

#### « Trans » approaches: from myth to realities

#### Examples of applications in pedagogy



source: The World Bank, 2009, The Little Green Data Book 2009, Communications Development Incorporated, GLC 2000, elaboration

Credits: C. Cavalieri PhD 2012

World Population Growth: 2050





















#### **SUMMARY**

- Transdisciplinarity: founding actions and actualities
- Transdisciplinary and transpersonnal approaches
- Basarab Nicolescu's 3 axioms
- And also some others: Omega point of PT. Chardin, quadrants of Ken Wilber, schemes of René Barbier, Krishnamurti
- Florent Pasquier's circles and temples
- Questions and exemples of usefull practise

  In pedagogy (uses of ICT in éducation)
  In lansdcape management

#### Some of the founding actions:

- 1986: The Venice declaration. Science and the boundaries of knowledge

-1994: The First World Congress of Transdisciplinarity, Convento da Arrábida, Portugal, 2-6 November. The *Charter of Transdisciplinarity was adopted* http://ciret-transdisciplinarity.org/chart.php#en

- -1996: Basarab Nicolescu published the *Manifesto of Transdisciplinarity* in French: *La transdisciplinarité*, manifeste, Rocher, Monaco, 1996.
- 1997: Mario Botta, « The Academy of Architecture: a New Transdisciplinary Experiment », Locarno Congress « What University for Tomorrow? Towards a Transdisciplinary Evolution of the University », Locarno, Switzerland, <a href="http://ciret-transdisciplinarity.org/bulletin/b11.php">http://ciret-transdisciplinarity.org/bulletin/b11.php</a>
- 2002: translation of the *Manifesto of Transdisciplinarity* in English (USA).

#### - 2011:

URBAN AND LANDSCAPE PERSPECTIVES

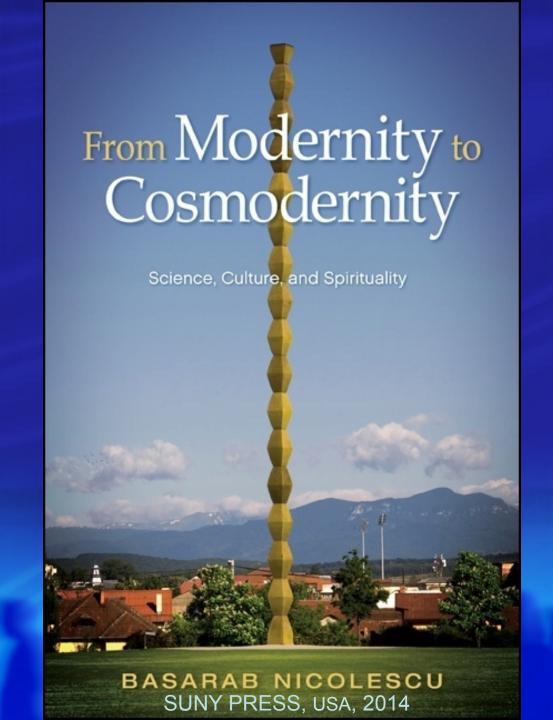


Isabelle Doucet · Nel Janssens (Eds.)

Transdisciplinary
Knowledge Production
in Architecture and
Urbanism

Towards Hybrid Modes of Inquiry





#### Actualities of transdisciplinarity:

#### Congres and lectures in

- Roumania
- Japon
- Portugal
- Brazil
- Mexico (Ciret 2020)
- ...

#### Institutions

- Research centers
- Medecine
- ...



« Transdisciplinarity » is a word popularized in 1970 by Jean Piaget, biologist, psychologist, logician and epistemologist (Switzerland 1896-1980)

#### **DEFINITIONS:**

PLURIDISCIPLINARITY or MULTIDISCIPLINARITY: studying a research topic not in just one discipline but in several at the same time

INTERDISCIPLINARITY: transfering of methods from one discipline to another

TRANSDISCIPLINARITY: studying what is at once between the disciplines, across the different disciplines, and beyond all disciplines (the consciousness)

## The goal is to understand and act in the present world.

(UNDERSTAND KNOWLEDGE & BEING).

The finality is to unify knowledge.

This path restores the dignity and importance of each human being

Transdisciplinarity is the study of the <a href="interaction">interaction</a> of « Object » and « Subject »

It creates new forms of knowledge

**Following Basarab's thoughts: REASON WHY A TRANSDISCIPLINARITY APPROACH IS TODAY NOT ONLY REALISTIC BUT ALSO NECESSARY** 





## An unprecedent increase of knowledge

Number of academic disciplines, specializations

**1300:** 7

**1950: 54** 

**1975: 1845** 

2014: > 8000

National Register of Scientific and Technical Personnel, National Science Foundation (NSF) archives, USA, 200@

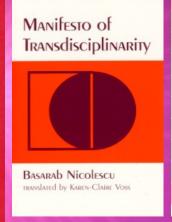


## 2014: > 8000 disciplines and specializations

This means: an EXPERT in 1 discipline Is IGNORANT in 7999 other disciplines

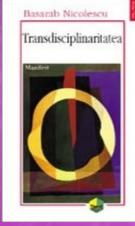
So how could s/he make a realistic and practicable decision?















