



Sustainability and Spirituality: a Transdisciplinary Perspective

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This paper addresses some issues that describe the experience of a transdisciplinary process and the place of spirituality within the aim of sustainability at the Universidad Veracruzana in Mexico. Spirituality as a dimension of human beings and natural systems, sustainability through the consciousness of a general ecology and transdisciplinary as a transformative experience that allows the inclusion of spiritual dimension in our aim for creating sustainable futures. Our dialogue with the popular traditions and cosmology of ancient Mesoamerican Philosophy is a core in the relationship between spirituality and transdisciplinary.

Keywords: spirituality, transdisciplinarity, sustainability, participating consciousness, knowledge, body, sacred, poetics of knowledge, Mesoamerican philosophy, dialogue.

1 Introduction

This paper addresses some issues in our transdisciplinary educational experience for sustainability at the University of Veracruz, Mexico, where we include the spiritual dimension within the aim for sustainability futures. Spirituality is understood as participating consciousness that involves the identification of human beings within their environment, where all natural elements and things seem to be alive [1]. As a dimension of life, spirituality is understood as an experience that connects all life and

human beings with wholeness, which means giving a sense of deep connection with creation and life. Likewise sustainability is understood through the consciousness of a general ecology that implies the recognition that we participate within a larger whole. These proposals involve a whole epistemological dimension in which the transdisciplinary perspective holds a central place.

Our aim is sustainability—to imagine, create and reinforce our commitment with the subtle weave of interdependence within our planet and our bioregional places—in our ways of living, in our societies. This means the necessary evolution of a spiritual dimension within us and within our communities that reinforces our commitment to life and its preservation and to health, harmony, balance, wholeness, and diversity. This commitment rests on a deep sense of the sacredness of life expressed as love, nurture, creativity, wonder, faith, hope and justice [2].

“Tomorrow may be too late,” Basarab Nicolescu said when referring to the triple dimension of the potential self-destruction of our species – material, biological and spiritual – as a product of a blind but triumphant technoscience, obedient only to the implacable logic of utilitarianism. “In the Age of Reason, the irrational is more active than ever,” and in this moment of the history, “humanity has the possibility of complete self-destruction” [3]. Of course, if we do not create new relationships with life and within ourselves, if we do not imagine another way of being in our planet, in our *Mother Earth* – as our

ancient people in Mexico referred to it – we will not be able to exist for long as human beings in this planet. The evidences of the planetary/environment crises are plenty [4, 5].

In this context, as an educational institution, our purpose is to integrate alternative ways to create knowledge that go beyond rationalism and modern science. Our challenge is to learn how to ask new questions and how to improve our thought, research and educational praxis. If we want to create relevant knowledge and co-create new realities in our lives, we have to question the relation between the knowing subject and that which is observed. We need new referents in our way of conceiving *Reality* and our relationship with it. We have to transcend rationalism, dualism and fragmentation of modern science. We need to conceive knowledge as part of a multidimensional and systemic world and situate the ethic and political dimension of the act of knowledge and its social and planetary commitment. “We need to ecologize knowledge based in a self-eco-organized conception that considers the vital link of every life system – human or social – with its surrounding environment” [5].

Transdisciplinarity and systemic thinking provide us with the epistemological tools to challenge the complexity of reality. From a transdisciplinary point of view, complexity is a modern form of the very ancient principle of universal interdependence. This principle entails the maximum simplicity that is possible and that the human mind could imagine, the simplicity of the interaction of all the levels of Reality. This simplicity can only be captured by symbolic language [6].

In particular, transdisciplinarity offers a conceptual frame to conceive Reality in a non-reductionist way. This methodological perspective provides us with (1) A notion of the multiple levels of *Reality* and Perception; (2) the logic of the *included middle* that allows us to state at the same time the existence of one thing and its opposed; (3) the recognition of the spiritual level of Reality in the core of the knowledge process; and (4) the inclusion of the sacred or the so call *hidden third*, which is in the space of non-resistance, situated in the place where object and subject interact within the knowledge process. [3, 7].

Transdisciplinarity implies a permanent epistemological awareness, which means that the subject/object relationship is in the core of the act of knowl-

edge. In this sense, the epistemological awareness allows us to incorporate the sacred and spiritual dimension in the main process of knowledge and praxis and to break the static disciplinary meanings and the multiple dichotomies of subject/object, reason/intuition and mind/body. This process allows us to transcend the rationalistic attitude that leads us to take shelter in the certainties that prevent us to go further in our questions and actions. “Transdisciplinarity is a way of self-transformation, oriented towards the knowledge of the self, the unity of knowledge, and the creation of a new art of living” [8].

