TheATLAS

To be or Not to be Transdisciplinary, That is the New Question. So, How to be Transdisciplinary?

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Centuries ago Hamlet, the famous character, asked himself a similar question. We now have to deal with the actualization of this fundamental ontological issue: "how to be" (or how not to be). Why. The difference is that in ancient times, humanity could have a long-term vision of its development (the planet earth was mostly unknown by Europeans). This is a vision we dont have anymore, as the anthropocentric period will collapse soon if humanity does not change its beliefs and way of life. Where. Since Shakespeare, the world has become a small village through globalization and the increase of all kinds of networks. So the question still remains valid anywhere on our planet, and even in outer space, where some futurologists plan a possible (and non-sensical) human extension. Propositions to discuss. We should try to answer this question by beginning here and now, as sciences and the worlds traditional wisdoms agree that all issues start from the inner self of each human being. So we have to increase knowledge by conducting research both in human sciences (philosophical and

practical) and fundamental sciences (theoretical and applied). How. Certainly, each one of us tries to be a good human being... but we also must not forget that we are not alone, which means we also have to learn how to live better all together. This brings us to translate the question from just a personal position (point of view) and instead in its collective and social dimension. It means the whole thing might become a question of education: we probably have to (re)-invent a new pedagogy. It should include: transdisciplinary approach, complex thinking process, transpersonal psychology, soft skills, consciousness, spirituality (not to be confused with religion) etc. The use of (always) new technologies must be part of this investigation, as they can increase our awareness and consciousness, creating a new field called technontologies (i.e. technics + ontology). Then, we will approach a transdisciplinary paradigm for our personal and collective lives, for a future of hope and fair sharing of the only planet we collectively need to take care of. Therefore we need work together to find the answer to this question:

"how to be transdisciplinary"?

Keywords: Being transdisciplinary, subjects and objects, how to be transdisciplinary, transreality, axioms of transdisciplinarity, levels of Reality, Hidden Third.

Centuries ago Hamlet, the famous character, asked himself a similar question. We now have to deal with the actualization of this ontological and fundamental issue: be and how to be (or how not to be).

The dierence is that in those ancient times, humanity could have a long- term vision of its development (the planet earth was mostly unknown by Eu- ropeans). This is a vision that we do not have any more, as the anthropocene period will lead to a collapse soon if humanity does not change its beliefs and way of life.

In contrast to Shakespeares time, the world has become now a small village through globalization and countless networks. So the question still remains valid anywhere on our planet, and even in outer space, where some futurologists plan a possible (and non-sensical) human extension.

We should try to answer this question by beginning here (and now), as the world's traditional wisdoms agree that all issues start from the inner self of each human being. So we have to increase knowledge by conducting research both in human sciences (related to subjects) and fundamental sciences (related to objects).

Certainly, each one of us tries to be a good human being, but we also must not forget that, as we are not alone, we have to learn how to live all together. This brings us to ask the question "*How to be transdisciplinary*" from not just a personal position, but a collective and social dimension.

We proceed in this way by starting with the diagram of "Transreality"[1] (see Figure 1). In agreement with the three axioms of transdisciplinarity,[2] the Hidden Third[3] appears as the interaction of Subject and Object, each constituted from different levels of Reality. We can go from one level of Reality to another level of Reality by using the logic of the included middle,[4] but this passing crosses the region of the Hidden Third. In the diagram of Transreality we therefore see the entanglement between the logical included middle and the alogical Hidden Third. This entanglement is fundamental for everything which follows in our paper.