# The METHODOLOGY OF TRANSDISCIPLINARITY

Manifiesto BASARAB MICOLESCU is based on 3 axioms

1. The epistemological axiom

2. The logical axiom

3. The ontological axiom

O Manifesto da Transdisciplinaridade

Thèse axioms provide a definition

of transdisciplinarity

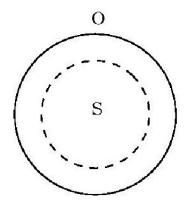
### 1) THE EPISTEMOLOGICAL AXIOM



## It follows the evolution from Pre-Modernity to Cosmodernity in 4 periods:

1

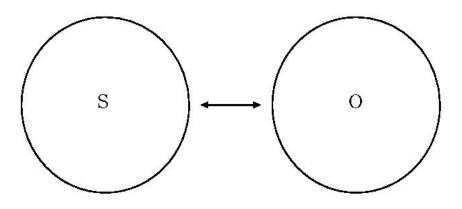
Pre-Modernity



S = subject, O = object

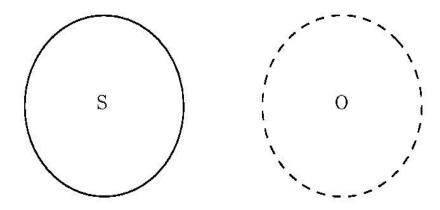
2

#### Modernity



$$S = subject, O = object$$

Post-Modernity

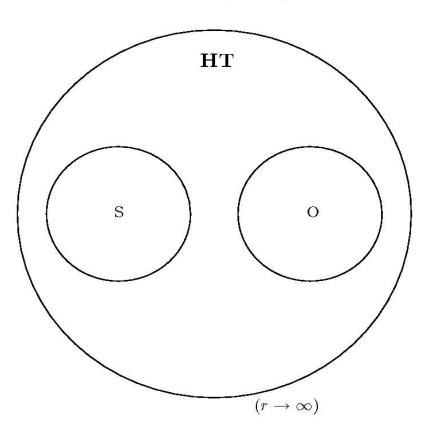


$$S = subject, O = object$$

#### Cosmodernity

Transdisciplinarity

4



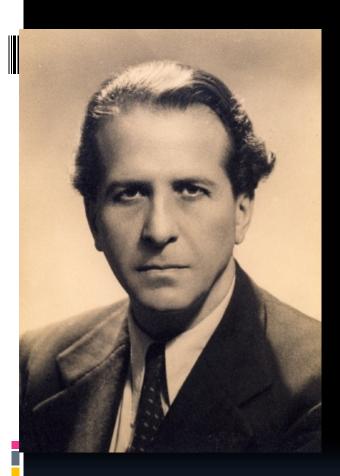
S = subject, O = object, HT = Hidden Third

### 2) THE LOGICAL AXIOM

The structure of the world contains many levels of reality. We perceive them as a complex structure.

Every level is what it is because all the levels exist at the same time

The passage from one level of Reality to another is insured by the logic of the included middle (Stéphane Lupasco, philosopher, 1900-1988)



Stéphane Lupasco (1900 – 1988)



Le principe d'antagonisme et la logique de l'énergie, 1951

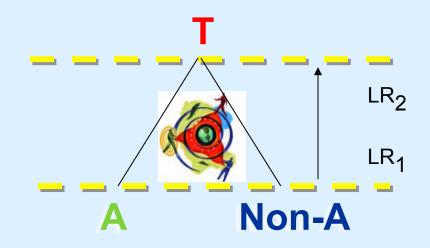
#### Definition of the included middle

There exists a third term

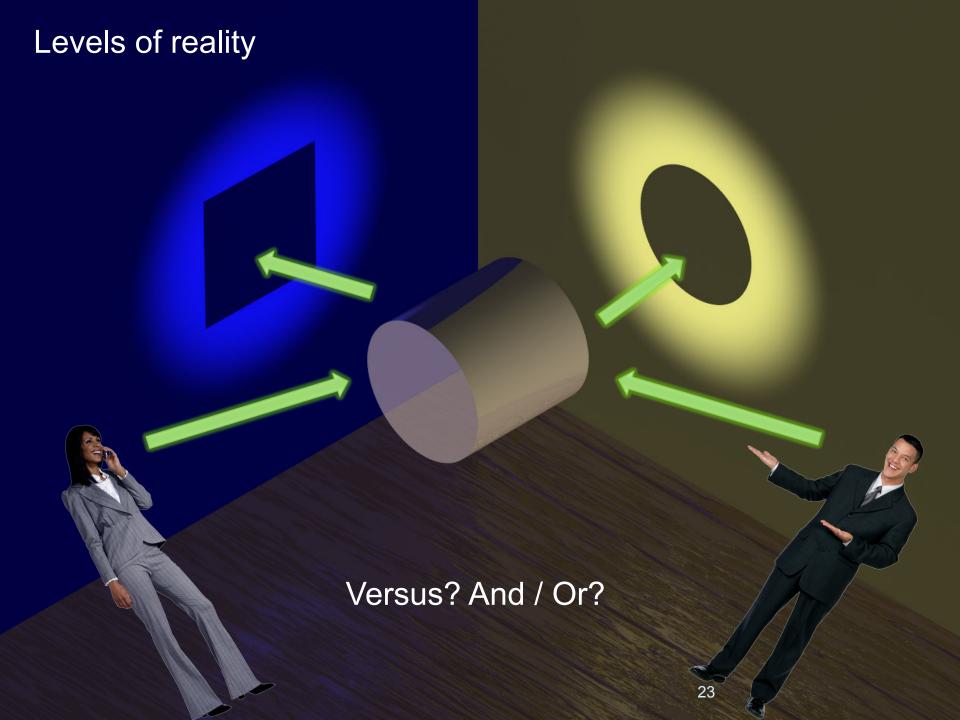
«T»

which is at the same time

«A» & «Non-A»



(symbolic representation of the action of the included middle logic)



# 3) THE ONTOLOGICAL AXIOM OF TRANSDISCIPLINARITY

There are different levels of Reality of the Object and, correspondingly, different levels of Reality of the Subject

#### **REALITY**

This is what resists...



- our representations
- our descriptions
- our images
- our mathematical formulations

