



**XII INTERNATIONAL TRANSFORMATIVE LEARNING CONFERENCE
ENGAGING AT THE INTERSECTIONS
PROCEEDINGS**



**October 20-October 23, 2016
Tacoma, Washington**



PACIFIC LUTHERAN UNIVERSITY



**Aliki Nicolaidis & Dyan Holt, *Editors*
University of Georgia**

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International Transformative Learning Conference



Reference

Nicolaides, A. & Holt, D. (Eds.). (2016). *Engaging at the Intersections*. Proceedings of the XII International Transformative Learning Conference, Tacoma, Washington, Pacific Lutheran University.

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Front Page

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ENGAGING AT THE INTERSECTIONS

PROCEEDINGS OF THE XII INTERNATIONAL TRANSFORMATIVE LEARNING CONFERENCE

October 20–October 23, 2016

Pre-Conference – October 20, 2016

Conference Sessions – October 21–October 23, 2016

Tacoma, Washington, Pacific Lutheran University

Editors

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WELCOME to ENGAGEMENT
through
Community, Hospitality & Rigor

Welcome to the XII International

Transformative Learning Conference. As Host and Chair of the Steering Committee, I am honored that you have traveled so far to be in community on my beautiful campus and in my beautiful city of Tacoma, Washington.

The 2016 conference went from “napkin to ribbon cutting” over the course of four years. I made the first napkin notes about hosting on Thursday, November 1, 2012. I had arrived to hotel for the 10th conference. I found Elizabeth Kasl in the bar. We discussed the program laid out before us. As we talked a vision began to form in my mind that Pacific Lutheran University would be an ideal host location. As the 2012 conference unfolded and the community discussed our best practices and traditions, my notes went from scratches on bar napkins to detailed plans on a yellow pad. I returned to PLU and discussed hosting with various administrators. Simultaneously I was in conversation with Aliko Nicolaides, Victoria Marsick and others about bringing the conference to Tacoma. While serving on the Steering Committee for the 11th conference at Teachers College, Columbia, I was also working at home on the 12th conference.

My four-year odyssey has been joyful, insightful, inspiring and stimulating. I have encountered very few stressors in the process, truly. As a communication scholar-practitioner who specializes in conflict and dialogue, I can say with confidence that the success of the planning process has been due to solid leadership, stellar collaborators and the dedication of the community. The individuals that thoughtfully designed this conference did so with past conferences in mind, especially moving from the 2014 theme, *Spaces of Transformation*, to the 2016 theme, *Engaging at the Intersections*. Everyone involved has taken on monumental tasks regardless of one’s larger life: professional advancement work, campus leadership, civic leadership, dissertation advising, extensive travel, family time, health issues, mentoring, new jobs/cities, teaching,

etc. And of course, on August 1, 2016 the sudden death of Patricia Cranton (1949-2016) was a shock to move through, fortunately together.

All through the summer Patricia worked with Victoria Marsick and Elizabeth Kasl on the Mezirow award process. I cannot speak for Patricia, though her life and scholarship embraced intersectionality: of adult education and transformative learning; of novels, artwork and learning; of animal welfare, ecology and mentoring students. There is a strong connection to Patricia at this year's conference as our community engages transformative learning questions in the physical and conceptual intersections.

The theme **Engaging at the Intersections** was selected not just because of the 2014 theme or because it captures the praxis of this community. It was selected, in part, because of the nature of PLU and Tacoma. I hope you take a moment to stand in Red Square just outside the University Center, our main venue. Red Square is a place where students, faculty and staff often come together to wrestle with powerful topics. I also hope that you take a moment to walk two blocks from the University Center to the corner of Garfield Street and C Street to see the Parkland Mural. The Mural is new as of 2015 and has an important story that I elaborate upon in the explanation of our conference theme which follows.

Engaging at the Intersections is a way of life in the greater Tacoma area which is alive with a living cultural development plan, natural beauty, social justice projects, peace and community building organizations and more. Tacoma is literally an intersection where the Pacific Rim connects with the first most western railroad terminal and the 3rd largest port on the U.S. West Coast. When you visit, you find yourself surrounded by creativity, inspiration and innovation. When you engage the city through eating, sight-seeing, shopping and strolling, you are immersed. Unlike the bustling cities of Bangkok, Dubai, London, New Delhi, New York or Seattle, Tacoma provides space to relax and reflect. We linger over specialty coffee or craft beers. We stroll green spaces such as Chambers Bay, Point Defiance Park or Ruston Way. We wander through museums. We savor locally sourced cuisine. We browse book stores, art galleries and boutiques. We have physical space to engage in these activities – we can sit at a pub and see the open waters of the Puget Sound; we can read in a park with tall, centuries-old evergreens reminding us that time is longer than we think; and we can share a meal in a restaurant that is lively, but not cramped or frenetic. Tacoma is rightfully, The City of Destiny.

