# BIOGRAPHICALLY ORIENTED COOPERATIVE INQUIRY: A SHIFT TO COMPLEXITY IN THEORIES OF LEARNING

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## ABSTRACT

The author reflects on the power of biographical methods in recomposing the dichotomies that dominate the mainstream of education and research - theory/practice, research/education, body/mind, individual/collective, and so on. Dominant theories of learning are focused on the single rational individual, acting based on conscious purpose, while democratic and social change is undervalued in favour of neoliberal goals. The problems created by this hegemonic western epistemology can be healed by thinking in terms of stories, as suggested by systems' theorist Gregory Bateson. An epistemological shift is then needed, in the light of complexity theories, and their concepts of self-organisation, emergence, and embodied cognition. Self-narratives illuminate more than individual lives, to sustain a complex view of learning as the emergent feature of entangled interactions, at different levels: micro, meso, and macro - that is, individual, interactional, and social. Adult education needs methods to overcome the dominant view and re-establish its fundamental role in granting social justice and peaceful co-existence. Biographically oriented cooperative inquiry is presented as such a method, dialogically working on contents and processes to build liveable knowledge based on human embodied and shared experience and able to foster systemic change through deliberate action.

**Keywords:** (Auto)biography. Complexity. Emergence. Interactions. Cooperative inquiry.

#### RESUMO

# INQUÉRITO COOPERATIVO ORIENTADO BIOGRÁFICAMENTE: UMA MUDANÇA PARA A COMPLEXIDADE NAS TEORIAS DA APRENDIZAGEM

A autora reflete sobre o poder dos métodos biográficos na recomposição das dicotomias que dominam a corrente principal da educação e da pesquisa – teoria/prática, pesquisa/ educação, corpo/mente, individual/coletivo, e assim por diante. As teorias dominantes da

aprendizagem concentram-se em um único indivíduo racional, agindo com base no propósito consciente, enquanto a mudança democrática e social é subestimada em favor dos objetivos neoliberais. Os problemas criados por essa epistemologia ocidental hegemônica podem ser superados pelo pensamento em termos de histórias, como sugerido pelo teórico dos sistemas Gregory Bateson. Uma mudança epistemológica é então necessária, à luz das teorias da complexidade, e seus conceitos de auto-organização, emergência e cognição incorporada. As (auto)narrativas iluminam mais do que as vidas individuais, para sustentar uma visão complexa da aprendizagem como a característica emergente das interações entrelaçadas, em diferentes níveis: micro, meso e macro - isto é, individual, interacional e social. A educação de adultos precisa de métodos para superar a visão dominante e restabelecer seu papel fundamental na concessão de justiça social e coexistência pacífica. A investigação biográfica cooperativa e orientada é apresentada como um método, trabalhando dialogicamente sobre conteúdos e processos para construir um conhecimento habitável baseado na experiência humana incorporada e compartilhada e capaz de promover a mudança sistêmica através de ação deliberada.

**Palavras chave:** (Auto)biografia. Complexidade. Emergência. Interações. Inquérito cooperative.

#### RESUMEN

# INVESTIGACIÓN COOPERATIVA BIOGRÁFICAMENTE ORIENTADA: UN GIRO HACIA LA COMPLEJIDAD EN LAS TEORÍAS DEL APRENDIZAJE

La autora reflexiona sobre el poder de los métodos biológicos para recomponer las dicotomías que dominan la corriente principal de educación e investigación: teoría/práctica, investigación/educación, cuerpo/mente, individual/colectivo, entre otras. Las teorías dominantes del aprendizaje se centran en el individuo único racional, actuando sobre la base del propósito consciente, mientras que el cambio democrático y social está subestimado en favor de los objetivos neoliberales. Los problemas creados por esta epistemología occidental hegemónica se pueden subsanar por el pensamiento en términos de historias, como sugiere el teórico de los sistemas Gregory Bateson. Entonces, se necesita un cambio epistemológico, a la luz de las teorías de complejidad y sus conceptos de autoorganización, emergencia y cognición encarnada. Las auto-narrativas iluminan más que las vidas individuales, para sostener una visión compleja del aprendizaje como la característica emergente de las interacciones entrelazadas,

en diferentes niveles: micro, meso y macro, es decir, individual, interaccional y social. La educación de los adultos necesita métodos para superar la visión dominante y restablecer su papel fundamental en la concesión de la justicia social y coexistencia pacífica. La investigación cooperativa de orientación biográfica se presenta como un método de este tipo, que trabaja de forma dialógica sobre los contenidos y procesos para desarrollar un conocimiento de vida basado en la experiencia humana incorporada y compartida, capaz de fomentar el cambio sistémico a través de la acción deliberada.