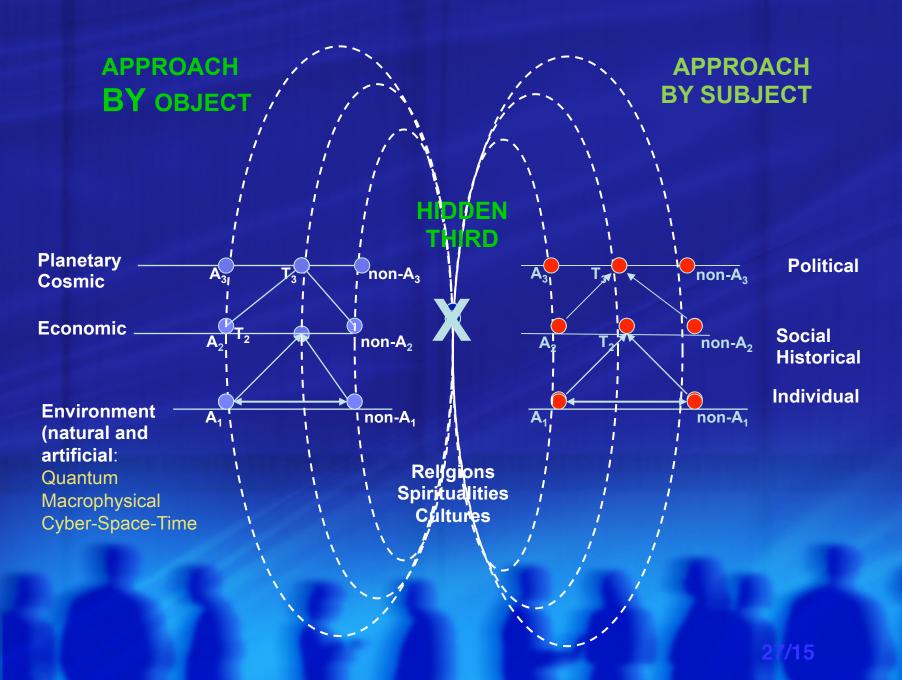


# REALITY Is accessible to our knowledge in a trans-subjective dimension



# THE REAL Is what has remained veiled for ever (until now!)

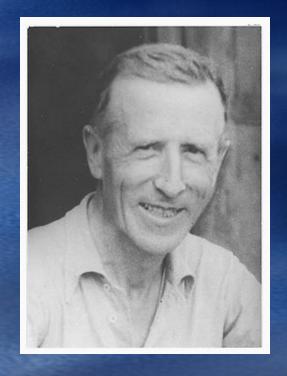
#### **TRANSREALITY**



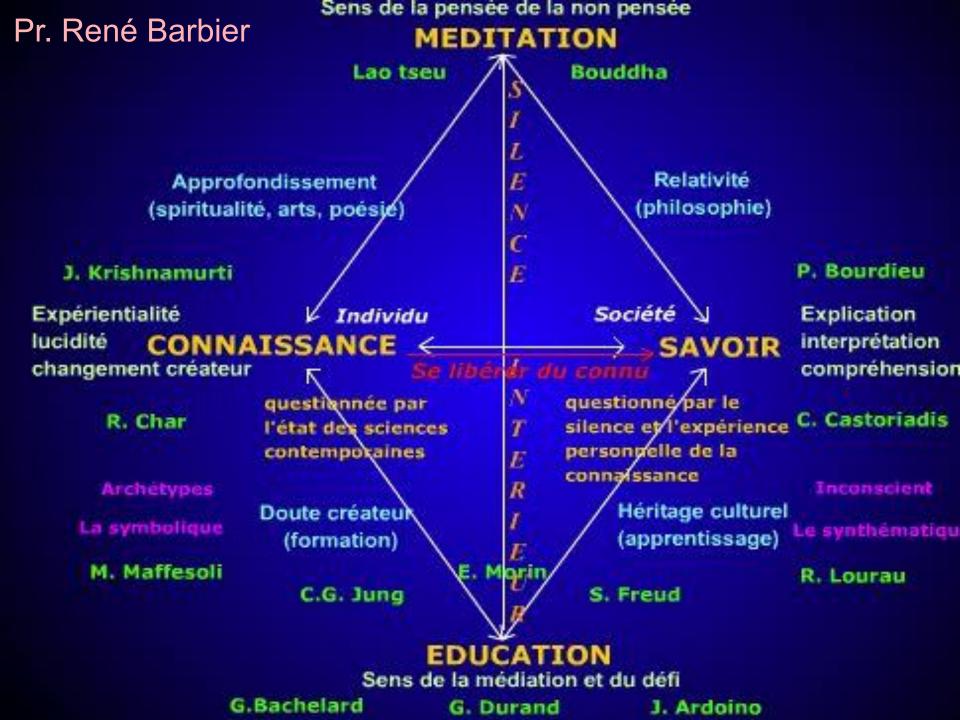
## Unit of Spirit The end of the physical universe Man Unit of Thought Unit of Life PSYCHIC TEMPERATURE COMPLEXITY WITHINNESS TIME Unit of Matter Unit of Energy The begin of the physical universe De Process of convergence and divergence

E fe Bioien of E eiffart te Chartin

## Pierre Theillard de Chardin (1881-1955)

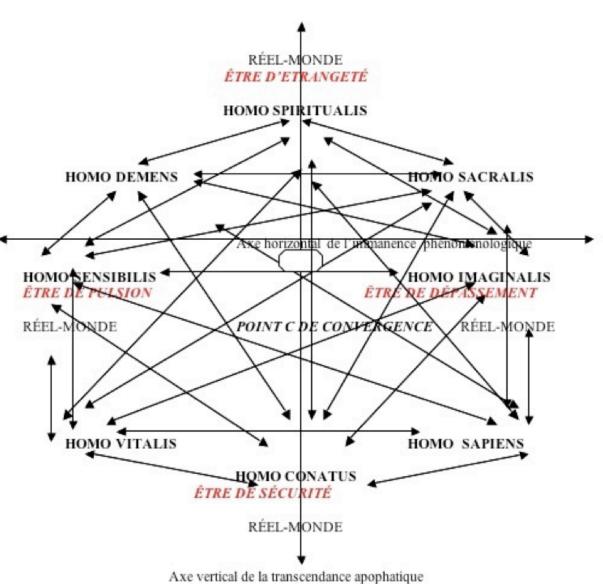






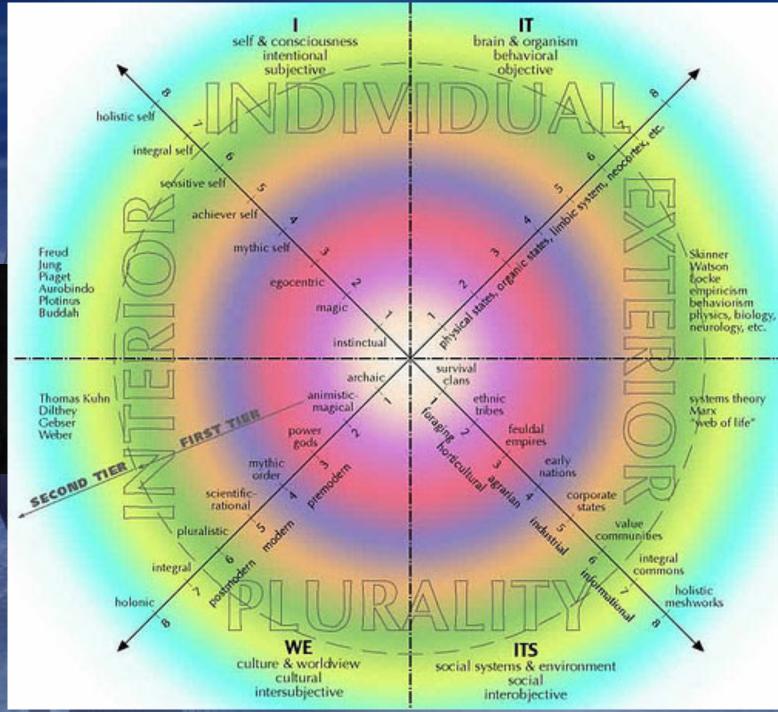
#### L'HOMO COMPLEXUS 2 En approche transversale