As a communication scholar-practitioner with an emphasis in conflict, dialogue and peacebuilding I know that **Engaging at the Intersections** is critical if we are to be vibrant people living in healthy communities. Tensions and conflicts are something most people avoid or accommodate rather than engage. Yet, engagement is an opportunity to explore and transform complexity. Non-engagement, the alternative, is to let the complexity change into deeper tensions, escalated conflicts, division and even violence. We see this happening across the globe as divisions deepen because as said by Martin Luther King Jr. speaking at Cornell College on October 15, 1962, *"I am convinced that men hate each other because they fear each other. They fear each other because they don't know each other, and they don't know each other because they don't communicate with each other, and they don't communicate with each other because they are separated from each other."*

It is not simply that discord, disharmony and violence are happening due to a lack of communication and due to deeper divides. It is happening because we do not engage as learners together. Violence is a method, not an outcome, for dealing with the complexity found in intersection. Transformative learning is a better, more desirable method. We must come together with others, especially with those unlike us to learn from and about each other. We must not simply communicate. We must dialogue, listen and reflect so as to transform our embodied, emotional, spiritual and attitudinal relationships to others.

With this in mind I have invited you to Tacoma and to Pacific Lutheran University to stand in an intersection and to learn together. Ask questions of one another that invite stories of perspective, struggle, marginalization, privilege and concern. Reach out to someone you do not know – ask someone to join you for a meal, talk to our volunteers about their transformative learning experiences, confront your own discomfort about new ideas or about being around so many unknowns. For many that may even be the largest fear at this conference – "I am nervous about being here, I don't know anyone, what to expect or how to behave". I invite you to acknowledge that feeling and then introduce yourself to someone.

At this, the XII International Transformative Learning Conference, October 20-23, 2016, we bring together over 200 individuals representing at least 25 nations and cultures. What an amazing opportunity! I welcome you to this four-day learning experience.

In closing, thank you for attending and for sharing of yourself. Of all the conferences I have ever attended, this conference is always my favorite. I hope it becomes your favorite as well and that I see you at future conferences.

With deep appreciation,

A handwritten signature in cursive script that reads "Amanda Feller". The signature is written in a dark ink and is positioned below the text "With deep appreciation,".

Amanda E. Feller

In Memory of Patricia Cranton

Edward W. Taylor & Elizabeth J. Tisdell
Penn State University—Harrisburg

It was a sad day on August 1, 2016 when we first learned of the passing of our beloved colleague Dr. Patricia Cranton. She had been our vibrant and brilliant colleague for a long time, but we were both privileged to teach with her at Penn State University—Harrisburg from 2005-2011 when she was on our faculty. During those years we engaged in many conversations about adult education and transformative learning theory, and those conversations continued both verbally and in writing; they were full of scholarly engagement, some argument, and full of a lot of dry wit and fun. As we begin this XII International Transformative Learning Conference with great excitement and anticipation about the study of transformative learning theory, we wanted to reflect a bit on the significant contribution Patricia made to the advancement of this theory and its practice. She was indeed a scholar, researcher, mentor, colleague, friend, worker bee, and lover of all things living,The lists go on and on.

Looking back on her long career, her many writings contributed to the advancement of transformative learning theory, and the many classes she taught both face to face and online deeply affected adult learners and scholars of adult education. It would be easy to compile a long and impressive list of books and journal articles, and the list of classes that she taught. However, Patricia was much more than a collection of her publications or her list of courses both online and face to face. For one, she was most adept at taking complex ideas and making them understandable, particularly for those just beginning to study the theory of transformative learning. Most notably is her book, *Understanding and Promoting Transformative Learning*, which was recently released in its third edition. This ground-breaking book first published in 1994 offered for many their first introduction into the theory and practice of Transformative Learning, influencing the theory's interest and access well beyond the field of adult education. In many ways, metaphorically Patricia was like a "town crier" spreading the word of TL through her work. Scholars from many disciplines across the academic spectrum continually reference this text as well as her other publications.