**Palabras clave:** (Auto)biografía. Complejidad. Emergencia. Interacciones. Investigación cooperativa.

Break the pattern which connects the items of learning and you necessarily destroy all quality (BATESON, 1979, p. 8).

## An epistemological issue

For more than 30 years I have done biographical work in group settings, as a way to build valuable knowledge for education. This locution - valuable knowledge - is worth a reflection: research and practice are too often separated in the field of adult education, more generally in social sciences, due to the typical academic binary attitude at creating boundaries and categories. "Scientific" abstract and generalized knowledge (the aim of mainstream research) is thus separated from personal, practical, and experiential knowledge. On the contrary, I adhere to a philosophy of education where any single act, event or experience is a mix of theory and practice, research and intervention, and doing biographical work with adults is research that illuminates our knowledge of life. The building of knowledge, that I prefer to designate by a verb - knowing - is a complex and systemic process that cannot be fragmented in different fields or paradigms (metaphors of separation) without losing, with that, its real essence.

Knowing is an ongoing process of interpretation and communication within a context, that can be considered "mental" (a Mind is a self-organising system, see Bateson, 1979) as well as "performative": to interpret is to enact a world (VARELA, THOMPSON, and ROSCH, 1991). In this framework, (auto)biographic work is a process of knowing, interpreting and communicating that entails a plurality of minds and bodies, ideas and actions. By telling lives, we build ourselves, our relationships and the world. Narration is a form of knowledge construction of its own. Biographical work implements a method, that is "a path" within a dynamic and changing context of relationships, where self-narratives are not granted, neutral or anodyne. Stories take a form that transforms in time and in relation to the context; they have different outcomes and responses, not always desirable, or functional. So, a critical and reflexive theory of (auto)biography as a research method and a practice of adult education should address the epistemological issue: what kind of knowing do we (want to) perform, when telling, or writing, sharing, analysing (our) life stories? What kind of world are we enacting?

The fact that biographical methods are so widespread nowadays is not a guarantee. On the contrary, we must be suspicious, since ideas nurture the context where they thrive, and our present context is problematic in many regards. So, why (and where) are (auto)biographical methods so famous, in research and education? There are different epistemologies, each embedded in an academic and professional culture - the French speaking world has developed a different frame for biographical work from the Anglophone, or North European, or the Korean and Brazilian worlds. (Auto)biography is not a monolithic reality. What I will develop in these pages is a specific theoretical and practical contribution, inspired by the systemic approach and by complexity theories. A relevant feature of the systemic epistemology is the plurality of systemic levels of analysis: the micro, meso and macro level combine in a pattern which connects them, which offers a possible solution to the fragmentation or competition of ideas.

Gregory Bateson theorized the "ecology of ideas" (1972) as a trans-individual and trans-disciplinary whole where our distinctions operate to move our thinking and make it evolve; multiple ideas emerge from ongoing, dynamic conversation and dialogue (inside and outside us) instead of a unique static truth, and enhance our capacity of "thinking in terms of stories" (1979, p. 14). Adult education in contemporary times needs to be ecological and sustainable (these are the new mantras of the contemporary world, but Bateson signalled half a century ago that pollution is not only environmental, it is mental, relational and spiritual as well). In fact, we are sensitive to the context and especially to the quality of our natural and social environment; moreover, we need to become aware that we - and our ideas - belong to circles of interactions, and depend on other ideas, objects, and people, to bring

forth our existence. The destiny of our world is our own. Adult education in contemporary times needs justice and freedom, values to be rehearsed in the light of complexity.

This paper, then, is about an approach to complexity that goes beyond trivial humanism (especially in its more individualistic manifestations), to adopt a complex trans-human attitude. I will bring some argument to show how this shift affects quite significantly (auto) biographical work, but can also be affected by it. Transcendence is the result, ultimately, of some kind of biographical work.

# Complexity: a theory of life and learning

Complexity encompasses a range of theories (ALHADEFF-JONES, 2010, 2012), from systems theory to autopoiesis, radical constructivism, second-order cybernetics and evolutionary biology. They frame human systems and relationships as becoming dynamic structures, characterized by circularity, self-organisation, co-evolution, and emergence. These theories are used in health care, ecology and social sciences to develop new presuppositions and more respectful, ethical, and effective practices. They have been used in education to revise its theories (MASON, 2008; JÖRG, 2009), organizational approaches (STACEY, 2005; DAVIS & SUMARA, 2008; LOORBACH, 2010; SNOWDEN, BOONE, 2007), and reforms (SNYDER, 2013; MORRISON, 2010). In adult education, they inspired studies on democratic practices and policies (BIESTA, 2006; OSBERG and BIESTA, 2010), contexts and relationships (EDWARDS, BIESTA and THORPE, 2009), or integrated approaches (FENWICK and EDWARDS, 2013).