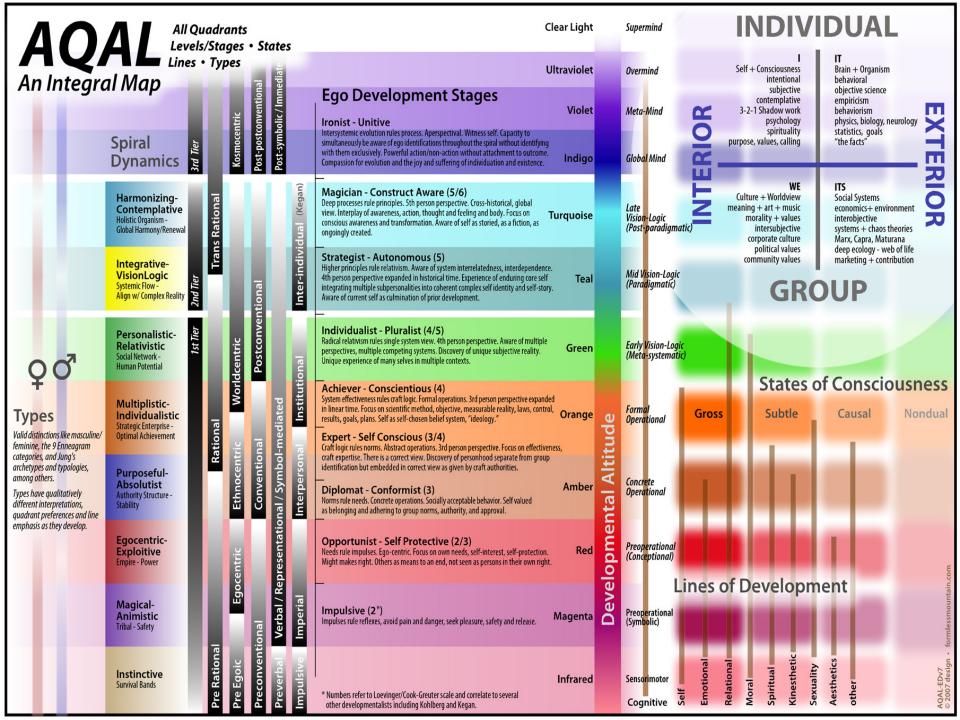
©René Barbier juin 2013'



