

HOW CAN WE ENTER IN DIALOGUE?

Transdisciplinary Methodology of the Dialogue between People, Cultures, and Spiritualities

COMO PODEMOS ESTABELECEER UM DIÁLOGO? METODOLOGIA TRANSDISCIPLINAR DO DIÁLOGO ENTRE PESSOAS, CULTURAS E ESPIRITUALIDADES

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INTRODUCTION

Can we really dialogue?

The word “dialogue” appeared in fact at the foundation of modernity, but it referred only to nature⁴.

Each person has his/her prejudices, his/her convictions, his/her subconscious representations. When two people try to communicate there is inevitably a confrontation: representation against representation, subconscious against subconscious. As this confrontation is subconscious, it often degenerates into conflict.

Language is the vehicle of these subconscious representations. We use the same words, but their meaning can be radically different. We are manipulated by our own representations. The dialogue is strictly impossible in the absence of a methodology of dialogue. We can only monologue. It is impossible to be at the place of the other.

The same considerations apply in the case of nations, cultures, religions and

spiritualities: interest against interest, representation against representation, dogma against dogma, hidden spiritual assumptions against hidden spiritual assumptions. This situation is aggravated by the large number of languages (more than 6000), which display each its own systems of representations and values. A completely accurate translation from one language to another is impossible.

This is also aggravated by the contemporary immense means of destruction and the continuing destruction of the environment. The inevitable conflicts could lead, for the first time in the history of mankind, at the disappearance of the human species.

A new model of civilization is necessary, the keystone is the dialogue between human beings, nations, cultures and religions for the survival of humanity.

We have therefore to face a number of important questions:

- What is the methodology of dialogue?

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² Galileo Galilei. 1962. Dialogue Concerning the Two Chief World Systems, Ptolemaic and Copernican, trans. Stillman Drake, foreword by Albert Einstein. Berkeley: University of California Press. The first edition appeared in 1632, year which could be considered as the birth date of modernity.

- The suspension, during the dialogue, of our prejudices to arrive at a “fusion of horizons”³ is it necessary?

- The abandonment of the binary logic and the adoption of non-classical logic is it necessary?

- Can we dialogue without first identifying the levels of reality involved in the dialogue?

- How can we take complexity into account?

- Are the transcultural and the transreligious crucially important for a methodology of dialogue of cultures and of religions?

- The dialogue between cultures is it a social or a political gamble?

- Is the danger of the dissolution of cultures in the context of globalization real?

- Are there big cultures, small cultures and falling cultures?

- Peoples of the world are they prepared for a real dialogue of cultures?

- What is the role of the spiritual dimension in this dialogue?

We can answer all these questions by adopting the methodology of transdisciplinarity.

I proposed in 1985⁴ the inclusion in the word “transdisciplinarity”, introduced by Jean Piaget⁵ in 1972, of the meaning “beyond disciplines” and I developed this idea over

³ Hans-Georg Gadamer. 1960. *Gesammelte Werke, Hermeneutik I. Wahrheit und Methode*. Tübingen: J. C. B. Mohr.

⁴ Basarab Nicolescu. 1985. *Nous, la particule et le monde*. Paris: Le Mail.

⁵ Jean Piaget. 1972. « L'épistémologie des relations interdisciplinaires ». In *L'interdisciplinarité – Problèmes d'enseignement et de recherche*, edited by L. Apostel, G. Berger, A. Briggs and G. Michaud, 131-144. Paris : Centre pour la Recherche et l'Innovation dans l'Enseignement, Organisation de Coopération et de développement économique.

the years in my articles and books and also in different official international documents. Many other researchers over the world contributed to this development of transdisciplinarity. A key-date in this development is 1994, when the Charter of Transdisciplinarity was adopted by the participants at the First World Congress of Transdisciplinarity (Convento da Arrábida, Portugal)⁶.

The crucial point here is the status of the Subject.

“Beyond disciplines” precisely signifies the Subject, more precisely the Subject-Object interaction. The transcendence, inherent in transdisciplinarity, is the transcendence of the Subject.

The meaning “beyond disciplines” leads us to an immense space of new knowledge. The main outcome was the formulation of the methodology of transdisciplinarity. It allows us also to clearly distinguish between multidisciplinary, interdisciplinary, and transdisciplinarity.