Complexity frames adult learning as a layered and multiple phenomenon, starting from its very basic epistemological assumption: what we call 'reality' requires an observer (von FOERSTER, 1973), or better an observer community, since "observing takes place in languaging" (MATURANA, 1990, p. 102). The vocabulary that we use to name experience (to tell our story) allows certain versions of the story, that are coherent with our culture and its forms of *languaging* (MATURANA, VARELA, 1992). The verb highlights that we are dealing with a process, a form of inter-action; what is crucial in languaging (in telling our story) is not (only) its contents, words, or its correspondence to a world "out there". It is coordination, reciprocal orientation, and doing together. This reinforces our community (for better or worse).

Words (with their supposed denotative meaning) are used to compel people to act in certain ways (based on their connotative meaning, MATURANA, VARELA, 1992). Hence, the value of our stories, descriptions, and theories (linguistic constructions) does not derive from their correspondence with an independent objective world, but from their viability in a world of experience. Like all pragmatic philosophies, complexity values experience.

As living organisms, we select information and maintain our structure; this ontogenetic drift (our individual history) is unconscious: we do not know how we became and are becoming the person we are. Learning is the "an ongoing structural drift" (MATURANA, VARELA, 1992) producing the subject, the object, and the context in the same here-and-now. The participants' actions and perceptions are coordinated: they see (on the basis of) what they do, and since they do together, their meaning is related to the same socio-material environment, a lifeworld is enacted (Varela, Thompson, Rosch, 1991) in a circular loop. Individuals co-evolve to form higher order units (MATURANA, 1990) such as families, organisations, and social systems, each with their own internal consistency, identity, language and myths. Each forming an observer community, based on redundancies,

hidden rules, linguistic games, and shared vocabularies. It is not possible to understand learning, or a learning biography, if we do not make an effort to grasp the complex dynamic of proximal systems. This is the meso-level referred earlier.

Observer communities (cultures, groups, organisations) are the dynamic result of this ongoing, never ending process of coordinated action, involving individuals as well as objects and spaces. Difference seems necessary: a system or Mind (BATESON, 1979) is a self-correcting process of circular interactions, processing differences and creating information. A group, organisation or family are "collective minds" which learn and transform in their own way. A theory of learning needs to offer concepts and approaches to understand this complexity.

Complexity has very concrete consequences. Firstly, it invites us to avoid reducing complex systems (living beings, organisations, ecosystems) to simple or complicated ones (SNYDER, 2013): the former is mechanical and expected to give the same answer to the same question (Von Foerster's "trivial machine", see 1993); the latter works with a variety of interconnected factors, needing expert knowledge to explain and control it, but then it works like a machine too. A complex system will never be fully explained or controlled without damaging its delicate equilibrium, or meaning. It is a mystery, since it reacts unexpectedly based on interpretation (inner states of communication), instead of linear causality.

As educators or researchers we may construct the other as simple, complicated, or complex: when we give instructions we are simplifying; by using expert knowledge (algorithms for example) to make a forecast, we are treating them as a complicated machine. When we involve them as "observers" of their own experience, reacting to it on the basis of interpretation, we are in a process of mutual learn-

ing, which is complex. This is what happens in biographical workshops, when information *emerges* from interaction, learning is unforeseen and depending on mutual interpretation of many actors. When we make an effort of interpretation of the situation at hand, there are unexpected conscious and unconscious events in the body and mind, in languaging and talking, in the relationship here-and-now, that open space for a chain of further events. Constraints and possibilities are revealed, meanwhile, in the environment. Linear causality cannot be invoked to explain these processes.

This is a problem, of course, when it comes to "demonstrating impact", or "assessing best practices" and building "standard operating procedures": the hegemonic language in education is based on trivialization (von FOERST-ER, 1993), that is the massive tendency to treat complex living systems as simple or complicated ones. A living system is unique and cannot be trivialized without destroying quality. This is a good argument in favour of biography. Complex systems cannot be controlled neither totally known: "The complex is the realm of the unknown unknowns. It is a space of constant flux and unpredictability. There are no right answers, only emergent behaviours" (SNYDER, 2013, p. 9). What we can do, is to narrate them, knowing that uncertainty is a gift of complexity in education: "We should learn to navigate on a sea of uncertainties, sailing in and around islands of certainty" (MORIN, 1999, p. 3).

