Experience, *experientiality* and complexity: a pertinent discussion to adult education?

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Abstract: In this paper we present a systematization of ideas that have emerged from a theoretical and epistemological reflection, relating the concepts of experience (Honoré, 1992, Larossa, 2002, 2011), knowledge from experience (Larossa, 2002, 2011, Freire, 1992, 2007, Sá-Chaves, 2004) developed within the conceptual field of adult education. Our purpose is to contribute to the discussion of the notion of *experientiality*, that we consider central to understand experiential learning processess and thus to contribute to adult education reflection, situating it in the epistemological framework of the complexity approach of Edgar Morin, where we find the basis and the presuppositions of this proposal. In this presentation, the concepts of experience and *experientiality* are analysed from the perspective of the complexity approach and the complex thinking (Morin, 1977, 1980, 1985, 1991, 1999,..., Nicolescu, 2003).

We argue that is not possible to understand the complexity of adult learning processes without consider the existence of a central dimension — *experientiality* —, which has not been enough valued both in traditional theoretical educational approaches nor in adult learning settings. We will work the concept of *experientiality* evidencing its articulation with the concepts of experience and knowledge produced from experience, trying to evidence the existing epistemological links with the complexity approach and with the complex thinking of E. Morin. We also argue that the awareness of *experientiality* and experiential learning processes can be a basis for strengthening the transformative dimension of adult education (Freire, Mezirow), leading to the development of emancipatory practices and projects.

Keywords: Adult education, experience, experientiality, knowledge, complexity.

Introduction

In the recent years, the concept of experience has been analysed in the field of adult education from different theoretical and epistemological frameworks. According to these frameworks, knowledge produced by experience — often referred as experiential knowledge — has also been understood differently, shaping conceptions and adult learning practices.

Our purpose is to present and discuss the concept of experience and knowledge produced from experience, from the perspective of the complexity approach, and thus to contribute to the highlight of an underexplored dimension in the adult learning theories, which we name as *experientiality*. We argue that *experientiality* is a human dimension closely interrelated with the concept of experience, and also that its awareness and understanding can contribute to the development of adult learning practices.

The paper is organised in three parts: in the first part we analyse the key concepts of experience and knowledge produced from experience, leading us to the emergence of a central dimension of the person, related to experiential processes, that we name as *experientiality*. The second part of the paper will focus on the analysis of these concepts at the light of the complexity approach and complex thinking, evidencing its characteristics and potentialities, that challeng the traditional perspective on learning and knowledge. In the third part we present some of the major implications of this discussion to adult education and learning practices.

1. Experience and *experientiality* in adult learning theories

In this part of the paper we will analyse the concepts of experience and knowledge produced from experience, from the perspective of Larrosa (2002, 2011), and secondly we will propose a definition of *experientiality*, understood as a core dimension of the experiential process, articulating it with the concept of *formativity* (Honoré).

1.1. Experience in Adult Education theories

Experience is considered in educational literature a key concept to understand the process of adult learning and development. We highlight relevant authors from Sciences of Education that have analysed the role of experience in learning — particularly from the scope of experiential learning — in the adult education field: D. Kolb (1984), N. Roelens (1989), P. Vermersch (1991), G. Bonvalot (1991), P. Dominicé (1989), C. Josso (1991), G. Pineau (1991), J. Mezirow (1991), B. Honoré (1992), Boud, Keogh & Walker (1996), Weil & McGill (1996), Larrosa (2002, 2011), between others. In previous research we have already give room to their contributions to adult learning theoretical framework (Pires, 2005, 2007), so in this paper we will work from a different perspective. Our purpose is to mobilise the principles of the complexity approach and complex thinking to conceptualise our perspective of experience.

We highlight in the first place the idea proposed by B. Honoré (1992), to whom experience is not a simple notion, but a complex one. The author identifies its recursive characteristic: "La dialectique de l'expérience trouve son achèvement propre, non dans un savoir définitif mais dans l'ouverture à l'expérience suscitée par l'expérience elle même" (Gadamer, 1976, *in* Honoré, 1992), leading to the idea that "l'expérience révèle la formation au meme temps qu'elle forme".