Not only was her work accessible, she was as well. Like many people in the field, we worked with Patricia on a variety of projects, one being as co-editors (or author) of the *Handbook of Transformative Learning*. Patricia was always willingly to assist both the novice and experienced scholar in any way possible, which is what made her a great editor of scholarly journals; she was a co-editor with us of the *Adult Education Quarterly*

from 2006-2011, and worked with John Dirkx and Chad Hoggan as a co-editor for the *Journal of Transformative Education*. Her collaborative interchanges with so many scholars led to numerous co-authored or co-edited book-length publications, including *Stories of Transformative Learning* with Michael Kroth, *A Novel Idea* with Randee Lawrence, *Reaching Across the Border: Canadian Perspective in Adult Education* with Leona English, and *Cultures and Self-Directed Learning* with Victor Wang, just to mention a few.

The volume of her scholarship in both its breadth and depth, and the fact that she collaborated with so many people, might give the impression that Patricia was very social. Despite her interaction with many people, she was quite a private and modest person. One of her last publications titled "Transformative Learning: A Narrative" published in *Learning, Design and Technology* was about the development of transformative learning over 40 years. While it is very thorough, she was modest in the sense that you never get a sense of the significance of her work in actually shaping the study of transformative learning.

Patricia was a hard worker with an engaged intellect. But she also had a life beyond her work. She was an incredible photographer, who loved nature, the wild places of the earth, and of course her animals (especially her dogs Cookie and Foxy, and her prior animal companions). An introvert for sure, but always full of dry wit and a lot of fun for those who had the opportunity to work alongside her and got to know her well. Patricia clearly listened to the beat of her own drum. She cared for the earth with such conviction that she was vegan for more years than many of us have been alive, and lived the kind of minimalist lifestyle out of a firm and steadfast commitment, which is simply an idea for most of us. While she had traveled much in her life in both physical and metaphorical ways, in her last few years after she left Penn State, she wanted to stay at home with the animals and the landscape that she so loved. She continued to write and to teach online, but did so with her photographer's eye ready to capture the next abstraction or natural wonder.

We encourage everyone during this conference as they engage in their work on transformative learning to explore and become aware of Patricia's contributions. And may the dialogues we share continue to transform us as we carry on Patricia's legacy in the ongoing development of transformative learning theory and its practice.

The Neurophenomenology Roots for Transformative Learning

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Abstract: The contribution that Neurophenomenology (Varela, 1991) can propose to transformative learning relate to the premises from which “it is possible” and “it is necessary” to promote a transformative learning. The paper will carry on a theoretical discourse around the two vectors of the possibility and necessity of the transformative learning according to the biological perspective offered by the neurophenomenological approach.

The Conditions of “Possibility” for Transformative Learning: The Contribution of the Neurophenomenology

To be able to talk about transformative learning is necessary to investigate from a biological point of view its conditions of possibility. The bio-pedagogy showed over time reading models of the learning processes of autonomous and heteronomous kind (Stollo, 2003).

In the first case both the nature of the learning process that the possibility to intervene on it starting from the conditions of the training setting are very limited, because the process of learning is determined by the genetic predispositions of cognitive structures that select between the stimuli coming from the environment those most significant for the structures themselves. In the second case, however, the learning process even in part conditioned by individual predispositions, depends more on socio-cultural environment, paving the way for educational interventions aimed at the transformation. In physical and cultural contexts of belonging, man is never passive receptor of environmental stimuli that hurt him, but is an agent system set in relationships with other agents systems, modifying each other. The socio-cultural environment is the constructor and producer of mental structures, thus the educational process is not simply facilitated by environment products.

In line with a heteronomous type model, in the neurophenomenological approach (Varela, 1991; 1996), subjective schemes are not genetically determined, but they are definitely influenced by the types of beliefs and reasoning schemes available in the culture that surrounds the individual (Stollo, 2008). This, on one hand may anticipate the impact of contextual constraints, on the other opens the way for reflection on the transformative possibilities of educational practices, which may be dialogic interaction spaces where to revise mental habits, behaviors, taken for granted assumptions transversally to the multiple application contexts (Gordon, 2013). Varela (1979) defined the unity of autopoietic systems as organized networks of the processes of transformation and destruction through which the system continuously regenerated and realized the processes or relations that produced it. Starting from these conceptual premises, neurophenomenology (Varela, 1991; 1996) offers a meaningful contribution to support the conditions of possibility where transformative learning (Mezirow, 2000; 2003) may occur.