# Micro, meso and macro levels of inquiry

Biographical work prompts participants to become reflexive in relation to many levels of their lives. Stories of adult learning feature multiple dimensions and punctuations: we are not neutral observers of our lives, but we draw on presuppositions in interpreting events. These pre-

suppositions have been built in previous interaction with significant others, and education should make them visible, if not changeable. This change of perspectives can be named as "Learning II" (BATESON, 1972), "transformative learning" (MEZIROW, 1991), "transitional learning" (ALHEIT, 2015). It is the essence of adult learning. But we are too keen to see it as an individual change and undervalue the change in context that is always entailed by it. Systemic theories introduce such notions as context and co-evolution, shifting the focus from individual learning to a multiplicity of learning dimensions (FORMENTI, 2018):

- At the micro-level, learning is embodied, only partially conscious, made of (changing) perceptions, meanings, emotions, values, interpretations; the learner's voice is a central feature of (auto)biographical methods (FORMENTI, CASTIGLIONI, 2014).
- At the macro-level, learning is shaped by discourse, by social structures impending on our lives, related to gender, class, ethnicity, background etc.; so, to understand a learning we need critical awareness of the social nature of subjectivity (ALHEIT, 2015).
- At the meso level, learning is a matter of interaction between people in the hereand-now; we participate in everyday conversations at work, in the family, in our webs of affiliation, in the internet, spaces and organizations where scripts emerge, and individuals are characters, parts of linguistic games.

The meso-level (ALHEIT, DAUSIEN, 2000, 2007; FORMENTI, 2011B; BOHLINGER et al., 2015) is marginalized by grand theories of adult education: they tend to refer to psychology or else to sociology, more rarely a mix of the two. In biographical studies, a psycho-social approach is often invoked; but we need to go be-

yond the psycho-social approach and enhance our capacity to analyse the local system of interactions and relationships that concretely shape our actions and scripts, and conversely are shaped by them, day by day. A biographical workshop can build such kind of knowledge.

A comprehensive theory of human learning should embrace and interconnect these three levels. Bateson's idea of a pattern which connects all the dimensions of learning challenges the common sense theory and epistemological presuppositions that inform educational practices and policies. A hegemonic set of ideas about life and learning dominates late modern societies towards a linear, essentialist, and anti-ecological approach. Bateson referred to them as "pathologies of epistemology" (1972, p. 478-487) and "shortcomings of occidental education" (1979, p. 8). His concern is still relevant and urgent nowadays. A feeling of dis-connection, fragmentation and meaninglessness permeates many lives, and education as well. It is not new, or a product of recent globalization, migrations, increased information, or the mere result of the pluralisation of life courses and hedonistic commodified lifestyles.

Dis-connection, Bateson warns us, has more ancient and epistemological roots. It is relational, a product of material and symbolic walls and boundaries, that we build between us and other, us and the world, when we talk of "fields", or when we conceive "cultures" as given and closed communities, each with its own understanding, language, and ways of doing. Separation nurtures defensive strategies and discourses that are "hermetically sealed off from each other" (ALHEIT, DAUSIEN, 2000, p. 407). Segmentation and specialization nurture social exclusion and serve neoliberal politics; they bring forth a view of society where skills, competences, and adaptation to rapid change are key words (ZARIFIS, GRAVANI, 2014). Dis-orientation, a common experience in adult life (FORMENTI, 2016a), is a feeling to which we respond by isolating ourselves and excluding whatever and whoever is "other" (BIESTA, 2006). The subjective experience of fragmentation is not only a personal, psychological problem: inner and outer worlds are correlated. (Auto)biographical research and practice can illuminate their relationship.

Dis-connection also produces its own healing and re-equilibrating processes. For example, a disorientating dilemma is, in Mezirow's theory (1991), a first step towards recognising and potentially transforming one's presuppositions. Thinking in terms of stories - abductive thinking (BATESON, 1979) - is the human way to (re)connect to the larger systems of which we are a part. The increasing 'biographisation' of life (ALHEIT, 2015; DELORY-MOMBERGER, 2009, 2015) can also be seen as a healing reaction and solution. In the "biographic society", self-narratives are a means of social construction that satisfies more than individual needs: "Never before has a society asked so many of its individuals to produce [...] the meaning of their existence" (DELORY-MOMBERGER, 2015, p. 38). Self-narrative can be a method (at certain conditions) to foster individual self-reflexivity, awareness and agency, and transform local and social systems. A thesis for contemporary times is that social change actually needs biography, the real revolution starts inside, or very near us. As demonstrated by biographical research, stories can make a difference to communities, workplaces, and groups, beyond individual learning (FORMENTI, West, 2016).

However, the apparent obligation for everyone to tell their life (DELORY-MOMB-ERGER, 2015) does not lead to real shared understanding or freedom or even insight. We need methods to re-compose separated and overspecialized perspectives into meaningful pictures. We need to re-state life as a whole. Adult education should enable researchers,

professionals and policy makers to compose their fragmented overspecialized perspectives in dialogical and transdisciplinary paths. Binary thinking, the basis of Western epistemology, is anti-ecological: it destroys quality, life and meaning.

In order to re-connect to the whole, adults should be invited:

- to meet and know others who are also living in the same environment, or organisation, and depending on each other for (mutual) learning;
- to explore and recognize the natural, material and social constraints and possibilities of learning;
- to listen to their own bodies and unconscious processes of knowing, fuelling, hindering, and shaping learning.