The question is to find a theory of action [5] that allows going from a descriptive mode to a conscious effective mode. We studied in such a way the dynamics of successive and simultaneous transformations, called individual, collective and social transformations. [6] We propose to study the problem of "develop- ment" - human and organizational. Starting from a world incarnated in three levels - the self, others and the nature/world,[7] we formulate three levels of development: personal development (the self), professional development (the others in a professional context) and collective development (the world). These levels, potentially present in the first diagram, allow *true transdisciplinary discovery* (see Figure 2): by superimposing the three zones of development, we see that there is a zone where they intersect, a zone where appears the important role of the Hidden Third, which is common to the three zones of development. By projecting this triple approach we can position them on a common pedestal which is constituted and constructed on the different levels and structures of Transreality. This pedestal is the common platform corresponding to a specific space-time. It contains individualities and communities such as territories, cultures, material and psychological conditions of existence, societal, affective and financial networks immersed in the Hidden Third. We therefore can discover the dynamical and operatory links be- tween human actions and the structure of Transreality (see Figure 3). The zones of non-resistance, belonging to the Hidden Third, are accessible through intuition, the imaginary and

[1] Basarab Nicolescu, "Transdisciplinary Realism", Cybernetics and Human Knowing, Vol. 23 (2016), Number 2, p. 77-85. http://basarab-nicolescu.fr/Docs_articles/CHK_2.pdf Accessed on October 20, 2018.

[2] Basarab Nicolescu, *Manifesto of Transdisciplinarity*, State University of New York (SUNY) Press, New York, 2002 , translation in English by Karen-Claire Voss.

[3] Basarab Nicolescu, "The Hidden Third as the Unifier of Natural and Spiritual Information", Cybernetics and Human Knowing, Vol. 22 (2015), Number 4, p. 91-99

http://basarab-nicolescu.fr/Docs‾articles/CHK‾1.pdf Accessed on Ocober 20, 2018.

[4] Stéphane Lupasco, *Le principe d'antagonisme et la logique de l'énergie.* L'Esprit et la Matière, Le Rocher, Monaco, 1987.

[5] Talcott Parsons, *Action Theory and the Human Condition.* New York: Free Press, 1978.

[6] Florent Pasquier et al., *Réinvestir l'humain: individus, collectifs, sociétés,* Chronique Sociale, 2017.

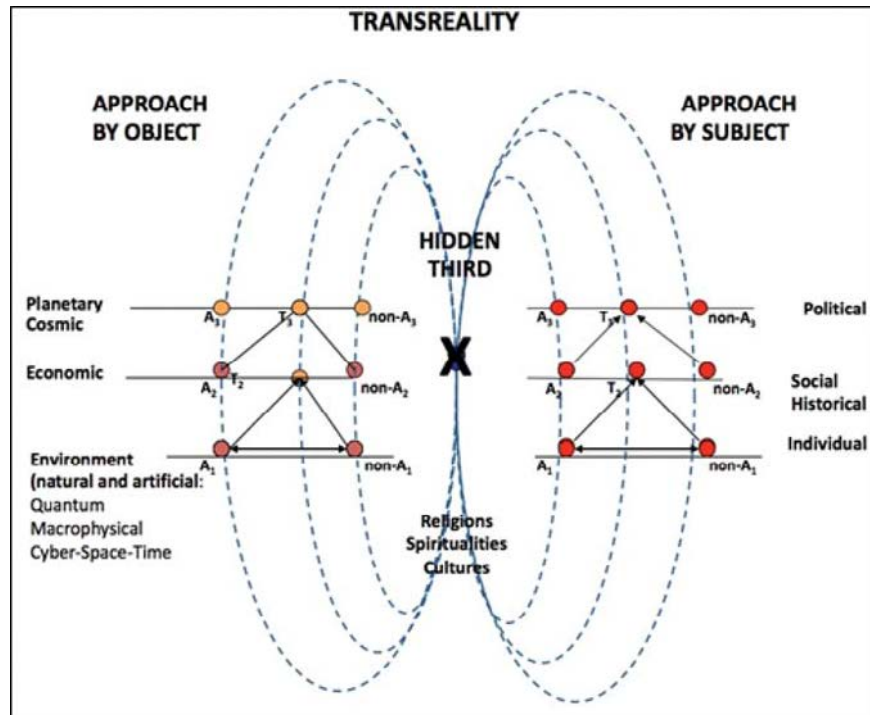[7] Pierre Weil,*L'art de vivre la vie*, Rocher, Monaco, 2003.

Figure 1: Transreality.