The core concept of the neurophenomenological reflection is the intentionality, which should be considered as the root of all human action, therefore, of the learning process and of the educational action. The central elements of the reflection on the intentionality find their theoretical roots in the phenomenology by Husserl and Merleau-Ponty (Dreyfus, 1982), and their

empirical roots in the neuroscientific studies on brain functioning (Rudrauf, Lutz, Cosmelli, Lachaux, Le Van Quyen, 2003; Lutz & Thompson, 2003). Those latter besides using the traditional functional magnetic imaging resonance, adopting the virtual reality (Froese & Fuchs, 2012; Froese et al., 2014), which even if in experimental conditions, allows to identify with greater approximation the variables that impact on the process of action in contexts of real life. Considering these researches, neurophenomenology identifies the base of action modeling processes that are the principles of enaction, emergence and coevolution, which are rooted in Husserl's theoretical categories of the Constitution, Implicit and Intersubjectivity (Strollo, 2008; 2014).

The enaction implies that “the sensory-motor association shapes, but never in a deterministic way, the double endogenous activity representational and constructive in a time that it configures into meaningful world items in an unceasing flow” (Varela, 1999, p. 270). The enaction means that each human action (and each human action is an intentional experience) works only through sensory- motor acts.

The enactive approach to perception is not only constrained by the environment, but contributes to its effective activation, so that the body at the same time gives shape to and is formed by the environment. In terms of methodology, it is possible to trace the adoption of a process very close to that proposed by the phenomenological tradition, since the correlation between the subjective act and the objective data to which this act is aimed explains the separation between things and modes of manifestation of the things, the subjective perception of the acts explains the appearance of the independent reality of things, and vice versa. The starting point in the study of perception is not, therefore, a world that is given, independent of the subject of perception, but the sensorimotor structure of the cognitive agent, the way in which the nervous system connects the sensory and motor surfaces. The exterior, the environment, plays a disturbing function that resides at the origin of the activation of perception, but since it takes place in local situations and these are constantly changing, it is the sensory-motor structure that determines how that person can act and how it can be modulated by environmental events.

The emergency introduces the possibility of considering any action as characterized by the co- participation between different regions of the brain, which are functionally distinct and topographically distributed, and their sensorimotor embodiment. Recent surveys conducted in the field of neuroscience allowed to support the transition from a conception of the brain as modular, both from the topological that functional point of view, to one that sees it as active by means of the simultaneous action of fragments of modules communicating with each other for phenomena of ‘resonance’: the occurrence of a resonance between cognitive subsets that act simultaneously, even if dedicated to specific differentiated functions, brings out “the cognitive configuration of the subject at that precise moment” (Varela, 1990).

The result is the inability to reconduct a global process, such as the conscious behavior, only to local rules that govern brain function: emergency, the specific cognitive configuration, manifests itself as a construction dependent on a relationship between the organism in a whole and the environment. Consequently, the traditional notion of a cognitive agent, which collects information and makes decisions for subsequent actions is replaced by the concept of transient configuration that emerges “in a moment and disappears in the next moment, and this for every fraction of a second” (ibidem).

The coevolution, connected to Husserl's concept of intersubjectivity, concerns the ways of construction of models of actions: a reactive mode, a hedonistic mode and an eductive mode, reflecting the cognitive levels that are driving the evolution of the human gender. The difference

between the three constructive schemes depends on several cognitive factors that intervene in the processes of construction of actions: the reactive action does not require the use of particular cognitive strategies and allows to adapt to complex environments exclusively for very simple tasks. Sophisticated action carried out in an evolutionary environment require to process the action starting from one's own experience, making reference to a principle of pleasure/displeasure. This is the hedonist level: by virtue of processes of self-reinforcement, the agent works in advance and is able to build new strategies. But at the hedonistic level these action strategies are stiff and evolve slowly. The only way for an agent to change in real time unsuitable strategies is the education, which refers to the ability to mentally simulate future actions, without one's own direct experience or imitation, and from patterns of one's cognitive and symbolic dynamics, functional for the strategies to be implemented. The education means, then, agent's ability to simulate numerous cognitive trajectories, where it is necessary, and to realize a self-directed learning from these virtual trajectories (Stollo, 2008).