All these relationships are too often forgotten and marginalised by adult education. In the systemic theory, the "unit of learning" is a whole formed by *individual-and-environment* (BATESON, 1972): individual change depends on and provokes other changes in the system. Learning needs relationships and interactions: within the individual unity (mind/body/heart/soul), with others, within and among organisations (local like the family or workplace; and larger), with many material and symbolic objects and places, with the broader society, but also with the species and the cosmos. All of which is interconnected.

The biological, socio-material, embodied and embedded nature of learning should inform biographical theories and research (HORSDAL, 2012; FORMENTI, WEST, HORSDAL, 2014). The pattern which connects is therefore an ecology of ideas and practices that may enter in biographical work (or simply be recognised, since they are already a part of it), to be used reflexively and critically to challenge dominant ideas of learning as individual, cognitive, and cumulative. Biography has

the power to overcome the binaries created by hermetically sealed-off communities and discourses. A life story is a celebration of interdependence and complexity; by telling it with this kind of awareness, we build wisdom, meaning and sense (TISDELL, SWARTZ, 2011).

# A comprehensive theory of coordinated learning

Complexity challenges the hegemonic idea of learning as individual, cognitive and acquisitive (FENWICK, EDWARDS, 2013). Learners learn by coordinating their behaviours, ideas, reciprocal positioning, narratives, among themselves and with the material world. So, a comprehensive theory of coordinated learning should compose different levels. The mind/ body unit (individual, microlevel) can learn in many ways (BATESON, 1972): we can respond to an event (Learning 0) consistently with our history and present position; we can change our response (Learning I), by drawing from a given set of alternatives; we can correct the set of alternatives, or perspective (Learning II or deuterolearning, is a change of meaning, presuppositions, frameworks); we can also go through a deeper transformation of our personality, self, worldview, or the way we set alternatives (Learning III). All these forms of learning take place in adult life, not necessarily in educational settings or even in intentional ways.

At a relational level (meso), learning entails conversations with others, in proximal systems and networks (self-organizing units that stabilize over time, such as a family or team); these "Us" maintain their organisation/identity while undergoing structural transformations. They feature scripts, myths and rituals, which may stabilize or transform, feeding back onto individual learning. At the macro-level, structural transformation and change also occur: laws, procedures and norms shape and are shaped

by the action of local groups and individuals. Media have an impact on people's lives by spreading dominant narratives (the power of storytelling, see SALMON, 2010); different representations and discourses facilitate or undermine the potential for change at a local and individual level. Everything is interconnected.

Each level has its own logic and internal consistency, or "structural determinism" (MA-TURANA, VARELA, 1992); in order to respect complexity we need a lot of information and reflexivity, especially in a rapidly changing world. The role of adult education in the contemporary society goes beyond the acquisition of abilities and skills, or even reflection, if we mean by it a merely cognitive and conscious act. We need to navigate in uncertain waters, among different perspectives of meaning/cultures, all of them legitimate, and contrasting, if not conflicting, and learn how to re-compose our dilemmas in viable ways, together with others. Contemporary adult education should develop our ability and willingness to learn from difference and conflict, to draw distinctions (von FOERSTER, 1993), and to transform our perspectives by adopting the other's point of view. Otherness is a precondition for viable learning.

Complexity works for large systems too, for example in educational reforms (SNYDER, 2013), where actors and institutions have different interests; the promotion of local spaces for reflexivity and interaction is necessary to foster learning through participatory and dialogic methods. The amplification of a little local difference (butterfly effect) can lead to systemic transformation, hopefully without destroying the ecosystem. Biographical workshops can become the leverage for institutional and cultural change. Complexity orients adult education, then, towards new methods, or a re-interpretation of old ones, based on multiplicity, coordination of actions and mean-

ings, and responsibility. As entailed by von Foerster's imperatives:

The Ethical Imperative: Act always so as to increase the number of choices.

The Aesthetical Imperative: If you desire to see, learn how to act. (1973, p. 61).

## Biographically Oriented Cooperative Inquiry: complexity as a compositional practice

The theory of learning sketched above offers a frame to re-interpret (auto)biographical work. Most biographical approaches put an emphasis on the individual level and learners' voices. However, they risk to collude with the dominant view of lifelong learning (ZARIFIS, GRAVANI, 2014), based on self-direction and personal responsibility, pushing learners to develop their views and projects on an individual basis, and to work in competitive ways against their best cooperative and collective impulses. If interdependence and vulnerability are marginalised and silenced, even words as empowerment and agency become suspect. The obsessive focus on oneself may be reinforced by biographical work, if the story told confirms dis-connection and the individual versus environment dichotomy. For example, when stories are used to reify the biographical path of the single individual and to (re)construct learning needs and competences that are useful for the market. When we work in order to assess the "possession" of prior knowledge, in order to "accumulate" new learning achievements, we are complicit with oppressive forces. There are many occasions to trivialize or deny, in education and research, the messiness and complexity of meaning, or the presence of emotions, ambivalent relationships, and shadows (FORMENTI and WEST, 2018). On the other side, a sociological view can be used to contrast de-contextualization, but the risk is to make abstraction from the local and concrete context,

that is unique. Sociology tends to build big categories, but we need to know about interactions and rules, that are proper to each meso-system.

