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

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“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 ontological and fundamental issue: be and how to be (or how not to be).

The dference is that in those ancient times, humanity could have a long-term vision of its development (the planet earth was mostly unknown by Europeans). 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 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 (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 Transreality1 (see Figure 1). In agreement with the three axioms of transdisciplinarity,2 the Hidden Third3 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 development - 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 between 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

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


The imaginal, aectivity, lived experience, poetry, dreams.  


They connect in a vertical manner the notions of “bottomless” and the ontological dimensions of existence and allow establishing a bridge between interior (the world of subjects) and exterior (the 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 unification 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 resistance 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.  

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 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, namely:

1. Each new born human grows up in a specific

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anthropologic context: beliefs, culture, social organization, economy, i.e. what we call Tran-sreality 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, “trans-disciplinarity” 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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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.\textsuperscript{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,\textsuperscript{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.\textsuperscript{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.\textsuperscript{18}

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\textsuperscript{15}Basarab Nicolescu, “The Hidden Third as the Unifier of Natural and Spiritual Information”, op. cit.


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