The limit for an isolated agent is, however, the possibility to use only models of action built on the basis of his own experience: the only way to build models, based not only on the individual experience, lies in the possibility of being able to make use of models built from the experience of others. This requires a new skill, the mirroring skill: thinking, modeling, reasoning in a given situation as well as the other would think, would model, would reason in the same situation. This is one of the main aspects of the concept of mirroring, essential concept to analyze the cohesion of human societies. In dealing with a new situation the human being does not build models only in function of what is observed but also considering the way in which the other would build models in the same situation. One of the key points of education in enactive key is thus intersubjectivity, the complementarity of self and other in the processes. One of the distinctive elements of the higher primates would, in fact, be to excel in providing an interpretation of the other's mind. This skill is a particular kind of intelligence, connected to the understanding of mental states, desires, intentions, and beliefs, based on the other's bodily presence. The other is learned, therefore, not as an object but as another similar subjectivity, an alter ego, who shares the same organic structure embodied in the same vital field: this double dimension of the body, organic and lived, is the basis of training and of the human evolution, so understood in terms of co-evolution (Stollo, 2008).

The learning process, therefore, in the neurophenomenological approach is always a transformative process: the conditions of possibility of learning reside in the ability to manage metacognitively one's own actions. About this conclusion the neurophenomenology has been working for years to build metacognitive strategies enabling subjects of experiments to report in first person (Diaz, 2013) what happens to them in the laboratory. One of the peculiar elements of neurophenomenology is criticism of the reports in third person and of researchers' reports, as a guide to the definition of what happens during the experiment (Varela, 1991; 1996; 1999). Hence the construction of paths that tend to form self-reflection about internal cognitive processes: these paths could be very interesting about the reflection on the possibility of a transformative learning (Mezirow, 2000) that makes individuals aware of their cognitive processes, acting on the emergent elements that regards the implicit and working as emancipatory element from cultural imprinting. We will discuss about these strategies currently in use as well as being tested in the Laboratory of Educational Epistemology and Practices in the end of our contribution.

How Neurophenomenology Supports the Conditions of Necessity for Transformative Learning

According to neurophenomenology, learning processes take place implicitly and are strongly influenced by the culture in which they implement, so we should reflect on how individuals are truly free in their choice of action. The condition of possibility of the process of freedom of choice lies in making explicit our own learning processes and in the emancipation from the cultural imprinting (Stollo, 2014). In this regard, neurophenomenology appears to present numerous connections with the theory of transformative learning: the input that generates the transformation is in fact intended in neurophenomenology as a kind of confused problem (Merleau-Ponty, 1962), as a perturbation (Varela, 1991) and as a disorienting dilemma (Mezirow, 2000).

Merleau-Ponty (1962) defines input as a kind of confusing problem: the body and the environment, sentient and sensitive, are not facing each other, sensation is not the irruption of sensitive in sentient, but is the outcome of a coupling, a synchronization between inside and outside, where the outside, the environment poses to the body of the living subject a kind of confused problem, for which the subject is called to find the attitude that will give him way to self-determine under this stimulus. Varela (1991; 1996) talks about inputs such as disturbance, perturbation, which triggers an autopoietic process of defense, which responds to the input renovating the subjectivity in its entirety. The concept of “perturbing input” exceeds the learning vision in mechanistic terms opening up to a more problematic interpretation of the person-environment relationship, according to which the environment, which also triggers strongly the dynamics of change, is “metabolized through a device certainly much more intricate and complex than the adaptive operation” (Stollo, 2006).

Mezirow speaks about input as disorienting dilemma (Mezirow, 2000; 2003): the disorienting dilemma is a disturbing input that determines a time of uncertainty, estrangement, an “A-ha!” moment. The disorienting dilemma is something relevant to the mystery of learning, to that jump that when it is produced, requires the need to review our patterns of meaning. The disorienting dilemma is an acute, personal and internal crisis (Taylor, 2000), which refers to some problematic experiences, themed from current insights and reference frames. People feel a disorienting dilemma when they do not undertake an action or a change despite having experienced the transformation through the process of critical thinking and reflective discourse: in this case, they go through a gap between their values and reality. In the ten step precursors of transformative learning, the outcome is the commitment in new action, testing a road thus far never undertaken. Clearly, the growth of self-awareness, the discovery of the values, and the encounter with other people promote the mutual exchange of insights, perspectives and visions that can enhance transformative learning. The disorienting dilemmas are part of the common sense of the people, but they can not be solved without understanding the ways in which the perception, thought and action distorted the way in which people have defined the problem and themselves in relation to it, in order to increase the probability of transformation. This implies that individuals acquire an awareness of their ability to give shape to their lives and the ways in which they try to cope with the disorienting dilemmas that arise in their experiences. For both approaches, the condition of possibility for a transformative learning resides into an input aiming at a reconfiguration of the previous cognitive structures, through a cognitive conflict that has resulted in an acquisition of metacognitive knowledge of the ties that imprison people’s possibilities for action. In this regard the contribution of neurophenomenology can be further: neurophenomenology and its implications in pedagogy provide as well as a theoretical support

for the possibility and the need for a transformative learning, also practical strategies for its achievement.

