

# EDUCATION AND TRANSDISCIPLINARITY

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**Abstract:** *The international concern about contemporary education strategies and their need for innovation seems to have had some positive results in the recent UNESCO Delors Report, which the Romanian scholar Basarab Nicolescu is presenting in one of his books, connecting its view to his own in matters of global education improvement. My intention here is to briefly discuss his perspective on transdisciplinarity as a new integrative concept and its possible creative influence in the evolution of education nowadays.*

**Keywords:** *education, multiculturalism, pluridisciplinarity, interdisciplinarity, transdisciplinarity.*

**Motto:** *"...to us, the debate takes the particular turn of archaism versus modernity. From this moment, all those who reject this reductive manicheism have a single choice. Against technological, artificial, transnational, anonymous communication, they only have interpretation. (...) Let's just practice together translation, commentary, and lucid critique."<sup>1</sup>*

(Lucien Sfez, *O critică a comunicării*)

## 1. Pillars of the new education

One's lucid look upon various contemporary discourses about our changing world, our transforming culture and civilization, and about the new value of multiculturalism, might lead to this perception: people try to reach an equilibrium, to set a balance, being aware of the danger which is symbolically named – and very often explicitly mentioned in these discourses – as "Babel Tower". From Hans-Georg Gadamer questioning if it could be avoided by a "rational administration of the world"<sup>2</sup>, to Samuel Huntington foreseeing in the cultural differences the main source of future

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<sup>1</sup> Translation from Romanian version by C. Matei.

<sup>2</sup> H.-G. Gadamer, "Moștenirea Europei", in *Elogiul teoriei. Moștenirea Europei*, Iași, 1999, Polirom, p. 147.

international conflicts<sup>1</sup>, one could notice the same concern for the “process of bablelisation”<sup>2</sup> – as the Romanian scholar Basarab Nicolescu called it.

The generous principle of *unity in diversity* seems to be seen as the positive choice, opposing to the mythical and archetypical image of human collective failure: the Bable Tower. And because the reason that is supposed to have caused the first big collective failure was the disappearing of common language, the contemporary trend seems to be the search for such a “common language” of our entire epoch, in the middle of all its possible evolutions and mutations.

Edgar Morin is – as I believe – another lucid mind evaluating the danger of a growing complexity in our world, in the *metasociety*, together with the lack of scientific proper means to organize it. He talks about the need for a new perspective, a new discipline that he calls *anthropolitics*, a unity of three big realms: science, conscience, and politics. He says:

*“We are at the beginnings of knowledge. We find ourselves – and I’ve said it enough by now – at the beginning of conscience. Finally, we have not reached the moment of a possible fulfillment of historical societies, but only the beginnings of an authentic social hypercomplexity.”*<sup>3</sup>

Morin’s general vision is the unification of *homo sapiens’* biological, cultural and spiritual levels, the complex bio-psycho-socio-cultural system, as no scientific approach have managed to study till today<sup>4</sup>. Again, one could see here the need and search for a common ground, a common language.

So it is logical that a vital domain in which the language of our common future should articulate and grow up is *education*. I will briefly present now the conclusions of a recent UNESCO report, made by the International Commission for XXI-st Century Education, under the presidency of Jacques Delors, as Basarab Nicolescu summarized them in his book<sup>5</sup>.

The author calls these practical conclusions, these orienting principles, “the four pillars of a new education”<sup>6</sup>, and he sets them in the context of

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<sup>1</sup> S. P. Huntington, *Ciocnirea civilizațiilor și refacerea ordinii mondiale*, București, Antet, 1998, p. 27.

<sup>2</sup> B. Nicolescu, *Transdisciplinaritatea. Manifest*, Iași, Junimea, 2007, p. 51.

<sup>3</sup> E. Morin, *Paradigma pierdută: natura umană*, Iași, Editura Universității „Al. I. Cuza”, 1999, p. 229.

<sup>4</sup> *Ibidem*, pp. 139-140.

<sup>5</sup> B. Nicolescu, *op. cit.*, 2007, pp. 154-161.