Figure 2: Multiple levels of development and the Hidden Third.

the imaginal, [8] aectivity, lived experience, poetry, dreams. [9]

They connect in a vertical manner the notions of "bottomless" [10] and the ontological dimensions of existence and allow establishing a bridge between interior (the world of subjects) and exterior (the

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[8] Henry Corbin, "Mundus imaginalis ou l'imaginaire et l'imaginal" in Henri Corbin, *Face de Dieu, face de l'homme, "herméneutique et soufisme"* (Paris: Flammarion, 1983).

[9] René Barbier, *L'approche transversale: l'écoute sensible en sciences humaines*, Exploration interculturelle et science sociale, Paris: Anthropos, Paris, 1997.

[10] Cornelius Castoriadis, Johann Michel, Catherine Goldenstein, Pascal Vernay, *Dialogue sur l'histoire et l'imaginaire social,* Collection "Audiographie" 15, Éditions EHESS, Paris, 2016.
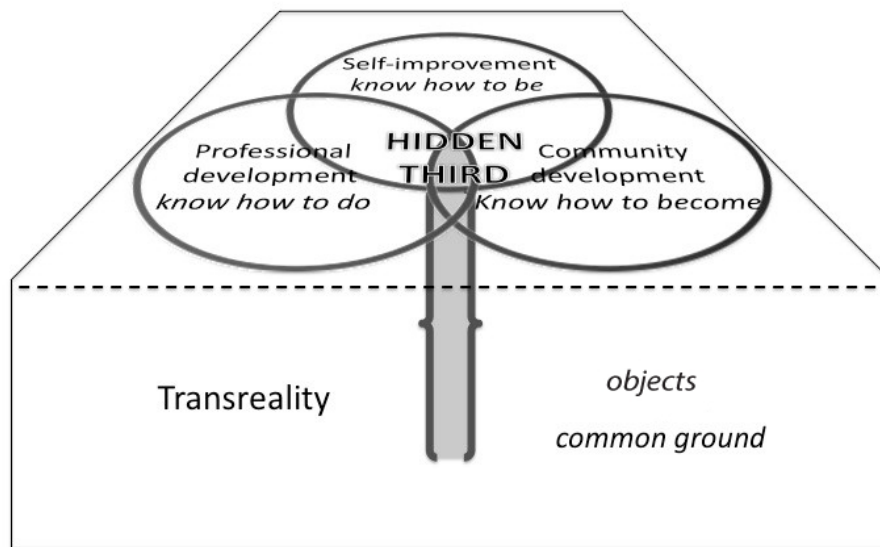
Figure 3: Multiple levels of human development and their link with Transreality.

world of objects).

Certain conditions are identified for an optimal functioning of acting in view of a real reciprocal influence between subjects and objects.

First of all, there is the condition of the search of a harmonious equilibrium between the three types of development

Also, there is the condition of the intentionality of the centripetal unifica- tion of these three domains, in order that everyone benefits from the others and there is sharing instead of separation.

Finally, we must pursue a deep analysis of the implicated subjects and subjects, in order to verify the consistency and the capacity of orientation towards the aims to be attained, by introducing the notion of "temple", as we will see in the following.

Then we can explore the coherence loops and the horizontal and sustainable self-consistency, allowing the instauration of a vertical trans-reductionist circulation of the information, of the "black hole" type, overcoming the resis- tance and the discontinuity of the classical paradigm (theories and discourses based in reason and classical logic). We can therefore envision a principle of unification of the world of objects with the world of subjects or of a vortex of the "white fountain" type. [11] This is the real place

of action, of passing from a voluntary, potential act towards actualization: the apparent dialectic mirror opposition subject/object fuses at this point of unification. As Krishnamurti [12] say "the observer is the observed".

Does this mean that everything becomes reduced to education and education policies? If this is the case, we must face the question: what type of education and with which conception of human being? What is our vision of a human being as an individual person?

The aim of our proposal is consider the human being as a human temple, a whole being in a holistic approach (see Figure 4).

