

PSE/CAPE paradigm transition towards “La pensée complexe” in a global world under pressure

addendum

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- In the following slides of the original presentation

Facing the global challenge

- **Come-on man, be rational!** (Descartes is watching me)
- Decision: Let's drop the personal introspection and keep the professional one
 - How can I incorporate global challenges in my professional activity?
 - Any problem has a **solution!**
 - I need to set **objectives!**
 - **Solution:** incorporate the three pillars of Sustainable Growth : economic, social, environmental in my activity

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- Slide 27: The integrative vision of sustainable development is a credit to pp. 25-30 of the book J.Y. Rossignol. *Complexité. Complexité. Fondamentaux à l'usage des étudiants et des professionnels.* EDP Sciences. 260 p. 2018.

Bifurcation starts with an insignificant event

- April 2014: workshop "Acting-Thinking in Complexity"
- Important notice: 'in' complexity rather than 'the' Complexity

	Descartes	Morin	LeMoigne	Avenier
In shu L.	Cogito ergo sum	limited complexity (complicated)	general complexity	Complexity
Approach	causality	Thinking 'in' complexity	Thinking 'in' complexity	Acting-Thinking 'in' complexity
Paradigm & Epistemology	rationalism	materialism	materialism	subjectivism
Example	my artefact	a plane	the mobility issue	Should I move?

- Constructivism:
 - Knowledge of reality is a human construct using science but also experience, intuition
 - La "pensée complexe" (Morin) / "Agir-Penser en complexité" (LeMoigne) / Avenier
 - Interdisciplinarity, subjectivity, path dependence, partiality and uncertainty
 - Principles: interaction, indeterminateness, non-organismality, non-rigidity, bifurcation, non-identity, emergence, delays, escape of action, self-organization, autoanalysis, no forecasting...
 - Other similar approach:
 - The "School of Palo Alto" on systemic and relational approach

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- Slide 37: the term 'subjective complexity' is a credit to J.Y. Rossignol (private communication) and not to J.L. Le Moigne or M.J. Avenier.