THE
SYSTEM
OF
QUADRANTS
BY
KEN
WILBER

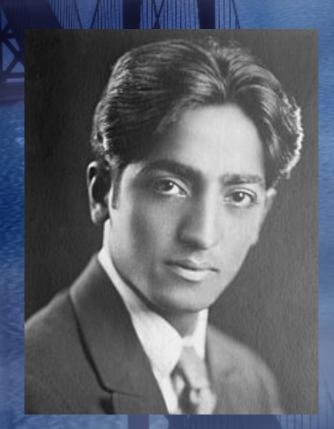


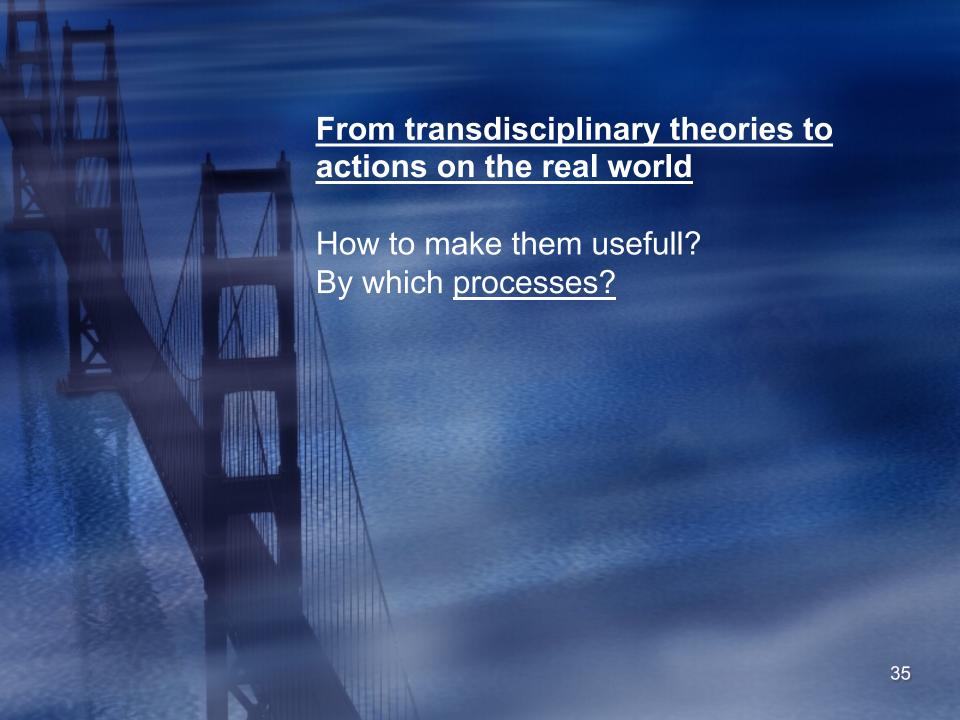




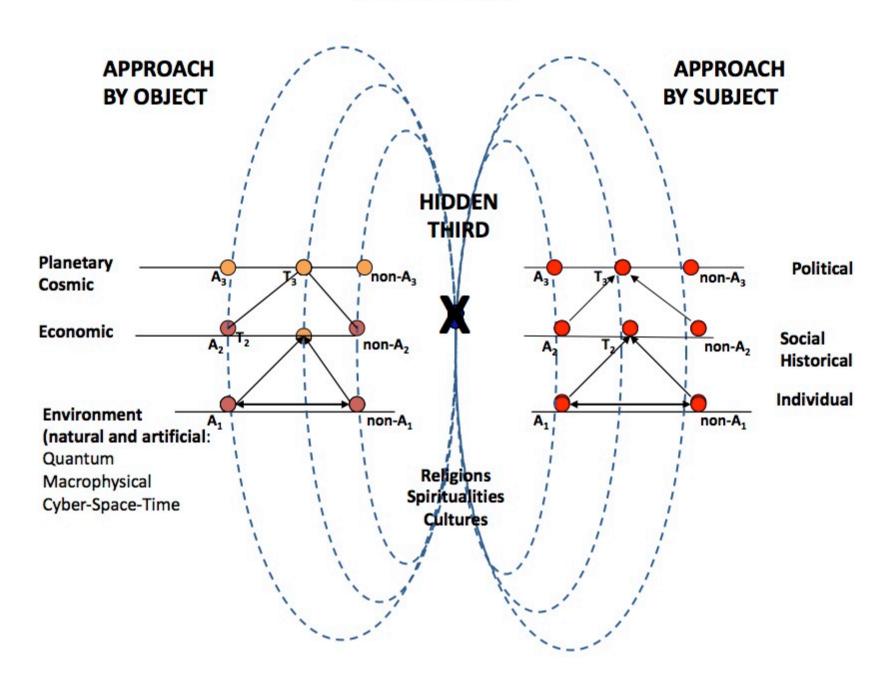
A last point of view, offered by the non dual approach proposed especially by the philosopher, psychologist, teacher Jiddhu Krishnamurti (India, 1895-1986):

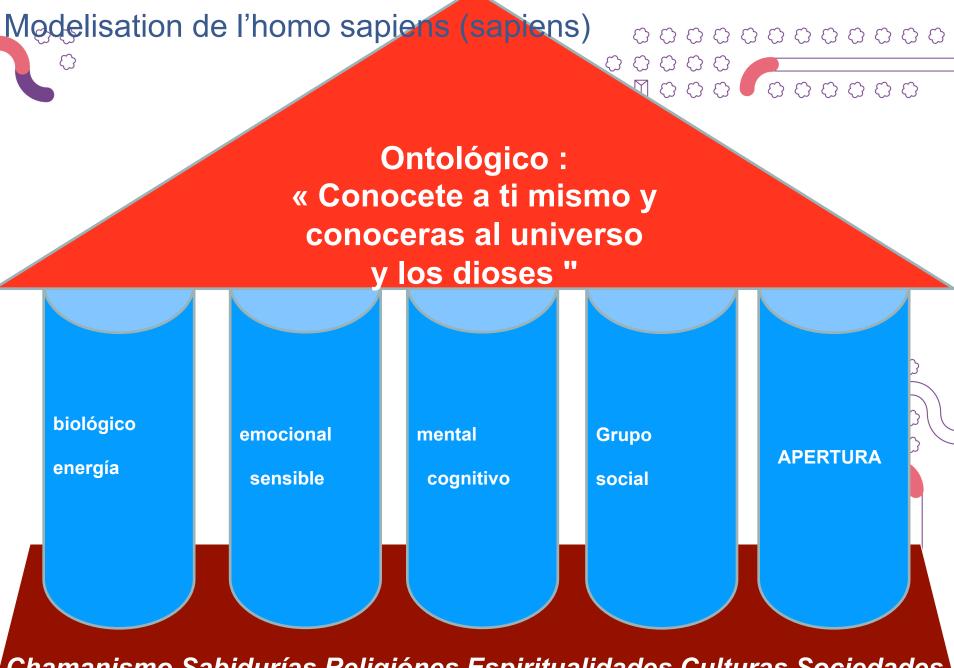
« the observator is the observed »...





#### TRANSREALITY



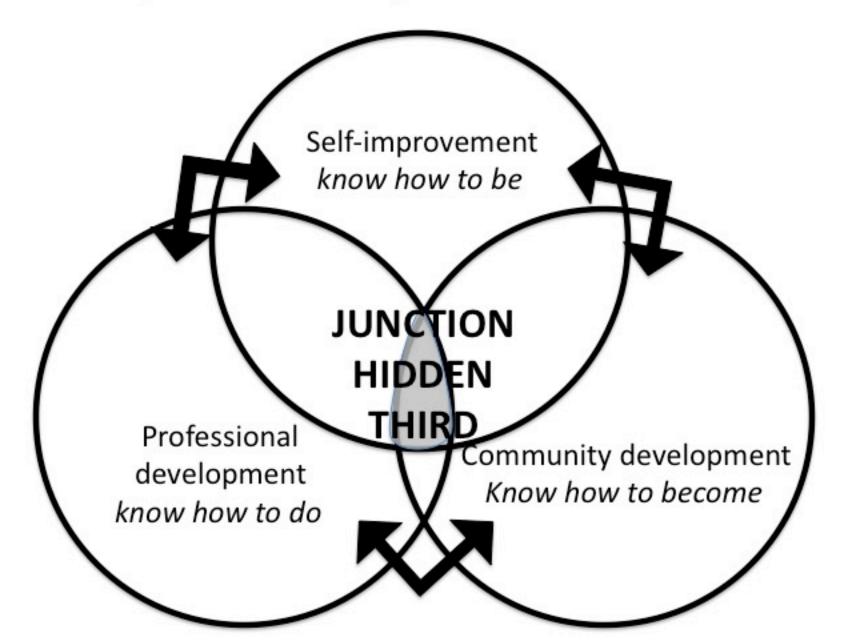


Chamanismo Sabidurías Religiónes Espiritualidades Culturas Sociedades

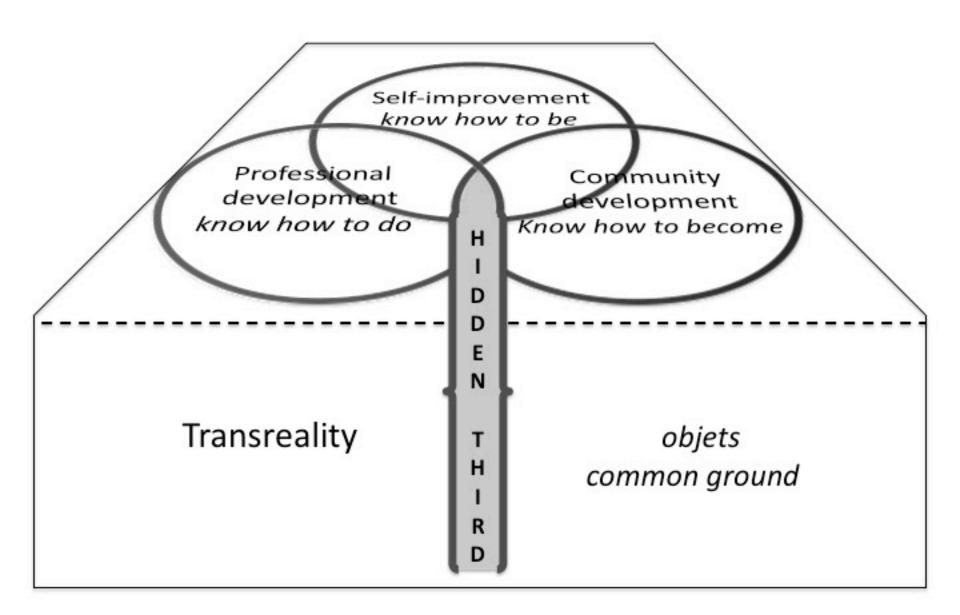
## Complex thinking: the fractal dimensions of human being Ontologique

