

# Learning From Within Ambiguity: Developing Adult's Capacity for Generative Learning and Timely Action

Aliki Nicolaidis  
*University of Georgia*

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## Recommended Citation

Nicolaidis, Aliki (2013). "Learning From Within Ambiguity: Developing Adult's Capacity for Generative Learning and Timely Action," *Adult Education Research Conference*. <http://newprairiepress.org/aerc/2013/papers/33>

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# **Learning From Within Ambiguity: Developing Adult's Capacity for Generative Learning and Timely Action**

Aliki Nicolaidis, University of Georgia, USA

**Abstract:** In this paper I present a study with the purpose to deeply understand how adults learn when they encounter ambiguity. I focused my inquiry on developmentally mature adults: those who make meaning—cognitively, affectively, and interpersonally—with an extraordinary capacity for complexity.

## **Introduction**

An incessant feature of our current living, working, and learning contexts is persistent complexity that includes conflict, volatility, and ambiguity that place intensified demands on adults for constant adaptation, rapid learning, and unlearning habits of action. This complexity infuses systems with a dynamic that is “paradoxically stable and unstable, predictable and unpredictable, known and unknown, certain and uncertain all at the same time” (Stacey & Griffin, 2005, p. 7). Examples of this complexity abound, consider the rapidly aging societies that are facing unsustainable policies with respect to health care provisions and later life financial security. These types of collective challenges are intensifying adults’ lifeworlds (Habermas, 1983) and, when coupled with features of the “new normal<sup>1</sup>” (McNamee, 2004), present a new curriculum for living that is largely ambiguous and, hence, beyond our current individual and collective capacity for understanding and meaningful action. To develop a better appreciation for how adults learn in relationship to such ambiguity, I studied the lived experiences of nine developmentally mature adults to explore the extent to which—as well as the ways in which—adults learn their way through the unprecedented demands for rapid change and adaptation of early 21<sup>st</sup> century life.

The following research questions guided this study:

1. How do nine developmentally mature adults describe and understand ambiguities in their most serious personal or work dilemmas?
2. How, if at all, do they describe an experience of relationship/connection to ambiguity?
3. What, if any, process of learning do they describe in relationship to ambiguity?
4. What, if any, relationship is there between one’s developmental action logic<sup>2</sup> and one’s experience of ambiguity?

In the following sections, I succinctly discuss my conceptual framework that integrates three literatures supporting this study; complexity theory, learning from experience, and developmental theory. Next, I describe my research method, and conclude with a discussion of three main findings and contributions to theory and practice.

## **Conceptual Framework**

Three theoretical lenses shape this study in order create the conditions to explore the essential features of adults’ relatedness to ambiguity. These literatures will be briefly exposed with a greater emphasis on adult developmental theory, due to the unique population participating in this study.

Complexity theory offer insight into the types of complexity that benefit this study: complexity of the participants meaning making in relationship to ambiguity, and complexity of adaptive social fields within which systems of interactions are evolving (i.e., individual, groups, organizations, society). For example, adults with more complex ways of meaning making such as comfort with paradox and contradiction that are galvanized under conditions of rapid change and uncertainty have a greater tolerance of ambiguity. For the purposes of this study, complexity<sup>3</sup> describes the interconnectedness, interdependencies and unprecedented rates of change experienced in the social field. One school of complexity theory—complex adaptive systems (Kauffman & Macready, 1996; Per Bak (1996); Uhl-Bien & Marion, 2008) explores the evolution of systems interactions to let emerge new structures of self-organization. Such as two systems (people, groups, organizations) interacting that lead to a new inclusive and transformed system that holds greater complexity. One expression of this theory, “complex responsive processes” (Stacey, 2000; Stacey & Griffin, 2005) provides a useful description of the dynamics of human interactions with uncertainty, unpredictability and rapid change. The special features of complex responsive processes (Stacey, 2002; Stacey & Griffin, 2005; Shaw, 2006) posit the interconnections among human beings as conscious, and therefore distinct from the interactions of biological beings and other matter. Studying patterns of human interaction, with ambiguity and uncertainty, both features of complexity, allows us to understand how learning takes place.