By attaching ourselves to the action of the subject and by taking into account that everything is centered on the self, we examine the deep relation between material aspects to more subtle aspects and argue that every part depends on the other parts, [13] namely:

1. Each new born human grows up in a specific

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[11]Florent Pasquier, "Le temps et l'espace à l'école en France,

entre trou noir et fontaine blanche", conference given at the workshop "L'école sans murs", Université Paris 8, 2013.

[12]J. Krishnamurti, *Réponses sur l'éducation*, Bartillat, Paris, 2006.

[13]Florent Pasquier, "Espiritualidad y educación", in *Ser cambio educativo / Las sociedades necesitan una ciudadana global*, 186 93, Rizomatrans, Florida universitria, 2016.
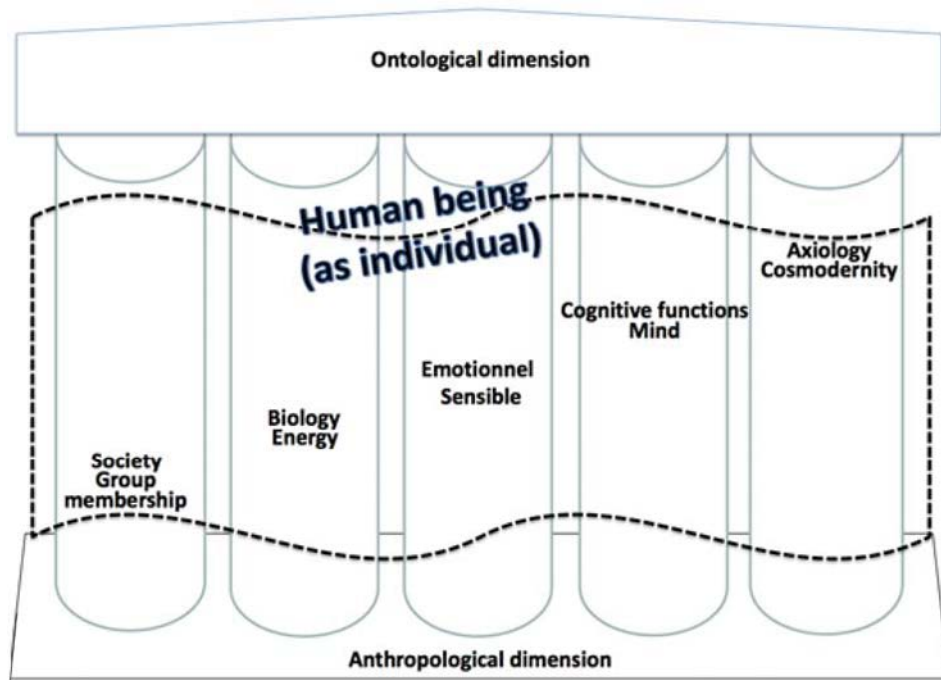
Figure 4: Simple human temple.

anthropologic context: beliefs, culture, social organization, economy, i.e. what we call Transreality or common ground.

2. The first pillar deals with the family and social group's links.

3. The second one deals with the body.

4. The third one is about feelings and sensibility.

5. The fourth one concerns the mental functions (cognition and mind)

6. The last pillar is about values.

7. The top of the temple concerns ontological questions.

Let us now discuss the complex scheme of the "human temple" in an educational context (see Figure 5).

Each of the above 7 levels includes and develops parts of the other 6 levels. We can in this way identify the basic scheme in different fields, as in curricula and disciplines. In this approach, "transdisciplinarity" appears in the 5th column and then crosses immediately all the levels and disseminates through the whole structure.

So, here is our answer to the question "how to be transdisciplinary?": we have to focus simultaneously on scientific knowledge and on the humanities, and the key for this is are "consciousness" as a trend and "intention" as a tool for evaluation.[14]

What kind of pedagogy might promote this vision? What kind of pedagogy shall we use in order to become transdisciplinary in educational policies?

At the crossroads of the Hidden Third containing the subjects in their 3 dimensions of development, linked to the background from the vortex, appears and arises the place for the manifestation of such pedagogy (see Figure 6). So this pedagogy must be elaborated according to personal, collective and social development research: it might focus on the junction of "know how to do", "know how to be" and "know how to become" while pursuing at the same time emancipation and direct participation to the common ground.