Honoré (*ibid*), sustains that experience is complex, identifying some of its properties: relationability, temporality, reflexivity, which also are related to some of the characteristics of the complexity approach.

J. Larrosa (2002, 2011) author from philosophy of Education offers an idea of experience in which we can identify some relevant principles from the complexity approach. According to Larrosa (2002), experience is "what is happen to us". It is not what happens or what touches us. Experience mobilise all felts, demanding the suspension of the will and the automatism of the action, and at the same time needs time and space. Experience, as the possibility that anything happens to the subject, demands the "interruption" of though, demands to be open to listen, to think slower, to feel slower, to take time on the details, to suspend the opinion and judgements, open the eyes and hears to the others, to be patient, give ourselves time and space (Larrosa, 2002:24).

The subject of experience is defined by passivity, receptivity and openness. According to the author, passivity is made of patience, passion, attention and availability. The openness and receptivity are crucial to be available to experience — listening and feeling — and also to make sense of the experience.

Experience is "what happens to us" and the knowledge that emerges from experience is related to the elaboration of sense, or non-sense, of what has happened. Larrosa (2002:7)⁷⁷ sustains that

359

⁷⁷ Original source: "(...) um saber finito, ligado à existência de um indivíduo ou de uma comunidade humana particular; ou, de um modo ainda mais explícito, trata-se de um saber que revela ao homem concreto e singular, entendido individual ou colectivamente, o sentido ou o sem-sentido da sua própria existência, da sua própria finitude. Por isso o saber da experiência é um saber particular, subjectivo, relativo, contingente e pessoal." (Larrosa, 2002:7)

the knowledge from experience is a finate knowledge, linked to the particular existence of an individual or a human community; it is a knowledge that discloses to a concrete and singular person, individually or colectively compreended, the sense or the non-sense of his own existence, his own «finitude». According to Larrosa, the knowledge from experience (knowledge of experience) is particular, subjective, relative, contingent and personal.

The author points out to the existential property and at the same time to the contextual property of the experience, highlighting its «relationship with existence, with the concrete and singular life of a singular and concrete existent» (2002:27)⁷⁸.

It is through experience and through knowledge from experience that we construct ourselves and that we apropriate ourselves of that construction: the experience and the knowledge that emerges from it give us the possibility of the apropriation of our own lives.

Larrosa (2011) identifies the difference between experience and experiment: the experience as a singular form of experience (*vivência*) and experiment as an element of the method — in the context of experimental science; the experience is singular and the experiment is generic; It produces agreement, consensus, homogeneuty between subjects; experience, by its way, produces difference, heterogeneity and plurality — the space where the singular can become plural.

Experience is allways singular: the same experience (*vivência*) has not the same meaning to the person who experiences it; it produces heterogeneity: the sharing of experience give room to heterology rather than homology. On the other hand, the experiment is repeatable and predictable; experience is not repeatable, it does not produces the same meaning everytime it happens.

Experience is also based on the foundations of incertainty and freedom, leading us to a «non-order»: of the unknown, incertain, impredictable, non-repeatable. Experience does not belong to the same rationality of the determinable, predictable, repeatable, and thus it is not possible antecipate its results. It is open to the unknown.

Experience is reflexivity, it is a movement of going and return: a movement of going because it pressuposes a movement of going out of his/herself, towards what is happening outside the person, towards a happening. And a return movement because experience pressuposes that what happens produces effects on his/herself, on what one think, feel, know and want (Larrosa, 2011:7)⁷⁹.