The second conceptual lens, adult learning theory (Dewey, 1933, 1934; Kolb, 1984; Knowles, 1975; Mezirow, 1991, 2000), emphasizes two dimensions of learning relevant to this study: the epistemological constructs of Dewey’s (1938) theory of learning from experience described by features of interactivity, and continuity. In the theoretical underpinnings of Dewey’s (1934a, 1934b, 1938, 1991) learning from experience, it was no surprise to discover that Dewey himself was aware of the paradoxical context of learning from within uncertainty. Dewey (1934a) describes learning from experience as requiring adults to pay attention to the simultaneous dynamics of continuity and interactivity. Continuity pointed to the ongoing process of learning from experience through reflection, which takes into consideration the recent past, the present, and the immediate future as a way to discern timely action from moment to moment. At the same time, Dewey recognized that this moment-to-moment awareness was always in relationship to some phenomenon and difficult to cultivate (Dewey, 1938). Dewey purposefully defines learning as a means for action. That action is informed by the capacity for one to bring, both consciousness (how I know: interactivity) and when to act (timely action: continuity) together in learning how to learn.

The third conceptual lens of adult developmental theory (Drago-Severson, 2004a, 2004b, 2008; Kegan, 1982, 1994; Torbert, 2003, 2004) also serves as a central analytic approach for this study. I also used the theory of developmental action logics as developed by Torbert (1991, 2003, 2004) as the analytical approach for organizing the meaning that emerged from this study. This focus is purposeful as the study engaged the *action* of developmental logics (strategies of meaning making in action and ego development as described by Torbert 2003, 2004) across the post-conventional stages (more complex ways of meaning making) of ego maturity (Cook-Greuter, 1999, 2003, 2004, 2006; Torbert, 2003, 2004). Constructive-developmental theory (Drago-Severson, 2004a, 2004b, 2008; Kegan, 1982, 1992) concerns itself with two primary aspects of development: (a) organizing principles that regulate how people make sense of themselves and the world (orders of development); and (b) how these regulative principles are constructed and re-constructed over time (developmental movement) (Kegan, 1982, 1994; McCauley,

2004). The developmental action logics (ways of making meaning that are enacted) that infuse this study come from Torbert's theory of Developmental Action Inquiry (DAI) (Torbert, 1991, 2001, 2004, 2007) and Cook-Greuter's (1999, 2003, 2004, 2006) research on the post-conventional stages of development. In her description of the developmental logics<sup>4</sup>, Cook-Greuter explains how actions integrate a person's "purpose of life" (integrity and vision), the "needs they act upon" (strategic choices), and "the ends they are moving towards" (feedback and assessment). Importantly, the emphasis is on the multiple aspects of the action logics; how a person integrates, aligns, and acts upon these three aspects of one's "personhood" (Heron, 1992, p. ii) develops and transforms one's capacity along the developmental continuum. In turn, a person's capacity to hold these perspectives in mind increases with complexity as one grows developmentally (Heron, 2006; Wilber, 2006). One of the reasons this study focuses on adults who make meaning in the post-conventional, or later action logics is because of this very capacity to keep in mind these dimensions of self while in action.