<sup>6</sup> *Ibidem*, p. 154.

what he calls the chance of a *transdisciplinary culture*. They are formulated like this:

- 1) learning to know;
- 2) learning to do;
- 3) learning to live together with the others;
- 4) learning to be.

## 2. The concept of *transdisciplinarity* and its benefits on education

Another advantage which one's lucid eye has today, looking at the evolution of disciplines and its multiple social and political consequences, is that things have obviously changed in the last decades, since Morin, Popper or Mattei Dogan were talking about disciplines' growing complexity. While Karl Popper was emphasizing the intellectual benefits of different cultures' clash (by the '70s)<sup>1</sup>, later the scholars Mattei Dogan and Robert Pahre were perceiving an increasing burst of interdisciplinarity, the birth of new border disciplines, and the divergence between their academic rigid frame and their practical explosion (by the '90s)<sup>2</sup>. Today, Gadamer, B. Nicolescu and others wonder if there is a chance for a positive control of this phenomenon of complexification in our entire world, not only in the scientific field. It seems that the latest revelation is that of a surprising intricacy among social, anthropological, ethical, political, economic, ideological, religious, and even ecologic components of our civilization.

So, forging his concept of *transdisciplinarity*, Nicolescu is trying to conceive a solution to a future imminent global confusion. We'll see how this solution looks like for educational field.

First, to understand what *transdisciplinarity* is in author's view, we have to distinguish it from *pluridisciplinarity* and *interdisciplinarity*. The former refers to the study of the same object in the same time from different disciplines. The latter refers to the epistemological or practical transfer of methods from one discipline to another, with the effect of creating new border disciplines. *Transdisciplinarity* refers to what lies, in the same time, between disciplines, inside them, and beyond them, and its purpose is understanding the present world, through the unity of knowledge. Also it seems to assume a different kind of logic, of Ștefan Lupașcu's inspiration, "the logic of the included third" on a superior level of reality.<sup>3</sup>

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<sup>1</sup> K. Popper, "Normal Science and its Dangers", *apud* M. Dogan & R. Pahre, *Noile științe sociale. Interpenetrarea disciplinelor*, București, Editura Academiei Române, 1993, p. 168.

<sup>2</sup> M. Dogan & R. Pahre, 1993, *op. cit.*, p. 94.

<sup>3</sup> B. Nicolescu, *op. cit.*, pp. 30-40.

Having this concept clarified, let's see how Basarab Nicolescu approaches the four pillars of education.

1) *Learning to know* requires, in author's opinion, an innovating way of concentrating on methods, not memorizing data; a flexible way of permanent interrogation, trying to build new bridges among pieces of information and discovering the possible applications of these knowledge.

2) *Learning to do* means, from the transdisciplinary point of view, learning to be creative and adaptive, to do something new, and not only specializing in something, not to be too confined to one work field.

3) *Learning to live together with the others* requires a transcultural attitude – as Nicolescu says – which is to be found in latency in every person; this attitude will make one adopt permanent learning, to succeed in recognizing oneself in otherness, and also in knowing better one's own culture, beliefs and interests.

4) *Learning to be*, as a new educational principle, could be materialized – as Nicolescu believes – only by translation to a superior level of experience, to a trans-personal dimension from where to realize the synthesis of contraries, of material versus spiritual, of oneself versus the other, of subject versus object.

Nicolescu's opinion is that the present system of education is focused only on the mental aspect, to the prejudice of the corporal and emotional aspects of a person. Such poor confinement is now a source of tensions and conflicts at a global level. The problem is the persistence of obsolete values and an unfit ethics based only on competition, materialistic efficacy and egoistic benefits. What the author sees is the urge for a common scale of values and a common ethics to cope with all these increasing tensions and conflicts.

### 3. Commentaries

Announcing a possible future integrative discipline named epistemology of complexity, which Edgar Morin was earlier trying to articulate, Basarab Nicolescu says in another book, written in 1989:

*"Could we possibly conceive the appearance of a new system of values and of a new ethics without the understanding of this overwhelming complexity, which can only lead us – if let to proliferate by its chaotic and anarchistic laws – to its own destruction and also our specie's destruction?"*<sup>1</sup>

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<sup>1</sup> B. Nicolescu, *Știința, sensul și evoluția. Eseu asupra lui Jakob Böhme*, București, Vitruviu, 2000, p. 109.