Experience is also transformation: *it forms* and *transforms* the subject: the result of experience is the transformation of the subject of the experience, which is not the subject of the knowledge, or the subject of the power, or the subject of the will, but the subject or formation and transformation (*ibid*). 80

79 "Um movimento de ida porque a experiência supõe um movimento de exteriorização, de saída de mim mesmo, de saída para fora, um movimento que vai ao encontro com isso que passa, ao encontro do acontecimento. E um movimento de volta porque a experiência supõe que o acontecimento afeta a mim, que produz efeitos em mim, no que eu sou, no que eu penso, no que eu sinto, no que eu sei, no que eu quero, etc." (Larrosa, 2011:7)

⁷⁸ original source: "a sua relação com a existência, com a vida singular e concreta de um existente singular e concreto" (Larrosa, 2002:27)

⁸⁰ "Daí que o resultado da experiência seja a formação ou a transformação do sujeito da experiência. Daí que o sujeito da experiência não seja o sujeito do saber, ou o sujeito do poder, ou o sujeito do querer, senão o sujeito da formação e da transformação." (*ibid*)

Following Larrosa (2002, 2011), we also defend that experience is singular, subjective, reflexive, transformational, impredictable, non-repeatable and incertain; experience products difference, heterogenity and plurality. It demands time, space, and freedom. It belongs to the impredictable and unknown order.

1.2. Contributions for the understanding of Experientiality

As we have stated before, it is our purpose to contribute for the understanding of the concept of *experientiality* as a core dimension of the experiential learning process. We will point out to the proximity between the concept of *experientiality* and the concept of *formativity* proposed by B. Honoré, relating *experientiality* with the complexity approach of Edgar Morin and to Paulo Freire thinking about the complex relation between men and world.

Honoré (1992:40/41) presents the concept of *formativity* — *formativité*, in the original language — as intrinsecally human, relational, contextualised in time and space, opened to the possible:

"(...) cette dimension de l'homme par l'aquelle s'exercent ces deux fonctions inseparables: la différentiation et l'activation. L'une caractérise la situation dans l'éspace et le temps, l'autre indique la nature de l'énergie engagée dans l'activité. Le dévelopment de la formativité crée les conditions d'un éspace plus et plus relationnel, et d'un témps de plus en plus intentionnel, révélant toujours davantage le possible."

Sharing the same pressuposes of the concept of *formativity*, we propose that *experientiality* can be understood as a human dimension that is based on the possibility to experience — where we can also identify the functions of differentiation and activation, characterised by the existence of time and space, by the investment of the person in the activity.

Experientiality could be defined as a human property, the quality of beeing experiential, that is essential to the awareness and development of experiential learning processes and to the person trans-formation. Considerig that a person is as a complex system, this dimension contributes to the self-organisation processes: self-awareness, openess to experience, giving sense, meaning and shaping experiences when they occur. The development of experientiality can contribute to the creation of a more relational space and for a more intentional temporality, tuning with the formativity concept proposed by Honoré.

Our proposal is to understand *experientiality* as an intrinsecally human dimension, which is developed during the vital cycle of life and that has in its core the interactions that a person—as an open and complex system— establishes with the environment, with his/herself, with others and with the world. *Experientiality* brings the awareness that experience produces knowledge, knowledge transform persons and persons transform the world, contributing to a global and holistic process of development. *Experientiality* also contributes to establish a deeper relation with the self—self-awareness—, trough a process of reflexivity.

Paulo Freire (1997:62)⁸¹ argues that man is a temporal and situated beeing, ontologically unfinished, subject by vocation and object by distortion. The relashionship that men establishes

⁸¹ original source: "temporalizado e situado, ontologicamente inacabado — sujeito por vocação, objecto por distorção." (Freire, 1997:62)

with the reality — of which he belongs and where he is a part — is a relationship shaped by «plurality, criticity consequence and temporality».

As sustained by the author, «men dinamizes his world from these relations with it and in it; He is creating, recreating. Add something to the world of which he is creator. He temporalizes the geographic spaces. Makes culture. And it is from this creative game of relationships between men and world that imobility of society and cultures is not alouded» (Freire, 1997:64). 82

Thus, Freire sees knowledge as a result of what the individual constructs with the others, highlighting the importance of the relational dimension of the process. This relational dimension is one of the dynamic of *experientiality*.

Synthetizing, we propose that *experientiality* is a founder dimension or a instrinsic quality of the human beeing — the quality of beeing experiential —, wich is developed troughout the life cycle, in the interaction with the self, with the others and with the world, transforming the self and transforming the reality, trough a dinamic process of internality/externality. *Experientiality* contributes to self-awareness, the making sense of experience and to the transformation, in tuning with the transformative learning approaches developed by Freire and Mezirow, between others.