In this sense we conceive transdisciplinarity as a transformative experience, as a healing and self-transformation process, where the person opens to the permanent questions and the reflexive dialogues within different levels of Reality to approach the paradox of the complexity of the human condition. At the same time, the dialogue with the cosmology and rituality of Ancient Mexican Philosophy, alive in many of the cultural practices today in our country, has been a very important axis in this relationship between the spirituality and transdisciplinary re-learning experience for sustainability.

2 Embodying Knowledge and Understanding: Our Being-Body in the Process of Knowledge

“Man does not have a different body than his soul.”

William Blake

Rationalism postulates that objective knowledge can be reached by the cognitive process of the rational and objective thought and that rationality is separate of emotions and separate from the body. For rationalistic thought, we must think in an objective way if we want to do science; that is, we have to think without the intromission of feelings and subjectivity. This is the only way to arrive to the knowledge of truth, to an objective, univocal and mechanical reality. In this sense, reality is separate of us, “out there,” and knowledge is not alive. If reality is “out there” and is an object, we, the subjects of knowledge, are objects too; nothing is alive and we live in a fragmented world where everything is separated. We are lost in a disjointed world and we

have lost our participative consciousness. *Participative consciousness* is the sense of being part of the cosmos, where we actively participate, because we are not separated (alienated) observers; our destiny is linked with all the cosmos and our lives have a sense in relationship with it [1].

Our sense of being separated – conceiving our being, nature and our world in a materialistic way, where everything is separated and life is conceived as an object – is one of the most important tragedies of the modern world and of rationalistic thought. Nature is an inert and chaotic object that has to be controlled. In this world, we live as isolated individuals thinking of ourselves, in a permanent competition among others, seeking how to survive and how to get power, money, and comfort. We have lost our sense of community with life and within us.

“Why is there this contempt for Nature, which we assume, without any real evidence, to be silent and impotent in regard to the pattern of meaning of our life?” [3]¹

In traditional forms of knowledge—in Mesoamerica, in South and North America, in Orient ancient cultures, in the so-called perennial philosophies – we find the presence of complex systems of knowledge that include a holistic notion of reality and a sacred view of life¹. The empathic relationship with nature that indigenous people have is full of care, affectivity and sensibility. The elements of nature (the water, the fire, the earth, the wind) are alive, like persons; therefore the relationship with these elements has profound implications in the way people understand natural and biological processes and how they assume the act of knowledge. In this act, indigenous people communicate with nature in a sensitive experience. So cognitive experience is embodied in their daily and ritual lives. They dialogue, and in this act of conversation they interact and they create their appropriation process of natural source, a process full of care and love [9]. Mythology, rituality and the sacred are always present in these traditional systems of knowledge. When Gregory Bateson [10, 11] writes about the sacred in life, about the connecting pattern that is always there, he says, “we can hear the music of evolution and dance with it.”

¹Is important to notice that the 90% of the planet biodiversity is concentrated in indigenous territories where people have profound knowledge of natural and biological process of life (Toledo y Boege, 2007).

That is what traditional cultures have always done in a sacred connection with Nature and Life.

Following these traditions and in a permanent dialogue with them, particularly with the Mesoamerican tradition that is still alive in many aspects of our way of living in Mexico, we find that the process of knowledge is linked with the *somatic experience* [12]. Our being-body is in the core of the cognitive experience, the body-emotions/mind-spirit, as a whole, are at once integrated in what we are and in what we are learning and experiencing as subjects/objects of knowledge². [13]. Cognitive experience needs to be in the Body to be able to break the rationalism, dualism and fragmentation of *Reality*, to be able to confront a complex and multidimensional Reality and a systemic organization (interrelationship). If we want to reach the multiple levels of Reality, we have to open ourselves to the possibilities of multiple levels of perception (emotion, poetics, intuition, love) because our levels of perception create our possibilities to create new knowledge. The corpse, emotions, mind and spiritual dimensions have to be joined in an *ecology of knowledge*, in an integrated and living process where experience is always present. Knowledge without experience is only information without meaning and without sense. Relevant knowledge is necessarily linked with experience by a profound perception of our senses, of our multiple levels of perception.