We propose a pedagogy called "integrative" and "implicative". *Integrative* means that every form of transmission is useful depending on the moments and the contexts. *Implicative* signals that pupils are offered situations to become fully actors of the process of their learning.

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[14] Arthur Versluis and Basarab Nicolescu, "Conversation between Basarab Nicolescu and Arthur Versluis", Part One: "Spirituality and Transdisciplinarity" http://www.hieros.world/a-conversation-between-basarab-nicolescu-and-arthur-versluis-part-one/, accessed on October 20, 2018.
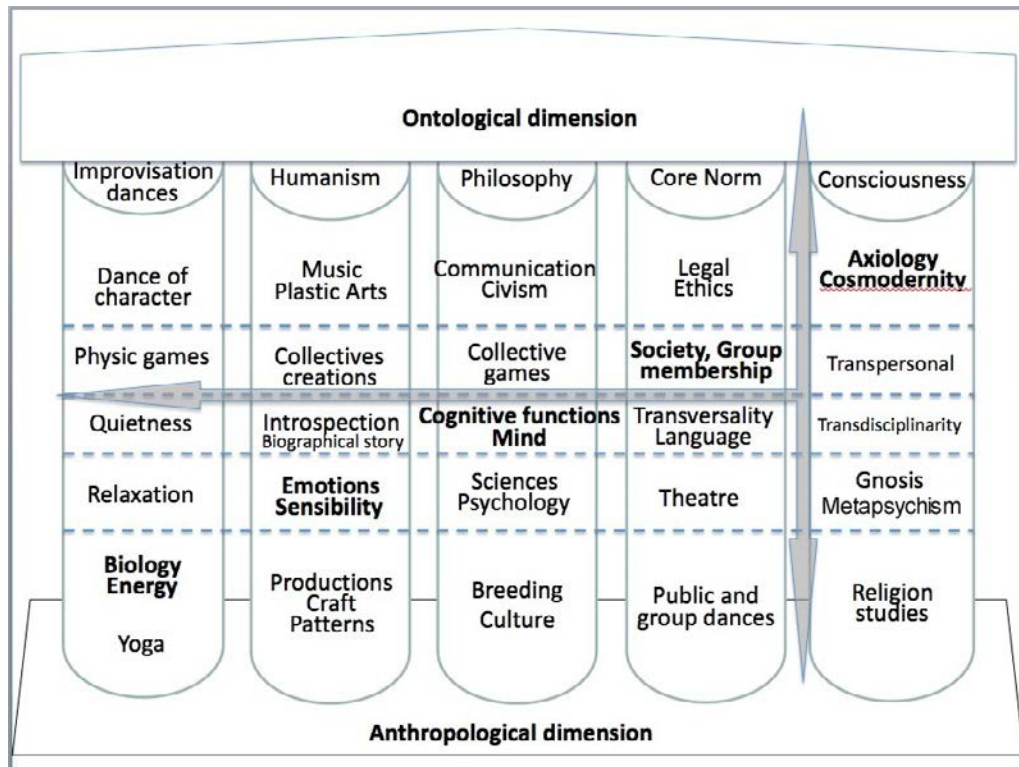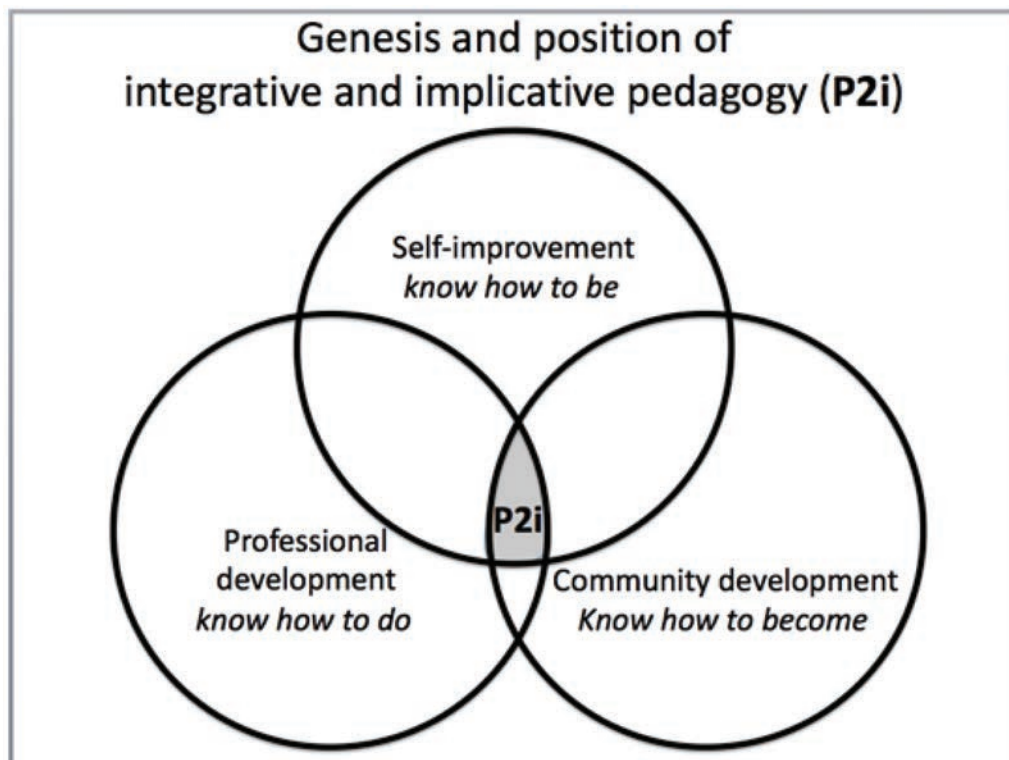
Figure 5: Full human temple.