Valuing *experientiality* and experiential learning processes in educational settings can be a basis for the strengthening of the transformative dimension of adult education, leading to the development of emancipatory practices and projects, as we will explore further on.

2. Analysing experience and *experientiality* from the perspective of the complexity approach and the complex thinking

As stated, one of the purposes of this paper is to analyze the concepts of experience and *experientiality* from the perspective of the complexity approach and the complex thinking (Morin, 1991), challenging the traditional perspective on learning and knowledge. As also already pointed out by Fenwick (2006), we can expand possibilities for adult learning adopting a complexified view of these processes, taking into account the principles of embodied action and co-emergence, complex adaptive systems, disturbance and disequilibrium, and continuous emergence, between others.

2.1 The epistemology of complexity

We would like to evidence that co

We would like to evidence that concepts of experience and *experientiality* can be afilliated in the epistemology of complexity. We highlight the principles and pressupositions that can comprehend and evidence its characteristics.

As Morin (1991:123) points out, complexity is the challenge, not the answer. «Complexity is not a basis, it is the regulative principle of the phenomenon principle in which we are and that constitutes our world" (Morin, 1991:127). Following this idea, we consider that complexity is the regulative principle of the thinking.

362

⁸² original source: "o homem vai dinamizando o seu mundo a partir destas relações com ele e nele; vai criando, recriando; decidindo. Acrescenta algo ao mundo do qual ele mesmo é criador. Vai temporalizando os espaços geográficos. Faz cultura. E é o jogo criador destas relações do homem com o mundo o que não permite, a não ser em termos relativos, a imobilidade das sociedades nem das culturas." (Freire, 1997:64)

According to Morin (1999:15), complex — that comes from the Latin *complexus* — means that which is woven together. According to the author, an entity is complex when it has multiple and hereogeneous parts in interaction, which interfere one with the others, weaving together as a whole. «There is complexity whenever the various elements (...) that compose a whole are inseparable, and there is intro-retroactive, interactive, interdependent issue between the subject of knowledge and its context, the parts and the whole, the whole and the parts, the parts among themselves. Complexity is therefore the bond between unity and multiplicity» (*ibid*).

The complex way of thinking is not disjunctive (either/or), but it connects; it interrelates parts and whole: it is not possible to know the parts without knowing the whole, and to know the whole without knowing the parts.

For a better understanding of the principles of complexity approach and complex thinking we present a brief synthesis of the ideas of Morin (1977, 1980, 1985, 1991, 1999). We argue that these principles can be very usefull to understand the concepts of experience and *experientiality*, as well as the dynamics of experiential processes.

2.2. Complexity as a lens to understand experiential processes

Experience and *experientiality* can be understood as complex entities, and thus analysed with the lens of the complexity principles:

.The dialogical principle

It means that what can be opposed can also be linked. Opposite or competing notions, or elements, are not dissociated, they can be united without loosing their duality, they are both needed for understand the reality, from a not disjunctive perspective.

Experientiality as not disjunctive; it is a relational property that demands an integration from confrontations and interrelations of experience (divergent and diverse).

. The principle of recursivity (or organisational recursion):

Causes and effects are interdepedents and influence mutualy; processes of self-regulation are ajusted to self-production processes, in order to maintain the system dynamic balance. Products and effects produce and causes new products and effects, in a recursive process.

Experientiality is a dimension that can be self-developed trough a recursive process; It can be simultaneously a product and a cause.

. The hologrammatic principle:

It is present in the paradox of the unicity and the multiplicity; It implies the overcoming of the fragmented and justaposed perspective of reality; It works as a whole that is simultaneously represented it its parts; And the part also represent the whole, because it can be incorporated on them.

Experienciality is hologramatic, it is a global dimension, not dissociated, in which the whole represents more than its parts; the interaction between its parts and the whole produces the emergence of new properties.

Complex entities are connected to their environment and the process of evolution is mutualy influenced. Open systems are evolutive, they are characterised by dynamic states and tend towards homeostasis. Entities evolve and interact with the environment, that which also evolves with the system, participating in their mutual formation and organisation processes.