Gaïa (écologie)		Ontologique		Noosphère
Transfiguration	Monde invisible (esprits)	Dissolution du « moi »	Lois universelles	Transcendance
Corps de lumière	Perceptions extra-sensorielles	Sentiment océanique	Formes-pensées Egrégore	Immanence
Corps archétypal (« parfait »)	Thérapies	Equanimité	Fraternité	Axiologique (Post-) Métaphysique
Vêtements Accessoires	Trans- générationnel	Intelligence collective	Groupal Social	Spiritualité
Mémoire cellulaire	Arts	Cognitif Mental	Langage	Neurosciences
Corps astral Chakras	Emotionnel Sensible	Psychée	Morale	Supramental
Biologique Energétique	Tantra yoga Nidra yoga	Neurobiologie	Petite histoire de la personne	
Physiologie Génétique Homo Chamanisme	Rapport à la nature	Culture et tradition	resituée dans la Grande Histoire	Religion et sagesse
sapiens Taoïsme	Paganisme			Sciences humaines
(sapiens)	,	Anthropologique	:	Trans/Post-humanisme

#### Multiple levels of development and the Hidden Third



#### Multiple levels of development and link with Transreality



## About artefacts/performances as tools/media for practices in transdisciplinary research:

Does the crossing of arts, sciences and digital technology can play a role on it?

Probably, but there is no just one definitive answer (we already knew it in such case)

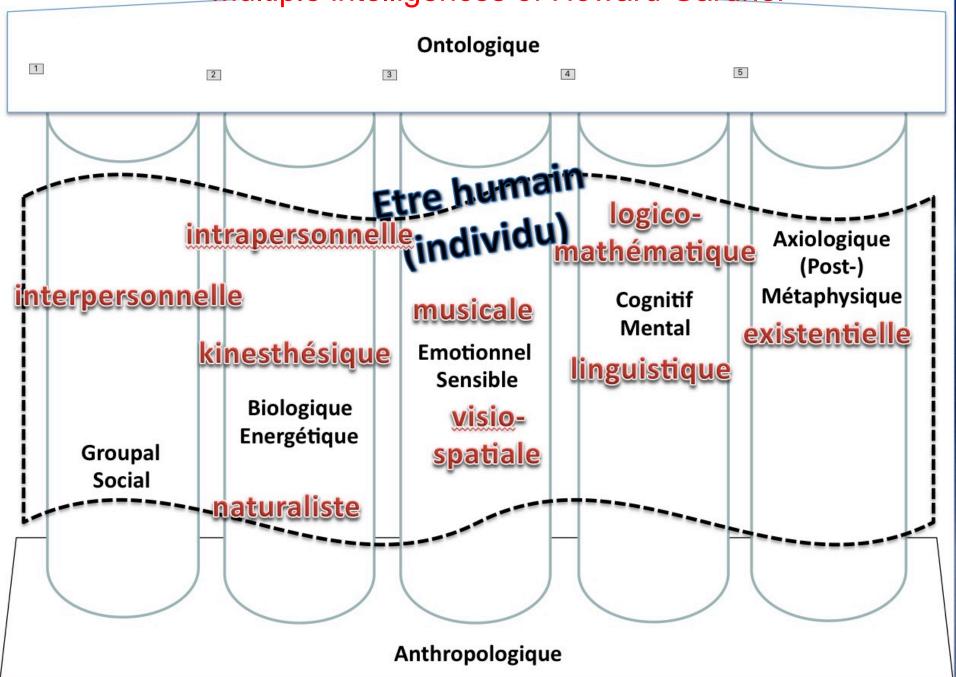
It is the goal to everyone to find the more accurate personal way and actions to answer those question (as for the quest of the holy graal)

The proposition of the temple with 7 dimensions could be a starting point for this kind of research. It might be usefull as well for the subjects than for the objects (as subjet = objet)

It might be adapted from/to the situation/position of each searcher/practitionner in order to create/found/developp particular/singular suitable activities.



Multiple intelligences of Howard Gardner



## Approach by facts objects and activities: sciences, disciplines et transversality

#### **Ontological dimension**

Improvisation dances	Humanism	Philosophy	Core Norm	Consciousness
Dance of character	Music Plastic Arts	Communication Civism	Legal Ethics	Axiology Cosmodernity
Physic games	Collectives creations	Collective games	Society, Group membership	Transpersonal
Quietness	Introspection Biographical story	Cognitive functions Mind	Transversality Language	Transdisciplinarity
Relaxation	Emotions Sensibility	Sciences Psychology	Theatre	Gnosis Metapsychim
Biology Energy Yoga	Productions Craft Patterns	Breeding Culture	Public and group dances	Religion studies

**Anthropological dimension** 

### Approach by places, pedagogies and didactics

#### Ontologie

	Shanga	Méditation	Phosphénisme	Quotient intellectuel	Quotient spirituel
	Dojo	Créativité Improvisation en pédagogie	Pédagogie de projet	Tutorat, Socio- constructivisme, Cours magistral	Axiologique (Post) Métaphysique
	Préau	Quotient émotionnel	Improvisation Co-éducation	Groupal Social	Sociocratie Holacratie
	Concentration	Soin (« care »)	Cognitif Mental	Enseignements pratiques interdisciplinaires	Remédiation
	Yoga	Emotionnel Sensible	Auto-évaluation	Co-évaluation	Quotient de conscience
	Biologique Energétique Exercices physiques (EPS)	Hypersensibilité ou perte de sensation du corps (la « zone »)	Travail Personnalisé Individualisation	Classe Transplantée : mer, montagne, campagne Organisation physique de la classe	Intuition en pédagogie
Anthropologie					

#### Approach with digital tools

(Informatique céleste, Alizart, 2017)

Technontologies

Qualités « divines » d'internet (Yahoo = Yahvé) : immortalité (webarchive), ubiquité (multiserveurs, worldwide), instantanéité. Qualités « divines » permises par l'usage d'internet (abolition du temps et de l'espace) : omniscience, omniprésence, omnipotence.