I started my exploration of biographical methods with a PhD project (1993-1996) with groups of university students, using writing to enhance reflection, as suggested by scholars like Pierre Dominicé (2000). Soon I started to suggest other languages (drawing, poetry, novels, movies, songs...) to nurture a biographical imagination and aesthetical appraisal of one's own experience. Since 2005, I have been using the framework of cooperative inquiry (HERON, 1996; FORMENTI, 2008, 2018) to connect the biographical dimension to other forms of knowing that are relevant for learning.

Cooperative inquiry weaves together four forms of knowledge: experiential, presentational, propositional, and practical (HERON, 1996). A group of adults (students, professionals, parents, citizens...) meet over a certain period of time, and negotiate their interests, questions, and the scope and method of their inquiry. All of them become researchers of a topic that is meaningful to them. In the first phase of inquiry - what I name "authentic experience" participants connect to their biographical and present experience, mainly through the body: they use perception from all the senses and radical embodied memory. Body work, meditation or other forms of mindfulness may be useful to enhance the quality of presence, during this phase. Which is essential to create a feeling of authenticity: a paradox indeed, since we are normally alienated from it. Then, in a phase called "aesthetic representation" (FORMENTI, 2011a), the participants explore the meaning of experience by using imagination: they tell stories, not only in words, but through artistic representation, symbols and metaphors, to maintain the aesthetical quality of experience. In this phase, language is used as an abductive tool: poetic and evocative, more than descriptive and categorizing. This is a challenge, especially for highly educated adults, who have learned to control their speech, to give sharp definitions and to trust the denotative meaning of discourse, more than its mood or connotation. For many adults, the difficult experience of listening to one's own body for a while is a good chance to let go the rational mind and restart to feel.

The performance, story or artwork that is the result of this phase is presented to others (in ways that are decided together), which provokes further reactions, emotions, and ideas in the group. Some patterns, or compositions, may emerge from this presentational and performative phase/action, which deserves attention, respect, and curiosity, since adult people often need to be re-connected to their imaginal self, that was dismissed by previous experience, and re-learn to trust their intuition. All of this enters then in a further phase - "intelligent understanding" - entailing generative conversations among the members, sometimes in little groups, to bring together ideas and images and interconnect them in order to develop collective meaning, based on local emerging theories. Previous knowledge is re-vitalized by connecting it to experience-based knowing and images. From these conversations, possibilities emerge (desires, new questions, actions to be taken, proposals) that can bring to "deliberate action" (the last phase, where the group decides what to do next) and start another cycle.

In all these years, students taught a lot to me. Especially mature students: doing biographical work, they reveal (and sometimes heal) their struggles, connected to the building of identity, meaning, hope, and possibility, and the blindness and deafness of the system to their real needs and desires for learning. Similar things could be said for other groups of adults, which I worked with: professionals, parents, educators, teachers, nurses, midwives etc. All of them may appear, at some point, deeply disoriented about the meaning of their life and their choices, or the value of learning for them and their proximal systems. The stories they tell about themselves can be closed, monothematic, saturated with "problems", or myths, or a theory of oneself that has never been seriously challenged, and works like a prison. Oppression, as Freire taught to us, can be deeply internalized.

Cooperative inquiry offers a possibility to challenge and transform these fixed narratives, and the frames of meaning that sustain them, hence avoiding the risk to confirm them by a method that would block evolution and differentiation. My favourite setting for researching human lives is the workshop: a group of people performing collective action, using their imagination and creativity, and transforming themselves, their relationships and their worlds through that. A workshop is a place/ time where people do things, develop common aims and methods, share principles and values and enact their own reality. (Auto)biography, in such settings, becomes a work-in-progress, the provisional outcome of collective action, a co-construction then. Such workshops are an amazing stage for many different kinds of performative acts. Writing is one of many ways to develop our thinking, to name things, to explore meanings; it allows further action, like reading, sharing, re-writing, and interpreting: these actions enact a world where one's life can be enriched by more meaning and a variety of interpretations. The capacity of naming one's experience and building a rich and deep interpretation of it is crucial and liberating. And yet, all these activities belong to propositional knowing (HERON, 1996), but if we want to celebrate the complexity and variety of lives we need to take into consideration other forms of knowing: the authenticity and embodiment

of experience (not least, in order to avoid mystification, or "telling stories"), or the workings of unconscious processes, that cannot be expressed by words. Imagination and aesthetic representation are very important, as well as critical thought.