MULTIDISCIPLINARITY, INTERDISCIPLINARITY, AND TRANSDISCIPLINARITY

Multidisciplinarity concerns itself with studying a research topic in not just one discipline only, but in several at the same time. Any topic in question will ultimately be enriched by incorporating the perspectives of several disciplines. Multidisciplinarity brings a plus to the discipline in question, but this

⁶ “The Charter of Transdisciplinarity” (in French, Spanish, English, Portuguese, Turkish, Arab, Italian, Russian, and Romanian). 1994. Paris: CIRET. Accessed on July 23, 2014.

<http://ciret-transdisciplinarity.org/index.php>

“plus” is always in the exclusive service of the home discipline. In other words, the multidisciplinary approach overflows disciplinary boundaries while its goal remains limited to the framework of disciplinary research.

Interdisciplinarity has a different goal than multidisciplinary. It concerns the transfer of methods from one discipline to another. Like multidisciplinary, interdisciplinarity overflows the disciplines, but its goal still remains within the framework of disciplinary research. Interdisciplinarity has even the capacity of generating new disciplines, like quantum cosmology and chaos theory.

Transdisciplinarity concerns that which is at once between the disciplines, across the different disciplines, and beyond all discipline. Its goal is the understanding of the present world, of which one of the imperatives is the unity of knowledge.

As one can see, there is no opposition between disciplinarity (including multidisciplinary and interdisciplinarity) and transdisciplinarity, but a fertile complementarity. In fact, there is no transdisciplinarity without disciplinarity.

METHODOLOGY OF TRANSDISCIPLINARITY

A remarkable achievement of transdisciplinarity in present times is, of course, the formulation of the methodology of transdisciplinarity, accepted and applied by an important number of researchers in many countries of the world.

The axiomatic character of the methodology of transdisciplinarity is an important aspect. This means that he have to limit the

number of axioms to a minimum number. Any axiom which can be derived from the already postulated ones, have to be rejected.

After many years of research, I have arrived at the following three axioms of the methodology of transdisciplinarity⁷:

i. The ontological axiom: There are, in Nature and in our knowledge of Nature, different levels of Reality of the Object and, correspondingly, different levels of Reality of the Subject.

ii. The logical axiom: The passage from one level of Reality to another is insured by the logic of the included middle.

iii. The epistemological axiom: The structure of the totality of levels of Reality is a complex structure: every level is what it is because all the levels exist at the same time.

The above three axioms give a precise and rigorous definition of transdisciplinarity.

Let me now describe the essentials of these three transdisciplinary axioms.

THE ONTOLOGICAL AXIOM: LEVELS OF REALITY

The key concept of the transdisciplinary approach to Nature and knowledge is the concept of levels of Reality.

Here the meaning we give to the word “Reality” is pragmatic and ontological at the same time.

By “Reality” we intend first of all to designate that which resists our experiences, representations, descriptions, images, or even mathematical formulations.

⁷ Basarab Nicolescu. 2002. *Manifesto of Transdisciplinarity*, trans. Karen-Claire Voss. New York: State University of New York (SUNY) Press. The first edition appeared in French in 1996.

In so far as Nature participates in the being of the world, one has to assign also an ontological dimension to the concept of Reality. Reality is not merely a social construction, the consensus of a collectivity, or some inter-subjective agreement. It also has a trans-subjective dimension: for example, experimental data can ruin the most beautiful scientific theory.

Of course, one has to distinguish the words “Real” and “Reality”. Real designates that which is, while Reality is connected to resistance in our human experience. The “Real” is, by definition, veiled forever, while “Reality” is accessible to our knowledge.

By “level of Reality”, I designate a set of systems which are invariant under certain general laws (in the case of natural systems) and under certain general rules and norms (in the case of social systems). That is to say that two levels of Reality are different if, while passing from one to the other, there is a break in the applicable laws, rules or norms and a break in fundamental concepts (like, for example, causality). Therefore there is a discontinuity in the structure of levels of Reality.

A new Principle of Relativity emerges from the coexistence between complex plurality and open unity in our approach: no level of Reality constitutes a privileged place from which one is able to understand all the other levels of Reality. A level of Reality is what it is because all the other levels exist at the same time. This Principle of Relativity is what originates a new perspective on religion, spirituality, politics, art, education, history, and society. And when our perspective on the world changes, the world changes.

In other words, the transdisciplinary approach is not hierarchical. There is no fundamental level. But its absence does not

mean an anarchical dynamics, but a coherent one, of all levels of Reality, already discovered or which will be discovered in the future.