These strategies are currently tested in LEPE (Laboratory of Educational Epistemology and Practices) as well as in a number of contexts in which it is adopted the neurophenomenological approach to the study of learning processes and include:

- Mindfulness as awareness and training strategy for first-person reports (for the clarification of the internal processes) used in both neuroscience research as well as in pedagogy (Lutz, Lachaux, Martinerie & Varela, 2002; Dor-Ziderman et al., 2013; De Simone, Strollo, 2014; De Simone, Strollo, Romano, 2014; Lancaster, 2015; Kass, 2015)
- Metacognitive paths on the topic of the awareness of personal process of cultural formation. In this regard, since 1999 it is used in LEPE a strategy designed to make users aware of the links between formal, informal and non-formal education, such as the hypertext: formal training means learning paths that take place in educational institutions and educational programs leading to the grant of recognized diplomas and qualifications; informal learning is a corollary of the experiences of everyday life, is not necessarily intentional and therefore can not be recognized even by individuals themselves as contributing to their knowledge and skills; non-formal learning means learning paths that take place outside of mainstream systems of education and training and does not typically lead to formalized certificates. Non-formal learning is dispensed in the workplace or in the framework of activities of organizations or civil society groups (youth associations, trade unions or political parties) (Source Memorandum on lifelong learning, SEC, 2000).

The experience outcomes are reported in references sources (Strollo, 2008, 2014). Users through hypertext construction connect the three dimensions as starting point of the metacognitive awareness of the role that culture and environment play in the training process. Such awareness as appears from self-reports written by users generates awe and opens the way for a transformation aimed at achieving better management of the influence that culture plays on individual actions. This finds support in the reflection of the memes by Dawkins (Dawkins, 1976). The meme is an entity consisting of an information recognizable by the intellect (Strollo, 2008) on human culture, and that can be replicated by a mind or a symbolic memory support, for example a book, to another mind or support. In more specific terms, a meme would be a self-propagating unit of cultural evolution, analogous to what gene is for genetic, then an element of culture or civilization transmitted by non-genetic means, especially by imitation, in transgenerational sense. Memes are responsible for the trans-generational cultural transmission.

Hypertext, a kind of presentation of the connection between formal, informal and non-formal education on personal training story, is therefore understood as a disorienting dilemma from which to gain awareness of the role played by cultural imprinting on individuals' educational theory. The Laboratory of Educational Epistemology and Practices follows a different path than the most commonly used strategies as it does not depart from a biographical analysis of experience, but from a preliminary systematization of knowledge around the educational process by a synchronic and comparative analysis of the training models. This analysis is preliminary to the choice and the explication of a pattern of action, explanation that happens through the construction of hypertext, intended as a device of revision of people's educational work through the synchronic-comparative analysis of educational patterns of actions internalized.

Between Neurophenomenology and Transformation, Future Perspectives

The route presented intended to explore the contribution of neurophenomenology for transformative learning: the theory of autopoiesis (Varela, 1991) and of the embodied mind (ibidem) led to a paradigm shift in the approach to the complex relationship mind-body, understood as structuring elements of being in the world, in continuous autopoietic co-determination, which organize all human experience. We can therefore assume that the encounter between neurophenomenology and transformative learning would bring a mutual enrichment, considering neurophenomenology as a foundational element of transformative learning dimension and Mezirow's theory as an important instrument of strategies that enable precise first-person reports to be used in neurophenomenological trials.

Neurophenomenology, in conclusion, not only substantiates (rooting it in the body) the questioning of the prospects of meaning on which it focuses the transformative learning theory, but provides the incarnated dimension of the opportunity to experiment new roles, after the review process, and to add in individuals' conscious experience of new pattern of action. Therefore, our future recommendations is for a deepening of the links that connect transformative learning theory and the embodied-enactive conception of the knowledge, which is embodied in our body and embedded in our relations and in lived experience.

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