So, cooperative inquiry with its different forms of knowing became a model to inspire my action. I call my method "Biographically Oriented Cooperative Inquiry" to stress that the participants' experience is the site of research, not its end. To transcend one's experience is as important as to tell it.

When self-narratives are shared in a collective space, as a workshop, there is an emergence of (new) patterns and frames of meaning, constraints as well as possibilities, which comes from the connections in the group, their communication, the meanings that are developed together. A compositional understanding of biography (FORMENTI, 2008, 2011a) acknowledges that adult learning is guided by conscious purpose and yet not controlled by will. Most learning is 'almost as unconscious as breathing' (ALHEIT, 2009, p. 27). There is something that goes beyond our capacity of acting, choosing, or understanding. I consider narrative as a performance, an aesthetic practice of composition similar to play and art (GERGEN, GERGEN, 2012), that has the power to present and connect different ideas and images into a form, here-and-now. Its relationship with there-and-then is mysterious, not linear. Memory is another word for imagination.

By doing this kind of collective dialogic work, each participant has "the chance to recognize the surplus meaning of our life experiences and to make them usable for deliberate modifications of our self- and world-reference" (ALHEIT, 2015, p. 26). Still, this outcome is not automatic; all the participants and the group as a system have a role as "biographical midwifes" (ALHEIT, 2015). Alheit and Dausien (2000) intro-

duced the concept of "biographicity", to name a resourceful learning that emerges from the experience of transition, that is when adults are faced with uncertainty and challenges, pushing them to learn beyond their own biographical constraints. Dilemmas, and more generally the experience of a difference that makes a difference, are a requirement for biographicity. The group setting makes it easier, since this kind of learning needs more than telling one's life experience; it requires good enough relational spaces and containment of anxiety, given that transitional learning is difficult and painful. It also requires spaces of questioning, in which a difference that makes a difference becomes new information (BATESON, 1979). Critical friends, mentors, people with other perspectives are necessary for our learning, since they challenge the monolithic and saturated stories (EPSON and WHITE, 1990), shaped by dominant narratives and strong truths, that we might tell. The presence, in the workshop, of a multiplicity of sights, images, narratives, theories, and truths, is helpful and necessary to allow transformation and to fuel dialogic conversations. This is a plea in favour of cultural diversity and heterogeneity: as it happens in biology, evolution is based on differences, composed and re-composed in our ongoing narratives.

This brings us to conflict as an important resource for learning, if potentially destructive. Learning peaceful conflict – how to transform differences in opportunities - through dialogic conversations is a main feature of adult education as we learnt from people like Paulo Freire, Danilo Dolci, Aldo Capitini and many others.

Biographicity, then, is not the outcome of individual adaptation strategies at a micro-level, but an emerging quality of specific interactions and conversations at the meso-level (intentional or occasional), using information from the broader context (macro-level). As claimed by social constructionists, the theory of biographicity itself, as well as the development of biographical action in research and intervention, constructs (new) narratives in new ways. It is not only about contents and Learning I (BATESON, 1972), it builds a different learning context, hence possibilities for Learning II/ deuterolearning, and even Learning III. It is a responsibility of education, to choose methods and means that are conducive to multiplicity and complexity, so as to open more possibilities. There is, here, a notion of liberation as a process where we become freer of previous ideas and capable to construct more liveable contexts.

There is a difference between reflection and reflexivity. When biography is based on the former, the crucial moment is becoming aware of inner and outer constraints, taking a distance from them, and making a choice (in Mezirow's theory of transformative learning, consciousness and rationality are central to "think like an adult", MEZIROW, 2000). Reflection is praised by contemporary adult learning theories, and maybe necessary but not enough. Rational consciousness is a form of knowledge among the many. It appears culturally biased: western, masculine and excessively guided by cortical activity; it marginalizes or silences the body, intuition, imagination, aesthetics and abductive processes. Which excludes a priori, or dismisses as "inferior", indigenous epistemologies and even women's or children's thinking, as Essoglou (1991) claimed in her critique of Freire's concept of dialogue and "naming", or Belenky and Stanton (2000), writing on the limits of Mezirow's theory.