Every level is characterized by its incompleteness: the laws governing this level are just a part of the totality of laws governing all levels. And even the totality of laws does not exhaust the entire Reality: we have also to consider the Subject and its interaction with the Object.

The zone between two different levels and beyond all levels is a zone of non-resistance to our experiences, representations, descriptions, images, and mathematical formulations. Quite simply, the transparency of this zone is due to the limitations of our bodies and of our sense organs — limitations which apply regardless of what measuring tools are used to extend these sense organs. We therefore have to conclude that the topological distance between levels is finite. However this finite distance does not mean a finite knowledge. Take, as an image, a segment of a straight line – it contains an infinite number of points. In a similar manner, a finite topological distance could contain an infinite number of levels of Reality. We have work to do till the end of times.

The unity of levels of Reality and its complementary zone of non-resistance constitutes what we call the transdisciplinary Object.

Inspired by the phenomenology of Edmund Husserl⁸, I assert that the different levels of Reality of the Object are accessible to our knowledge thanks to the different levels of Reality of the Subject which are potentially present in our being.

⁸ Edmund Husserl. 1966. *Méditations cartésiennes*. Paris : Vrin. Translated from the German by G. Peiffer and E. Levinas.

As in the case of levels of Reality of the Object, the coherence of levels of Reality of the Subject presupposes a zone of non-resistance. The unity of levels Reality of the Subject and this complementary zone of non-resistance constitutes what we call the transdisciplinary Subject.

The two zones of non-resistance of transdisciplinary Object and Subject must be identical for the transdisciplinary Subject to communicate with the transdisciplinary Object. A flow of consciousness that coherently cuts across different levels of Reality of the Subject must correspond to the flow of information coherently cutting across different levels of Reality of the Object. The two flows are interrelated because they share the same zone of non-resistance.

Knowledge is neither exterior nor interior: it is simultaneously exterior and interior. The studies of the universe and of the human being sustain one another.

The zone of non-resistance plays the role of a third between the Subject and the Object, an Interaction term, which allows the unification of the transdisciplinary Subject and the transdisciplinary Object while preserving their difference. In the following I will call this Interaction term the Hidden Third.

Our ternary partition { Subject, Object, Hidden Third } is, of course, different from the binary partition { Subject vs. Object } of classical realism.

The transdisciplinary Object and its levels of Reality, the transdisciplinary Subject and its levels of Reality and the Hidden Third define the transdisciplinary approach of Reality. Based on this ternary structure of Reality, we can deduce several ternaries of epistemological levels which are extremely useful in the analysis of concrete situations:

Levels of organization – Levels of structuring – Levels of integration
Levels of confusion – Levels of language – Levels of interpretation
Physical levels – Biological levels – Psychical levels
Levels of ignorance – Levels of intelligence – Levels of contemplation
Levels of objectivity – Levels of subjectivity – Levels of complexity
Levels of knowledge – Levels of understanding – Levels of being
Levels of materiality – Levels of spirituality – Levels of non-duality

THE LOGICAL AXIOM: THE INCLUDED MIDDLE

The incompleteness of the general laws governing a given level of Reality signifies that, at a given moment of time, one necessarily discovers contradictions in the theory describing the respective level: one has to assert A and non-A at the same time.

However, our habits of mind, scientific or not, are still governed by the classical logic, which does not tolerate contradictions. The classical logic is founded on three axioms:

1. The axiom of identity: A is A.
2. The axiom of non-contradiction: A is not non-A.
3. The axiom of the excluded middle: There exists no third term T (“T” from “third”) which is at the same time A and non-A.

History will credit Stéphane Lupasco (1900-1988) with having shown that the logic of the included middle is a true logic, mathematically formalized, multivalent

(with three values: A, non-A, and T) and non-contradictory⁹.

In fact, the logic of the included middle is the very heart of quantum mechanics: it allows us to understand the basic principle of the superposition of “yes” and “no” quantum states.

Our understanding of the axiom of the included middle — there exists a third term T which is at the same time A and non-A — is completely clarified once the notion of “levels of Reality”, not existing in the works of Lupasco, is introduced.

In order to obtain a clear image of the meaning of the included middle, let us represent the three terms of the new logic — A, non-A, and T — and the dynamics associated with them by a triangle in which one of the vertices is situated at one level of Reality and the two other vertices at another level of Reality. The included middle is in fact an included third. If one remains at a single level of Reality, all manifestation appears as a struggle between two contradictory elements. The third dynamic, that of the T-state, is exercised at another level of Reality, where that which appears to be disunited is in fact united, and that which appears contradictory is perceived as non-contradictory.