Experientiality is developed through recursive and retroactive movements; it is auto-criative and auto-organised. The person is an open system, that is criating and recriating him/herself, trough processes of trans-formation, strongly anchored in experience.

Experientiality is based on the principle of interdependence and interconection that is established between the person and the world, constituted by different nature phenomenon: phisical, biological, psychological cultural and social.

2.3. Complexity and learning

According to Fenwick (2006), learning is a complex process and needs to be understood according to it. To the author, this complexified view of learning is informed by the complexity science (Davies et al, 2000, Maturana and Varela, 1987, Varela, 1999, Sumara and Davies,1997), arguing that systems represented by person, learning and context are inseparable and change occurs from emerging systems affecting by the intentional thinkering of one with the other. Humans and and systems in which they act are interconnected, and when two systems coincide, it origins perturbations that that will afect the dinamics and the responses of the other.

From this perspective, learning is an expanded possibility for action, leading to more sophisticated, creative and flexible actions. The interactions between complex systems, some of them unpredicted, lead to the emergence of new possibilities for action. Accordingly, «knowledge can not be contained in any one element or dimension of a system, for knowledge is constantly and spiling into other systems (...)» and «experiential learning emerges and ciurculates trough exchanges among both human and non-human elements in a net of action» (Fenwick, 1996:239).

According to the complexity science, Fenwick argues that it is not possible to separate individuals and environments, minds and bodies, prior and present, learning and doing, because complex systems comprises *person*, *learning and context*, that are interconnected and produce changes that could not be produced independently — this process of change is understood as co-emergence. Learning is central of any complex system but is not only the property of the individual, thus contextual elements have a significant role in the process.

Based on the idea of a complex system, knowledge is a process, not a product acquired by the individual, resulting from the interaction of the person and the context, trough a learning process.

Experiential learning is auto-eco-organised, it is developed as an autonomous process, singular, but strongly dependent of the environment, considering that the person is an open system in relashionship with the inner and the outer world.

According to this, knowledge from experience results from the reintroduction of knowledge in all knowledge – it is the result of trans-formation and re-construction process, inseparable of the time and space where it occurs.

3. Implications of the discussion to adult education and learning practices

We have pointed out the importance of experience and experiential learning for knowledge production processes, and also for the development and trans-formation of the person.

We also have argued that principles of the complexity approach can be a lens to understand experience, *experientiality* and experiential learning, which articulated with coherent learning practices can strenthening the transformative dimension of adult education (Freire, Mezirow), leading to the development of emancipatory practices and projects.

Adult education should aim to contribute to the perspective transformation (Mezirow, 1990), that is the process of becoming critically aware of the influences of our pressupositions in the way how we understand and feel about the world; the reformulation of presuppositions can lead as to new understandings, *«More inclusive, discriminating permeable and integrative perspectives are superior perspectives* that adults choose if they can because they are motivated to better understand the meaning of their experience.» (Mezirow, 1990: 14).

Based on that analysis, we present some contributions to adult learning practices, pointing to some existing tensions between traditional and complexity approaches on learning.

According to Sá-Chaves (2004), the construction of formative interventions anchored on a critical, reflexive and ecological matrix is not a way without obstacles, considering that we live in a world of incertainty and impredictability. «However, it is exactly there where we find the challenge of complexity in the core of formation and that we make our own formation in the core of that complexity (Sá-Chaves, 2004:167). To shed light on values and conceptions that underlines the formative intervention corresponds to the author «to the construction of the reflection on praxis».

Following this argument, we can question the dominant approach developed in adult education practices — which reproduces the dominant traditional school approach to learning —, questioning what is the importance atributed to the reflection on praxis, what is the role of experience in learning and what is the value given to knowledge that is produced from experience in education.

We have argued that experiential processes are a basis for self-organised and transformation processes, that are multidensional and global, where the whole and the parts are in relation.

If the purpose of traditional school approach is to transmit knowledge, then valuing knowledge from experience in formal education setting demands a different approach to teaching and learning. According to Morin (1999), education is blind to the reality of human knowledge, to its infirmities, dificulties, errors and illusions.