Transhumanisme	Réalité virtuelle	Intelligence Artificielle (deep learning)	Open source	Anomalous Telecommunication Experiences
Homme augmenté (implants)	Réalité augmentée	Stimulations neuronales	Outils de la république numérique	Axiologique (Post-) Métaphysique
Homme	Objets	Cartes	Groupal	VPN
connecté	connectés	mentales Fab Lab	Social	
Lunettes-c	asque de	Cognitif	Mooc, FAD,	Big Data
stimulations	sensorielles	Mental	ENT, DDL	Fact checking
Chi machine	Emotionnel	Serious	Pétitions	Système
Matelas <u>Bemer</u>	Sensible	Games	en ligne	expert
Biologique Energétique Dispositifs tactiles ByBeflow Caisson isolat	Production multimédia artistique	Activités assistées (conception, imprimantes 3D) Lunettes 3D	Infrastructures (Arpanet, Renater, wifi, lifi)	Robotique (intra et extra corporelles) Robots (prêtres japon, Allemagne; conjoints)

Anthropologique Gafa, darkweb, blockchain

## Genesis and position of an integrative and implicative pedagogy (P2i) Des connaissances au savoir d'expérience (Artaud, 1981)





## ○ ○ Another exemple of application: «transformation workshops»

À paraître en janvier 2017



## Réinvestir l'Humain Individus, collectifs, sociétés Bruno Mattéi Germain Buffeteau Antoine Valabregue José Dhers Florent Pasquier Chronique Sociale

Il y aurait assurément plusieurs façons d'envisager les transformations d'un monde en mutation placé devant des défis de sens et de survie. Vous trouverez dans cet ouvrage cinq approches, issues d'un atelier au long cours, de transformations conjuguées: personnelles, collectives et

Cet essai théorique et pratique témoigne de germes de prise conscience de ce que chaque individualité et chaque collectif peuvent apporter dans leurs rapports à eux-mêmes, aux autres et au monde, devenant ainsi acteur-accoucheur de notre humanité en gestation.

Nous faisons l'hypothèse de l'importance de partir d'un point commun d'humanité, de faire des pas de côtés, pour mieux ajuster, par des dialogues féconds récurrents, les inévitables tensions. Nous proposons une exploration concrète, sensible et conceptuelle sur la nécessité d'une fraternité universelle avec des exercices et des expériences que chacun pourra pratiquer et vivre selon ses dispositions et visées propres. 99

#### Les auteurs

- Bruno Mattéi, professeur de philosophie honoraire, philosophe nomade. Anime, en France, des Ateliers de
- Germain Buffeteau, technicien et militant associatif, cherche à promouvoir l'idée d'un point commun d'humanité comme facteur de cohésion et de renouvellement social.
- Antoine Valabregue, pédagogue, intervient sur les questions de cohérence, d'adéquation et de justesse dans tous les milieux, quelque soit le niveau de désaccord.
- José Dhers, professionnel du développement social et urbain, spécialiste de l'intervention sociale d'Intérêt collec-
- Florent Pasquier, enseignant-chercheur en Sciences de l'Education, étudie les modalités d'appropriation du pouvoir de transmettre, d'apprendre et d'agir.

#### Ouvrage disponible à parution en librairie

À défaut, notre site Internet ou par correspondance

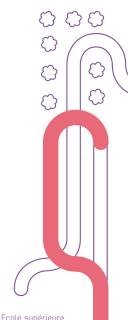
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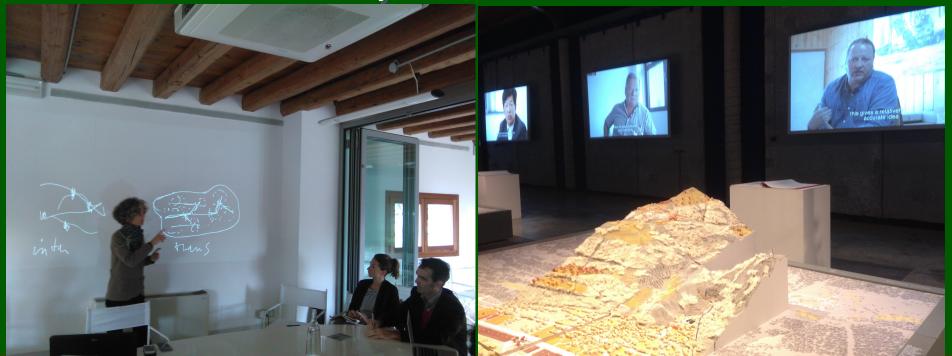
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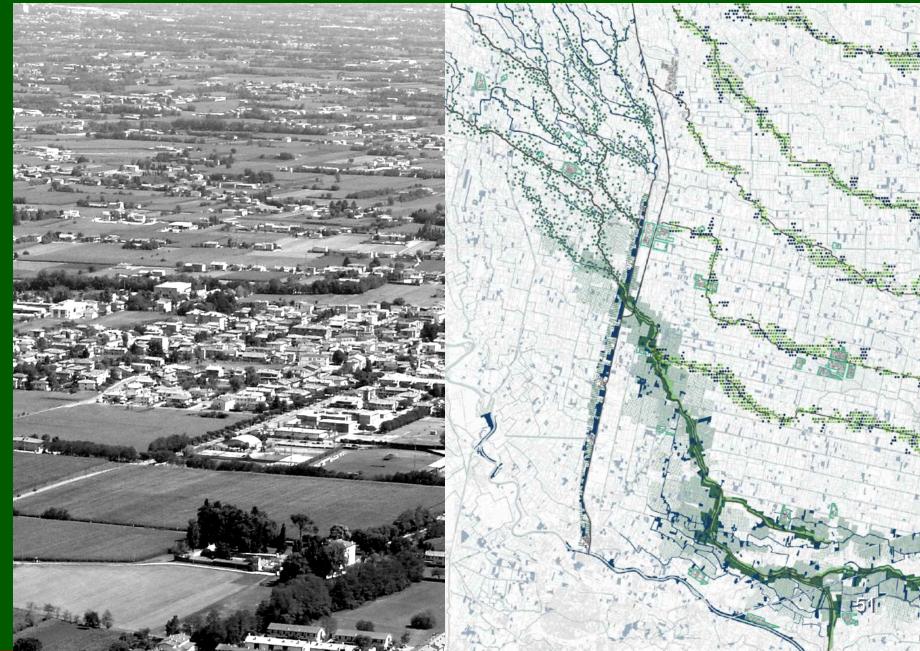