It is the projection of the T-state onto the same single level of Reality which produces the appearance of mutually exclusive, antagonistic pairs (A and non-A). A single level of Reality can only create antagonistic oppositions.

The action of the logic of the included middle on the different levels of Reality induces an open structure of the unity of levels of Reality. This structure has considerable consequences for the theory of knowledge

because it implies the impossibility of a self-enclosed complete theory. Knowledge is forever open.

THE EPISTEMOLOGICAL AXIOM: THE UNIVERSAL INTERDEPENDENCE

There are several theories of complexity.

In the context of our discussion, what is important to be understood is that the existing theories of complexity do not include neither the notion of levels of Reality nor the notion of zones of non-resistance¹⁰. It is therefore useful to distinguish between the horizontal complexity, which refers to a single level of reality and vertical complexity, which refers to several levels of Reality.

From a transdisciplinary point of view, complexity is a modern form of the very ancient principle of universal interdependence.

TRANS-REALITY AND THE HIDDEN THIRD

In the transdisciplinary approach, the Subject and the Object are immersed in the Hidden Third.

The transdisciplinary Subject and its levels, the transdisciplinary Object and its levels, and the Hidden Third define the transdisciplinary Reality or trans-Reality (see Figure 1).

⁹ Stéphane Lupasco. 1951. *Le principe d'antagonisme et la logique de l'énergie - Prolégomènes à une science de la contradiction*. Paris: Hermann & Cie.

¹⁰ Paul Cilliers and Basarab Nicolescu. 2012. “Complexity and Transdisciplinarity - Discontinuity, Levels of Reality and the Hidden Third”. *Futures* 44 (8): 711–718.

[INSERIR FIGURA 1]

The Hidden Third, in its relationship with the levels of Reality, is fundamental for the understanding of *unus mundus* described by cosmodernity. Reality is simultaneously a single and a multiple One. If one remains confined to the Hidden Third, then the unity is undifferentiated, symmetric, situated in the non-time. If one remains confined to the levels of Reality, there are only differences, asymmetries, located in time. To simultaneously consider the levels of reality and the Hidden Third introduces a breaking in the symmetry of *unus mundus*. In fact, the levels of Reality are generated precisely by this breaking of symmetry introduced by time.

In the transdisciplinary approach, the Hidden Third appears as the source of knowledge but, in its turn, needs the Subject in order to know the world: the Subject, the Object and the Hidden Third are inter-related.

Cultures and religions are not concerned, as academic disciplines are, with fragments of levels of Reality only: they simultaneously involve one or several levels of Reality of the Object, one or several levels of Reality of the Subject and the non-resistance zone of the Hidden Third. Technoscience is entirely situated in the zone of the Object, while cultures and religions cross all three terms: the Object, the Subject and the Hidden Third. This asymmetry demonstrates the difficulty of their dialogue: this dialogue can occur only when there is a conversion of technoscience towards values, i.e. when the techno-scientific culture becomes a true culture¹¹. It is precisely this conversion that transdisciplinarity is able

to perform. This dialogue is methodologically possible, because the Hidden Third crosses all levels of Reality.

Technoscience has a quite paradoxical situation. In itself, it is blind to values. However, when it enters into dialogue with cultures and religions, it becomes the best mediator of the reconciliation of different cultures and different religions.

Homo religiosus existed from the beginnings of the human species, at the moment when the human being tried to understand the meaning of our life. The sacred is our natural realm. We tried to capture the unseen from his/her observation of the visible world. Our language is that of the imaginary, trying to penetrate higher levels of Reality - parables, symbols, myths, legends, revelation.

Homo economicus is a creation of modernity. We believe only in what is seen, observed, measured. The profane is our natural realm. Our language is that of just one level of Reality, accessible through the analytic mind - hard and soft sciences, technology, theories and ideologies, mathematics, informatics.

The only way to avoid the dead end of *homo religiosus* vs. *homo economicus* debate is to adopt transdisciplinary hermeneutics¹². Transdisciplinary hermeneutics is a natural outcome of transdisciplinary methodology.

Transdisciplinary hermeneutics is able to identify the common germ of *homo religiosus* and of *homo economicus*, which can be called *homo sui transcendentalis*.