### **Methodology**

Given the intensifying demands made on adults in a complex world, an in-depth exploration of the nature of ambiguity and adults' relationship with it is intended to provide insight into what it takes to learn and act through increasing complexity (Antonacopoulou, 2006; Heron, 2006; Jarvis, 2006; Stacy & Griffin, 2005; Van der Veen 2006; Wilkinson, 2006). The dynamic context in which this study is situated called for an equally dynamic research approach. For this reason, qualitative research was selected as the method of inquiry—specifically, a series of phenomenological interviews (Gadamer, 1993; Husserl, 1970; Merleau-Ponty, 2002; Moustakas, 1994; Seidman, 1997)—that builds on the inter-subjective interactions between participants and researcher. A phenomenological approach allows the researcher to explore how respondents make meaning in significant dilemmas in their lives, including the dilemmas of how to interact with the interviewer during the semi-structured, semi-spontaneous interview itself. The study was conceived as "conversation," implying and accepting the constraints of an inter-subjective dialogue as the methodological boundary within which to explore and make sense of a lived experience of ambiguity. Due to the abstract focus of this study and the multiple meanings that people give to ambiguity, I chose to look at a select group of adults who profiled in the post-conventional (Cook-Greuter, 1999, 2003, 2006) stages of development.

### **Findings**

Three main findings emerged from my analysis and interpretation of the participants' descriptions of their experiences of ambiguity.

1. An encounter with ambiguity
2. Distinctions in relatedness with ambiguity
3. Learning through ambiguity

#### *Finding One: An Encounter with Ambiguity*

All nine participants described encounters with ambiguity through the distinct use of metaphor. These metaphors suggested that alternative and potentially new realities exist in experiences of ambiguity. This distinctive disposition towards ambiguity is different from conventional responses to ambiguity (e.g., averting the ambiguous, diminishing ambiguity by managing, and defending against uncertainty). Interestingly, these nine participants grappled with various forms of language—especially

metaphor—in order to express the meaning of their experiences of ambiguity, both in their lives and from within the interview conversations themselves. The emic code “a door in each moment” is a metaphorical way of describing the varied ways that the nine participants described ambiguity as a signal (doorway) that there is a yet-to-be-known potential waiting (in each moment) to be disclosed by the experience of ambiguity. Importantly, this finding facilitated an understanding of the phenomenon that lies beyond any one rational construction or label of what ambiguity is.

*Finding Two: Distinctions in Relatedness with Ambiguity.*

The second research question in this study brought attention to the way the participants described an experience of connection with ambiguity and asked how, if at all, the nine participants described an experience of relationship with ambiguity. The answer that emerged in response to this question was that each participant reported a distinct form of connection with ambiguity. However, the characteristics of the relationship were distinct for each of the developmental action logics. For the Individualist, connection with ambiguity was experienced as something to endure. This sense of endurance emerged through the Individualist descriptions of experiencing uncertainty as a required phase to pass through in order to “do my own thing.” The two Strategists described a relationship to ambiguity in terms of degrees of tolerance relative to their capacity to act on the basis of their personal and systemic concerns. In short, they acknowledged and tolerated ambiguity insofar as it did not obstruct their freedom to take effective action. The allure of a relationship to ambiguity was that it allowed them to integrate and to “act in synergy with the direction of potential. For the five Alchemists, they described a form of communion, a felt sense of interconnection with “always present” ambiguity. Communion is defined as a relationship marked by intimacy, vulnerability, and co-union, while concurrently reflecting the partiality, limitations, and incompleteness of the Alchemists’ capacity to know a separate reality. The one Ironist described actively generating ambiguity in his relationships, roles, and responsibilities as a way to be in closer relationship with emerging potential. Each unique relationship to ambiguity illustrates ways of understanding how potential lies within ambiguity, the unknown, and the uncertain.

*Finding Three: Learning through Ambiguity*

The third research question drew attention to processes of learning in relationship to ambiguity and to distinctions that emerged, according to each of the four action logics represented in this study. In response to the first part of this question, each participant described distinct ways of how to learning that seemed to accompany the action of their meaning making as connected with ambiguity. Regarding the second part of this question, distinct learning processes took shape according to the participants’ developmental action logic (ways of meaning making and timely action). The Individualist learns by inquiring into ambiguity, while the Strategists purposefully learn through ambiguity; the Alchemists surrender to learning from within ambiguity, and the Ironist generates ambiguity to learning to encourage more potential realities and acts.

