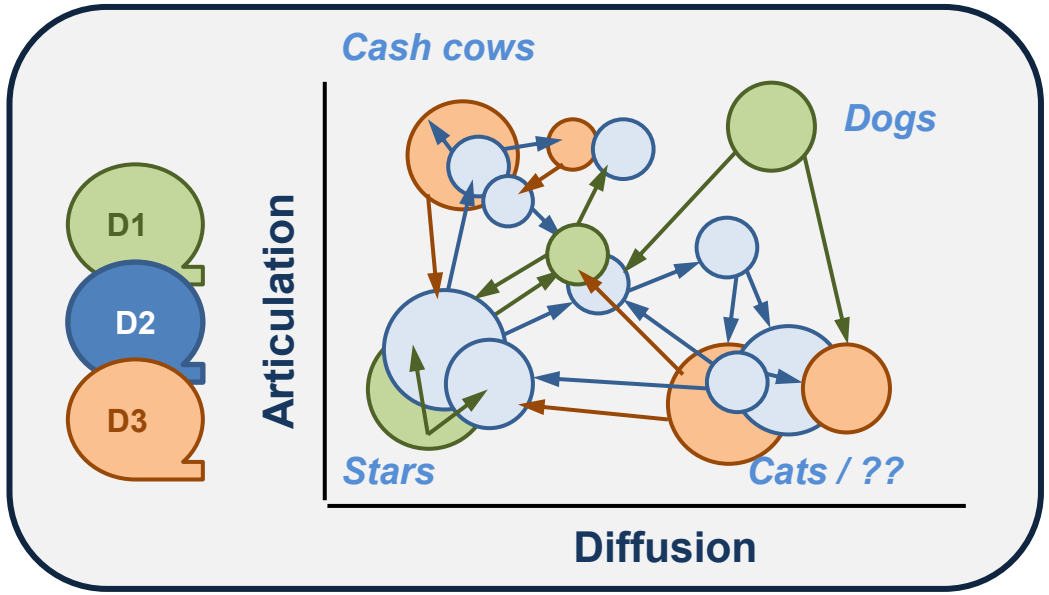
- Outcome of data collection: “knowledge maps”





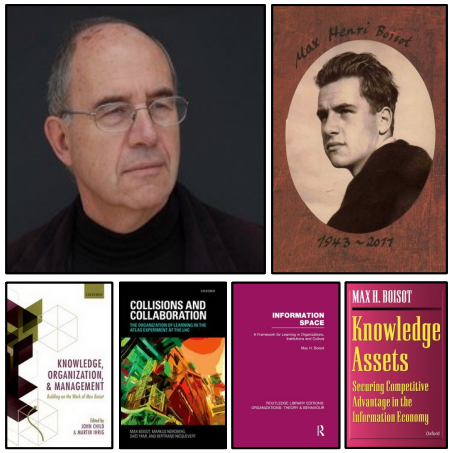
Knowledge mapping

- **D1, D2, D3, etc. represent either knowledge domains or business units, or partners in a network.**
- **Arrows materialize dependencies between knowledge assets: knowledge pictured at the origin of the arrow is required for activities related to the domain at the other end of the arrow.**
- **Circles materialize the importance of knowledge assets in the knowledge portfolio of the firm: diameters are either proportional to volumes of FTEs, or to knowledge "value" (thus, raising data codification issues)**



KEY TAKE AWAYS…

Key insights available from Boisot's research



- **Max H. Boisot explained that codification can both relate to abstract and concrete knowledge assets, thus, leading to very important managerial and cognitive perspectives for the articulation costs underlying socialization, internalization, and (on a different level) combination of knowledge assets.**

- **Boisot's taxonomy of knowledge provides an interesting framework to develop an analysis of the strategic value of knowledge, then leading to strategic knowledge mapping, thus, leading to expand the tools relevant for the appraisal of open innovation and of cooperative/ competitive learning in innovation**

KEY REFERENCES

Key publications by Max Boisot

- **Boisot (1995), *Information Space: A Framework for Learning in Organizations Institutions and Cultures*, London: Routledge**
- **Boisot (1998), *Knowledge Assets: Securing Competitive Advantage in the Information Economy*, Oxford: Oxford University Press**
- **Boisot, Nordberg, Yami and Nicquevert (2011), *Collision and collaborations: The organization of learning in the ATLAS experiment at the LHC* Oxford: Oxford University Press**

- **Boisot and Canals (2004), "Data, information and knowledge: How we got it right?" *Journal of Evolutionary Economics*, 14(1) pp 43-67,**

Other publications related to Max Boisot

- **Mérindol and Versailles (2020),**
  ***"Boudary spanners in the orchestration of resources: global-local complementarities in action"*, *European Management Review*, vol 17, pp 101-119**

- **Versailles and Mérindol (2020),**
  ***"Boundary objects as the missing link in the orchestration of resources: An exploration study of Dassault Aviation Mirage IV and Rafale programs"*, *Management International – International Management – Gestion Internacional*, 23(4), pp 102-117**

- **Versailles and Foss (2020),**
  "Unpacking the constituents of dynamic capabilities: a micro-foundations perspective"
  Management International – International Management – Gestion Internacional, 23(4), pp 18-29

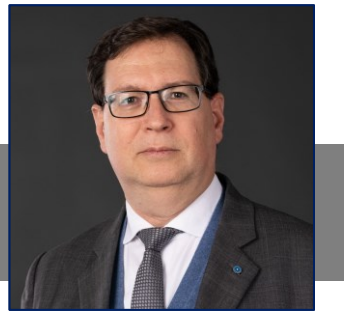
REFERENCES
CONTACT DETAILS

Valérie MERINDOL

- Dr pol sc., HDR management
- Ord. Professor, Paris School of Business
  Co-director, newPIC chair
- Founding partner, ISK Consulting SA (LUX)

- eMail vm@newpic.fr
- eMail vm@iskconsulting.net
- gsm +33-0-617 09 06 43 (Signal)
- fax +33-0-1 777 25 233
- twitter @VMerindol

David W. VERSAILLES



- Dr HDR, economics
- Ord. Professor, Paris School of Business
  Co-director, newPIC chair
- Visiting Ord. Prof., Luxembourg School of Business
- Founding partner, CEO, ISK Consulting SA (LUX)

- eMail dwv@newpic.fr
- eMail dwv@iskconsulting.net
- gsm +33-0-609 52 54 56 (Signal)
- gsm +352-0-671 01 21 58
- fax +352-0-246 11 255
- twitter @DwV13

© DWV & VM, 2023
pour PSB/newPIC