Transdisciplinary hermeneutics avoids the trap of trying to formulate a super-science

¹¹ Basarab Nicolescu. 2004. "Toward a Methodological Foundation of the Dialogue Between the Technoscientific and Spiritual Cultures". In *Differentiation and Integration of Worldviews*, edited by Liubava Moreva, 139-152. Sankt Petersburg: Eidos.

¹² Basarab Nicolescu. 2007. "Transdisciplinarity as Methodological Framework for Going beyond the Science and Religion Debate". *Transdisciplinarity in Science and Religion* 2: 35-60.

or a super-religion. Unity of knowledge can be only an open, complex and plural unity.

The human person appears as an interface between the Hidden Third and the world. The erasing of the Hidden Third in knowledge signifies a one-dimensional human being, reduced to its cells, neurons, quarks and elementary particles.

A unified theory of levels of Reality is crucial in building sustainable development and sustainable futures. The considerations made until now in these matters are based upon reductionist and binary thinking: everything is reduced to society, economy and environment. The individual level of Reality, the spiritual level of Reality and the cosmic level of Reality are completely ignored. Sustainable futures, so necessary for our survival, can only be based on a unified theory of levels of Reality.

TRANSDISCIPLINARY ETHICS AND THE ANTHROPOCENE

The consequences on ethics of such a vision of Reality are crucial in the context of Anthropocene, of the existence of the danger, for the first time of history, of the annihilation of the entire human species¹³. As Clive Hamilton writes in his book *Requiem for a Species*, it is difficult to accept the idea that human beings can change the composition of the atmosphere of the earth to a point of destroying their own civilization and also the human species. One can predict the elevation of the sea level by several meters

during this century and the total dissolution of the Arctic ice in one or two decades. One can even predict that the ice of the entire planet will disappear in several centuries, leading to elevation of sea level of around 70 meters. From my point of view, in agreement with Clive Hamilton, it is not the technology which will save our species but a radical change of our vision of Reality. Reality is One. For a sustainable future, we have to consider simultaneously all levels of Reality and also the Hidden Third.

We are part of the ordered movement of Reality. Our freedom consists in entering into the movement or perturbing it. We can respond to the movement or impose our will of power and domination. Our responsibility is to build sustainable futures in agreement with the overall movement of Reality.

We are witnessing a new era - cosmernity - founded on a new vision of the contemporary interaction between science, culture, spirituality, religion, and society. Cosmodernity means essentially that all entity in the universe is defined by its relation to the other entities. The human being, in turn, is related as a person to the Great Other, the Hidden Third. The old idea of cosmos, in which we are active participants, is resurrected¹⁴.

Reality is plastic. Reality is not something outside or inside us: it is simultaneously outside and inside. We are part of this Reality that changes due to our thoughts, feelings and actions. This means that we are fully responsible for what Reality is. The world moves, lives and offers itself to our knowledge thanks to some ordered structures of something that is, though, continually

¹³ Clive Hamilton. 2010. *Requiem for a Species – Why We Resist the Truth about Climate Change*. London: Earthscan.

¹⁴ Basarab Nicolescu. 2014. *From Modernity to Cosmodernity – Science, Culture, and Spirituality*. New York: State University of New York (SUNY) Press.

changing. Reality is therefore rational, but its rationality is multiple, structured on levels.

The levels of Reality correspond to the levels of understanding, in a fusion of knowledge and being. All levels of Reality are interwoven. The world is at the same time knowable and unknowable.

The Hidden Third between Subject and Object denies any rationalization. Therefore, Reality is also trans-rational. The Hidden Third conditions not only the flow of information between Subject and Object, but also the one between the different levels of reality of the Subject and between the different levels of reality of the Object. The discontinuity between the different levels is compensated by the continuity of information held by the Hidden Third. Source of Reality, the Hidden Third feeds itself from this Reality, in a cosmic breath which includes us and the universe.

The irreducible mystery of the world coexists with the wonders discovered by reason. The unknown enters every pore of the known, but without the known, the unknown would be a hollow word. Every human being on this Earth recognizes his/her face in any other human being, independent of his/her particular religious or philosophical beliefs, and all humanity recognizes itself in the infinite Otherness.

A new spirituality, free of dogmas, is already potentially present on our planet. There are exemplary signs and arguments for its birth, from quantum physics till theater, literature and art¹⁵. We are at the threshold of a true New Renaissance, which asks for a new, cosmodern consciousness.

¹⁵ Nicolescu 2014.

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