So, reflexivity (HUNT, 2013) is a deeper concept that means the capacity to feel one's own body and unconscious, to connect with the other and the environment and to transcend your ego. It is very near to systemic wisdom, defined by Bateson as a sensitivity to the pattern which connects, a capacity to (re)connect

with the context and be responsive to the other and the world. The reasons of the brain reconnect, here, with the reasons of the heart, looking for a new equilibrium. Human life is not reducible to rational choice alone: lived experience, aesthetical representation, conversations and practice form a flux in a larger system where we are only a part, and aware that we can only see a very small arc of circuit. Reflexivity is learning in and through complexity. It entails transcendence, since we recognize something beyond us, beyond our ego or individual existence. Some people call it God, Plato called it Logos, it can be Nature, the Cosmos, or "systemic interconnectedness". Recognition of it could be the ultimate learning for an adult (FORMENTI and WEST, 2018). A form of tertiary learning, in Bateson's terms.

Biographically oriented cooperative inquiry entails a reflexive re-composition and re-equilibration of mind and body, words and images, propositional and presentational languages; it invites learners to take a (dynamic) position, in relation one to the other, so as to make their different points of view, experiences, and frames of meaning visible and changeable; it sustains the co-construction of satisfactory local theories, viable and sustainable in the local context (family, work group, community), and conducive to collaborative action; finally, it respects broader ecologies.

Biographically oriented cooperative inquiry offers a learning environment that fosters dialogic relationships, conceptual composition, and 'thinking in terms of stories' (BATESON, 1979). It bridges the biographical with the dialogic, reflective and reflexive methods of adult education, and with the interpretative/critical frame of educational research. It is inspired by many different traditions of qualitative research – narrative, (auto)ethnographic, participatory, arts-based and performative – and by critical pedagogy.

All these approaches can become useful to support the emergence of learning. For example, I use duoethnography (NORRIS, SAWYER, LUND, 2012; SAWYER, NORRIS, 2013) to sustain the multiplication of perspectives and critical understanding of issues related to identity, power, gender, injustice and inequality. Using creativity, irony, and lightness to bridge the biographical with a critical perspective (ROSIEK, 2013) is a way to multiply descriptions and avoid reification of stories.

In this method, learning is not searched for: it emerges, unexpected and unplanned, from the process. The powerful combination of aesthetic languages, dialogue, and responsive action, connected to lived embodied experience, fosters co-evolutionary learning within the group and nurtures the participants' ability to appreciate complex thinking, to recognize stories and differences, to act in playful, carefull and critical ways, and to take personal and social responsibility. It can help professionals, researchers and adults in general to accomplish their social mission of creating possibilities for better living.

It is not an easy method: it requires time and care, safe and trusting relationships, generosity. It can build strong qualitative data and offer insights on many issues related to adult life. It enhances care and care-fullness as a complex feature in human life. Adults are responsible of others, but in order to take care of others we need to be able to care for ourselves, for our relationships and contexts, and for the larger society. Care requires attention, meaning, and sensibility. Besides, it demands knowing ourselves, our biological, psychological, relational, and social determinants, and the complex network of relationships which are woven around us, in our proximal system, and in the broader social context. Individualism is clearly inadequate to answer all of this. As biography alone.

### **Conclusions**

I presented a (new) framework and method for (auto)biographical work, where learning goes beyond the evolving individual self, to take care of the reciprocal and ecological co-evolution of a group of people, and the possible transformation of contexts. Learning does not come from our conscious efforts to change ourselves or others. It is the emergence of unexpected new patterns and actions, effecting the biological as well as psychological, relational, institutional, and social levels. Learning is thus both social and individual, physical and symbolic, conscious and unconscious, or embodied. The pattern which connects these dimensions may become a conceptual basis for biographically oriented cooperative learning, as an antidote to binary thinking and dis-connection. Adult education is urgently required, in the complexity of contemporary society, to compose the material dimensions of life (bodies, spaces, objects), with actions and perceptions, emotions, images and stories, words, concepts and critical theories, values and statements of interest, and the embeddedness of all these in the broader relational, cultural, social context. This complexity cannot be managed with old fashioned trivializing and mechanistic theories, practices and policies. As an adult educator and researcher, I feel the responsibility, and the power sometimes, to open opportunities by enabling individuals to re-conceptualize and re-invent their stories, roles and identities within their webs of affiliation. To this difficult end, I have to engage myself in a transformative process. I have to interrogate, as an academic, the conventional styles of interaction and scripts, based on separation and competition, closed communities, and an hyper-specialized language.

I quoted Heinz von Foerster's imperatives (1973): if I want to open new possibilities (eth-

ical imperative), I have to act differently, so as to begin to see what I was unable to see (aesthetical imperative). My desire is to see a more equal, peaceful, and viable world. To see the pattern which connects, I have to avoid trivializing others, isolating them and silencing their voices. The whole human being deserves respect; education should open up possibilities for critical thinking, and foster collaborative conversations. This is not a comfortable choice, or idea: it considers education as uncertain, learning as something that cannot be foreseen or controlled, and interdependence as a quality of life. It challenges our omnipotence. And yet, it can boost our capacity to learn and to live with each other.

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