Our body is the scene of the articulation of knowledge in our being. The somatic experience brings our biological life into being. We are not used to our **body** life and to conceiving ourselves as a **living process**. But when we are in contact with our soma through a deep sense of perception with our body through our sensitive awareness or empathy, we can understand and be connected with the organic/emotional level and with the vital energy or impulse that sustains it (the so call élan vital–Bergson-) [12]. We can view our body as a living system in relation with the environment. The relationship that we establish with our body-mind-spirit influences our sense of relationship with the biosphere of our planet [11].

The experience of knowledge through our whole

²The somatic experience means our biological process conceived like a mental/spiritual process; that is to say that a complex communication process is happening in our whole body [10, 11]. Each molecule and cell has a complex and systemic interrelation, and in this communication process resides the corporal somatic intelligence.

body-being – that is our biological life, our emotions and our mind/spirit process – gives us the possibility to improve our cognitive skills that help to open our levels of perception. Self-knowledge is the core to not only knowing ourselves but essentially as a model to understanding “others” in the relationship. As a part of whole life, we cannot be out of the relationship. The Mexican poet Octavio Paz gives us a beautiful image of this:

So that I can be, I must be Other
Get out of me and search me between
Others
The Other that are not if I do not exist
The Other that give me my whole existence

Octavio Paz

If we want to integrate knowledge as a living experience, we have to let it grow within our being through the experience of connection, of unity with the “other,” through empathy. Our transdisciplinary approach revolves around the epistemological awareness that springs from the consciousness of our *being-body*. This awareness implies a healing process, something like “sensitive awareness.”

Awareness is consciousness allied to knowledge. It includes being attentive to what goes on both inside yourself and in the external world. For the external world, the surrounding environment of space and society is as intrinsic a part of us as the nervous system and its body envelope. Awareness cannot be taught verbally. It has to be experience. And in order that it may be experienced, a particular learning situation has to be created.

(*Verin, 1977* [14])

Empathy is a discipline. It is a strategy to comprehend ourselves and the world in which we live. Of course there are limits; there are always profound mistakes in trying empathic understanding [11]. Can I, for example, change my understanding of anything by dancing with it? When we are involved in the rhythm, when we try a deep communication with that what we want to understand. In addition, Reality and its levels are infinite, and *knowledge is forever open* [6]. Nevertheless, there can be truth

comprehension when knowledge is alive within us not as information but as experience.

When concepts are living within us, when knowledge is incorporated in our being-body, we have the possibility of the unification of what Basarab Nicolescu calls the *multiple Subject* – results of the existence within the Subject of multiple levels of perception³. *Unification of the Subject is performed by the action of the Hidden Third, which transforms knowledge into understanding*. Understanding means the fusion of knowledge and being [6]. In this sense, empathy and awareness involve the inclusion of the sacred, of the hidden third, where the interaction of Subject and Object takes place [3, 6]. In other words, the inclusion of the sacred is the emerging of *a way of being that connects* [11].

The sacred does not imply belief in God, in gods, or spirits. It is the experience of reality and the source of consciousness of existing in the world [6].

The sacred is first of all an experience; it is transmitted by a feeling – the religious feeling – of that which links beings and things and, in consequence, induces in the very depth of the human being an absolute respect for the others, to whom he is linked by their all sharing a common life on one and the same Earth [6].

3 Poetics of knowledge: The experience of sacred

In our dialogue with Mesoamerican traditions in Mexico, we have found that knowledge is intrinsically linked with the presence and the experience of the sacred. Everything is connected. The elements of nature are alive, and they have multiple connections with the person’s life. Through the ritual life, as a way of knowledge, the indigenous tradition incorporates somatic experience and the sacred in their daily lives. Knowledge is linked with sacred experience, and rituality is present in many of the moments of community.

³“Inspired by Edmund Husserl’s phenomenology (Husserl [1966]), we assert that the different levels of Reality of the Object are accessible to our knowledge thanks to the different levels of perception potentially present in our being. These levels of perception allow for an increasingly general, unifying, encompassing vision of Reality, without ever entirely exhausting it. In a rigorous way, these levels of perception are, in fact, levels of Reality of the Subject.” [7]

Through the experience of the sacred, the Mesoamerican way of knowledge understands natural processes and integrates this comprehension in daily life in a consciousness of a general ecology and basic respect for life. It recognizes our affinity with the living world and deals with it ethically and responsibly.