## SOME TOPICS DISCUSSED AT VENICE BIENNALE (October 23, 2016, close to the exhibit)

Pr. Paola Vigano (Italia/Swiss).
The question of the unity of disciplines; of the direction:
non linearity and non determinism

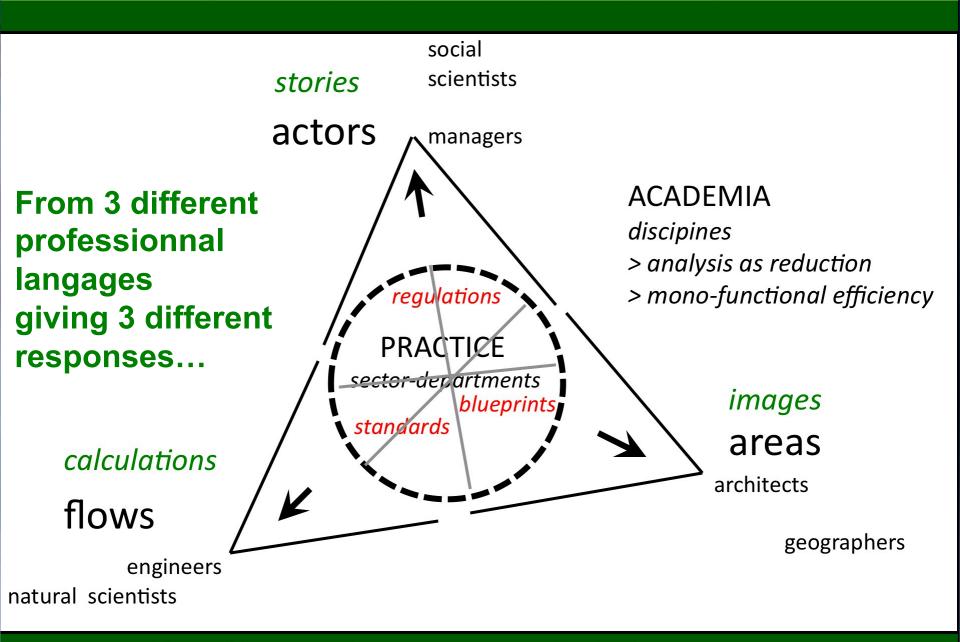


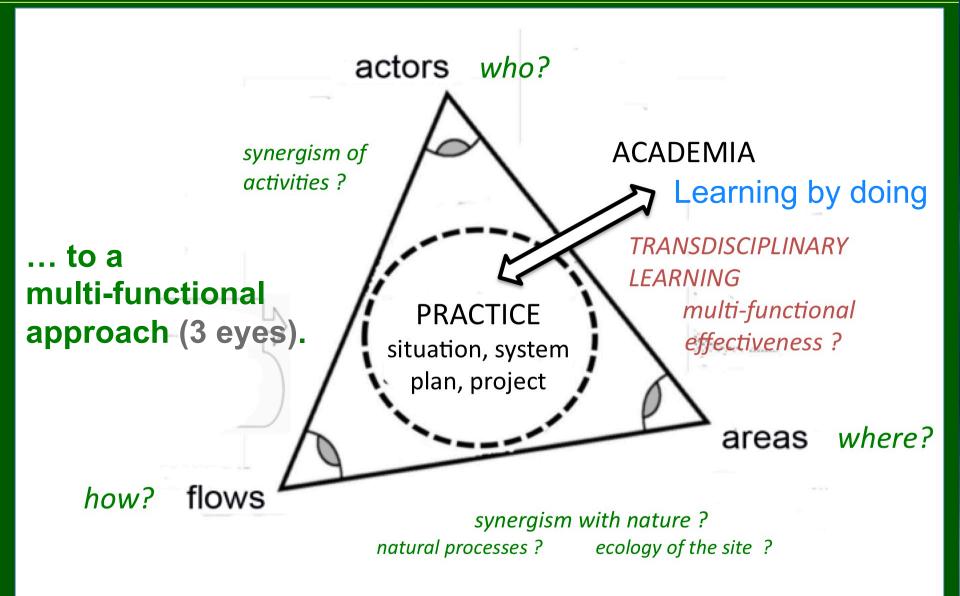
Synergism between Landscape Ecology and Socio-economic development (PADOVA, Italy) : flows problems (traffic, water, storage...)



## Pr. Sybrand Tjallingii (Nederlands) "Can we change the way?"

- 1. The *Horizontal Metropolis* is a low density, green and multi-functional urban landscape. It has both urban and rural qualities. The threat is up-scaling of industry, agriculture and traffic, but the opportunity is its great potential of combining landscape ecology, physical, social and economic development: seeking *synergism*.
- 2. Transdisciplinary learning is essential for exploring synergism. Disciplines speak different languages: images (architects), calculations (engineers) or stories (managers). Interdisciplinarity and theory do not solve this but practice does. Therefore we need transdisciplinary learning that includes practice and pilot projects.
- 3. In the Veneto *città diffusa* the concepts of horizontal metropolis and transdisciplinary learning may help us planners and designers of the urban landscape to find meaningful roles in the process of urban development.





# Towards some conclusions • Danger of just transhumanism without

- consciousnessFeed our live on the direction where we want
- to progress (don't stay sticked into the past)Questions of attention and empathy (buen
- Questions of attention and empathy (buen vivir)
- From being subject to being actor of our lives
- Observe, create, take inspiration from this congress and the meetings we will have.

## Short Bibliography

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- Susan Rowland, Remembering Dionysus Revisioning Psychology and Literature in C. G. Jung and James Hillman, Routledge, London and New York, 2016.
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- Systems Research and Behavioral Science. « A Transdisciplinary Learning Approach to Foster Convergence of Design, Science and Deliberation in Urban and Regional Planning ».
   Daniel B. Muller, Sybrand P. Tjallingii and Kees J. Canters.
- ♦ Basarab Nicolescu, Manifesto of Transdisciplinarity, New York, SUNY Press, 2002.
- Internet site of the International Center for Transdisciplinary Research (CIRET): http://ciret-transdisciplinarity.org/index.php