Concerning the benefits of transdisciplinarity, my opinion is that, although the author's view is very attractive on the theoretical field and very generous on the practical field, it could be too optimistic. And that's because the author seems to invest too much on a theoretical, even scientific notion, expanding its transforming power over too many different aspects of reality, no matter how much these aspects are connected today. As I believe, beyond their multiple connections and influences, we should try to concentrate on their determinism, specifically on the cause-effect relation, in order to see where to press the button in our "applications".

From this perspective, to say that transdisciplinarity could be the source of a new kind of ethics which is to be globally adopted only by the power of its new generous openings doesn't seem too realistic, as we neglect the true interests and reasoning of peoples' social actions.

In fact, reading Basarab Nicolescu's writings, one can notice a conceptual translation from transdisciplinarity to trans-culture, trans-attitude, trans-relation, trans-politics and so on. Given the author's scientific education as a Ph. D. physicist, French scholar and also researcher at UNESCO as the founder of the International Center for Interdisciplinary Studies and Research, one could not suspect a lack of consistency in his vision; but more likely, a tendency to think the universal, to reach the unity of knowledge, to let aside analytical perspective and embrace the synthetical one.

As I already mentioned, his perspective means letting aside the logic of the excluded third and promoting a sort of oriental logic. As I believe, it is his attempt of integrating occidental and oriental thinking, as a reflex of multiculturalism. A thinking that includes the *tertium non datur* by rising the controversy on a superior level of reality, where the controversy dissolves itself.

A possible reply here could be that such thinking is too abstractly presented. Any lecturer might resent the need of exemplification on many practical issues, from many different domains, for the efficiency of its logic to be proven. Again, there can not be accepted a translation by similarity from such "oriental" solving of an abstract problem to similarly solving of a practical one. For instance, an abstract controversy which Nicolescu uses to illustrate his thinking is the controversy masculine versus feminine.<sup>1</sup> He says:

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<sup>1</sup> B. Nicolescu (2007), *op. cit.*, pp. 100-109.

*“The conciliation of «pro» and «contra» cannot be obtained but on another level of reality, where they look like two opposite poles of a larger unity, which means being together, in other words, considering only what is positive and constructive in both.”<sup>1</sup>*

In the case of masculine versus feminine, the level of a larger unity seems to be the creative realm of Eros, inspiring both poles which reunite in imagination of scientific discoveries (the masculine attitude) and similarly of artistic creativity (the feminine attitude).

In my opinion, this is not a well chosen example, because there are a lot of other perspectives that consider the two as complementary, not opposite. And after all, if they are to be considered contraries, there will be other possible levels of unity, such as the spiritual realm, as the spirit is supposed to be beyond sex. The problem of materializing this kind of thinking by practical and various illustrations still remains.

But considering the theoretical and educational fields, I think that Basarab Nicolescu's writings may represent a source of inspiration for solving many system difficulties and – why not? – for changing the entire actual paradigm. After all, education personnel should try its best in improving the attitude towards knowledge and application, and definitely has its role in configuring the future scale of values, even if it is not the single one to do that.

I agree with Nicolescu that education can change the obsolete ethics still manifesting in our societies, despising the human being as a person and despising the person's affectivity. The author says that, nowadays, practical efficacy is nothing but a caricature of *efficiency*.<sup>2</sup>

In fact, I think this attitude towards human feelings reveals no morals, but only materialistic reasoning, praising the Adaptation of one's psychic no matter what, and disregarding any sensibility as a sign of non-adaptation – this very notion being illicitly “adapted” from biology to anthropology. But again, I don't think education could be the only vector of this change.

Anyway, till we all are to reach the limits of education's influence upon values and ethics, we should start doing the needed improvements and accomplish a coherent general approach on this issue. Despite its remote century, there is still valid the Enlightenment advice: let's cultivate our garden!

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<sup>1</sup> *Ibidem*, p. 105.

<sup>2</sup> *Ibidem*, p. 101.

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