The essence of the sacred is relationship is the *connecting pattern* present everywhere. In life process (conceived by Gregory Bateson as a mental/spirit process), the elements of totality are connected as stories through metaphor communication; is the way that connectivity works, through relevance. We all share this way of thinking, by meaning, connection and relevance; in forests as well as in us (human beings), we think in terms stories[11]⁴. In all stories, the meaning emerges in the context of relationship, the meaning of words in human beings and of actions in every alive being. When we recognize the relationship, the connecting pattern, we discover what is not trivial. We recognize that we are part of the living world and we rescue the sense of the biosphere and of the humanity unity – we rediscover an ecology. In this way we recognize our *participative consciousness* [15] and we rise to live the poetics of life [16]. We recognize beauty and we can enter to the depth of living knowledge. When we enter to the sacred scope, we can recognize the beauty of creation; beauty as the substance of all that is alive. Ancient philosophers recognize clearly that *global wholeness is primordially beautiful*. We have lost the sense of biosphere and humanity unity, a poetic sense that can link us with beauty and reverence for life [10].

Rituals and symbolic practices are the main actions that allow us to connect with the sacred scope. We know that every sentient being – plants and animals – practice symbolic actions throughout the communication and organization that takes place. Nature has designed rituals as the way we organize our life and our social systems. It is not possible to live without doing rituals⁵. As symbolic practices, rituals allow us to experience life and all kind of

⁴The alive world is a symbolic world -Creature- where everything is impossible to understand without the evocation of difference and distinctions. In this world the communication exists through metaphor and everything gets its significance through the relationship. Organism are not things they are relations and the biological world is organized through communication process, that is to say, through metaphor, aesthetic or poetics [11].

⁵The cells and the molecules realise their own rituals for

social actions and connections through metaphor and paradigms [17]; ritual it is a poetic language that allows us to experience the sacred. Through metaphor we experience the sense of unity because metaphor unifies things that are apparently separate. Through experience, ritual and metaphor we come into living knowledge, that is, we incorporate knowledge into our being-body.

In our *Re-learning Transdisciplinary Process*, we use the somatic experience and the permaculture metaphor: *everything gardens*. Through this idea, the somatic experience is linked with the communitarian process. Community is in the core of the *participative consciousness*. The idea of co-intelligence comes from the permaculture metaphor: “everything gardens and everything has an impact on its environment.” Co-intelligence is the dance of mutual gardening, of co-influence, of co-creativity. So the notion of co-intelligence refers to the ways people influence each other individually and collectively through social systems. Intelligence is the capacity of life to create and modify patterns in its search for what works and what satisfies it. Co-intelligence adds the idea that such patterning is mutual, multi-dimensional, holistic and evolving. Co-intelligence involves bringing a diversity of perspectives into synergistic interaction through true dialogue to increase the validity, comprehensiveness and fruitfulness of the collective insights that emerge [18].

In our *Re-learning Transdisciplinary Process*, we are interested in those rituals that focus on depth of human beings to make sense of ourselves and of our relationship with other humans, with nature and with wholeness. Through ritual experience, we explore how the sacred is present in everyday life of the traditional culture in our country, and we learn how these practices attune people with the rhythms of nature; that is, the natural patterns that are outside and inside human beings. We explore how ritual practices of the traditional culture allow us to resituate our connection within ourselves, with the environment, and to create a community rhythm. So we embrace the Mesoamerica ancient philosophy that is still alive in Mexico as a time/space where community emerges and where the opportunity of dialogue, of coherence and co-organization is open. We conceive dialogue and community as a way to

communication and auto-organization process. In fact, many studies have indicated the existence of complex social behaviour in cells and molecules.

create sustainable futures.

4 Conclusions

Our transdisciplinary educational experience for sustainability includes the spiritual dimension as a core for creating relevant knowledge within our societies, at local and global levels. As a main tool for including the spiritual dimension in our research and educational processes, we set the body/being in a central place of the so-called *Re-learning Transdisciplinary Process*. Through this process we use the potentialities of the transdisciplinary perspective to go beyond rationalism, dualism and fragmentation of knowledge. In this way transdisciplinary provides us with the essential tools to improve our thought within the great challenge of creating sustainable futures. At the same time we make an important dialogue with ancient philosophies and traditions in Mesoamerica that improves our way of understanding the spiritual dimension and its place in sustainability.

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 - University Excellence Medal Universidad Autónoma Metropolitana-Iztapalapa, 2002.
 - Member of National Research System (SNI) renewed on three-year basis, since 1998
 - Vth National Reward in Agrarian Studies *Revista Estudios Agrarias*, 2000
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