Figure 6: The Hidden Third as source of integrative and implicative pedagogy.

What kind of consciousness is able to conduct this transdisciplinary pedagogy?

We must distinguish "natural information" from "spiritual information" and we have to join them

through the transdisciplinary methodology.[15]

For this we can use information and communication technologies (ICT) but under some conditions. "Costech laboratory" ("Knowledge, organization and technical systems"), at the Technological University at Compiègne in France,[16] promotes this approach, by questioning methods and processes and not only objects. This means having a reflection not only in terms of disciplines, but also in terms of the transdisciplinary/complex approach.

Thus, we have to be very careful about the question of transhumanism.[17] There is here a huge confusion between intelligence and computation abilities. The goal of "technontology" (techno-ontology) is to empower human beings for a better life.

Conclusion

In conclusion, a new pedagogy has to include: the transdisciplinary approach and complex thinking, transdisciplinary consciousness, spirituality, the relation with nature and cosmos, creativity, practice of the arts, transpersonal psychol-ogy and soft skills.

The use of new technologies has to be part of this investigation, as they can increase our awareness, creating a new field called technontology (i. e. technique + ontology). Then, we will try to apply transdisciplinarity for our personal and collective lives, for a future of hope and fair sharing of the only planet we collectively need to take care of.

So now, what can we do? We should become members of *trans-communities* that respect and increase the commons good: we must cooperate with artists, engineers, scientific researchers, practitioners, educators and all those who are open-minded regarding the other, to open science to culture, society and spirituality.[18]

[15] Basarab Nicolescu, "The Hidden Third as the Unifier of Natural and Spiritual Information", op. cit.

[16] http://www.costech.utc.fr/spip.php?article95, Accessed on October 20, 2018.

[17] Basarab Nicolescu, "The Dark Side of Technological Singularity: New Barbarism", Cybernetics and Human Knowing, Vol. 23 (2016), Number 4, p. 77-83. http://basarab-nicolescu.fr/Docs_articles/CHK_3.pdf Accessed on October 20, 2018.

[18] Basarab Nicolescu, *From Modernity to Cosmodernity: Science, Culture, and Spirituality,* State University of New York Press, 2014.

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