The predominance of fragmented learning — artificially separeted in disciplines — does not connect the part and the whole, and does not take into account neither the subject that produces nor the context where knowledge is produced.

According to Morin, sentiments may blind, but intellectual development is not separated from the emotional development. In fact, the author states that curiosity and passion are considered the wellsprings of scientific and philosophic research. In this sense, affectivity is crucial to knowledge, it may stifle it but also enriches it.

⁸³ original source: "Todavia, é justamente aí, que encontramos o desafio da complexidade no seio da formação e que fazemos a nossa própria formação no seio dessa mesma complexidade" (Sá-Chaves, 2004:167).

The cartesian paradigm — that dominated science, a certain conception of knowledge and also that shaped scholling processes oriented to its transmission —, disconnects subject and object, soul and body, mind and matter, quality and causality, sentiment and reason, liberty and determinism, existence and essence is overcome by the complexity approach, that connects rather than separates.

By the other hand, the traditional school model does not consider the hologrammatic, dialogic and recursive principles, neither privilege a transdisciplinar approach to learning.

In educational settings knowledge is seen as objectified products, presented through mechanic and not contextualized teaching and learning strategies, according to the positivist paradigm of science. Fragmented knowledge is seen as neutral and objective. Knowledge is not understood as a global entity and its existential dimension is absent.

We can understand that the pedagogic work based on transdisciplinarity brings a major challenge to traditional school approaches, but it brings together the diversity of knowledge.

We have been arguing that knowledge from experience is *particular*, *specific*, *subjective*, *contingent and personal*. This knowledge is neither separable from the subject nor from its contexts of production, so it is necessary to develop a reflective, critical and ecological intervention in order to promote efective transformational processes of learning, which are based on the conscience taking, reflexivity and critical thinking.

The nature of this knowledge is not linear, not fragmented, not disjunctive, it articulates subject and object, mind and matter, sentiments and reason, existence and essence. Its awareness produces transformation, expands the learner potential range of action, autonomy and emancipation. It is the result of different situations and experiences, actions and retroactions, woven in time and space.

Atr the same time, it does not belong to any classified scientific knowledge. It can be seen as trans-disciplinar knowledge (Nicolescu, 1999, 2003, Morin, 1999). It is a knowledge *in vivo* that aims to articulate the outer world (object) and the inner (subject), looking forward to understand through uniticity of knowledge, demanding a new balance between mind and body, reason and emotions, woved in an ethic framework. The awareness and the epistemological valuing of this complex knowledge in formal education settings *in vivo* and *in situ*, will lead us to the development of a culture of *experientiality*.

According to Freire, knowledge is not transmited, it constructs itself — in coherence with the idea of self-organisation and self-construction of the living system. Freire (1992: 85) argued that we should never underestimate the knowledge from experience that learners take with them into schools or into formal training institutions: «underestimate knwledge that results from socio-cultural experience it is at the same time a scientific error and also the unequívocal expression of an elitist ideology. (...) in last analysis, it is a *myopia* that constituting itself an ideological obstacle, provokes an epistemological error» ⁸⁴.

As adult educators, we should be able to face this challenge: valuing experience in our adult learning practices, ackowledge the role of *experientiality* as a central dimension of learning and existence, mediating learning processes and trans-formational ecological processes of

⁸⁴ Original source: "jamais subestimar ou negar os saberes de experiências feitas, com que os educandos chegam à escola ou centros de educação informal. (...) subestimar a sabedoria que resulta necessariamente da experiência sociocultural é, ao mesmo tempo, um erro científico e a expressão inequívoca da presença de uma ideologia elitista. (...) Em última análise, é essa "miopia" que, constituindo-se em obstáculo ideológico, provoca o erro epistemológico."

subjective, reflective and singular experiences, processes that lead to *difference*, *heterogeneity* and *plurality*.

Will we be capable to acept this challenge, this impredictable adventure, not repeatable and uncertain? In a time of incertainty and impredictability, valuing experience and knowlegde from experience in formal settings is, more than ever, a *maybe*. And, above all, to accept experience as *freedom*.

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