A further delineation emerged between the first two logics (Individualist and Strategist) and the latter two (Alchemist and Ironist). The emic code “figure-ground shift” best describes that delineation: participants represented by the first two logics described a process of figuring out what to do with the presenting ambiguity, while those representing the latter two logics described a process of learning that was neither separated from the action of one’s meaning-making, nor separated from enacting meaning in a timely and transforming manner. For example, one of the Alchemists described herself as “being passionately committed to growing sustainable structures that hold the complexities of human

relationships standing at the doorway of ambiguity, recognizing that it can be nothing else other than the essential movement of life reveling in its potential.” Each distinct interaction with ambiguity, 1) encounters with ambiguity, 2) relatedness to ambiguity, and 3) learning through ambiguity that I have described above contribute towards a richer understanding of a connection with ambiguity that leads to learning and action. In what follows I discuss the implications of these finding for learning and timely action.

### **Contributions to Practice**

Each finding I have discussed brought forth new, nuanced understandings of ambiguity, and collectively led to a rather simple conclusion. What emerged from this study was that aversion—defending against uncertainty, employing conventional problem-solving techniques, and engaging in behaviors that avert and/or ignore ambiguity—is not the only way to respond to ambiguity, to the uncertain, and to the unknown; indeed, the phenomenon of ambiguity may be construed as an invitation to explore emergent potential through learning that is generative, and action that is timely (benefits human systems flourishing).

The opportunity to consciously explore, engage with, and shape action through the emergent potential that also exists within ambiguity, with all its difficulties and rewards, is a novel approach to the relationship with ambiguity as described by these nine developmentally mature adults. This connection with ambiguity initiates a new form of learning, which is described in finding three, as the “figure-ground shift” and that I discuss as *generative learning*. The implications of cultivating the capacity for generative learning and timely action in adults as a way that adult educators can respond to the complex demands that arise in lieu of interconnectedness, interdependencies and unprecedented rates of change suggest that there is more to be discovered within ambiguity. The conscious development of adults’ capacities for mutual co-inquiry and timely action requires designing learning approaches that strengthen their capacities to learn from each other, and with each other from within ambiguity. To create these new curricula and practices, learning environments are needed that facilitate reframing how adult learning for increasing their capacity to learn and act from within ambiguity.

### **Conclusion**

An evolving epistemology for generative learning and timely action emerged through this study that may be helpful for developing educative strategies that develop adults capacities to learn how to learn from within ambiguity. The application of this epistemology informs research in the direction of innovative approaches for learning through ambiguity. By exploring ways to reframe how adults cultivate relationships with ambiguity, adult educators can help develop new pathways for participation in society that fosters human flourishing through generative learning and timely action.

Notes:

1. New Normal is defined as “a time of great uncertainty—about terrorism, corporate scandals, the outsourcing of jobs overseas, and much more. The old safety nets aren’t coming back, even when the economy recovers...it means unlearning most of the principles of the past decade. Forget everything that you’ve learned about time (faster is better), money (capital is free), and leadership (no experience required). Everything takes longer in the New Normal. Longer is better than never, but it requires a different frame of reference”. (McNamee, 2003)

2. Developmental Action Logics refers to the developmental capacity concerning the cognitive, affective, interpersonal aspects of our meaning making that inform our experience and how we take action. Action Logics are difficult to see especially in the moment of action when we most need to see them, unless and until we ourselves reach that point along our development where we recognize the limits of how and what we know. (Drago-Severson, 2009; Kegan, 1982, 1994; Torbert, 2003, 2004)
3. There is not one unified discipline to which 'complexity theory' actually refers. Because of the diverse types of complex systems, which have been studied, it's been hard to agree upon one definition of 'complex' and 'complexity'. There are six interrelated research traditions that intersect to form what is know as complexity theory. These are: 1) Systems thinking (boundaries); 2) Theoretical biology (evolution); 3) Non linear dynamical systems theory (chaos); 4) Graph theory (networks); 5) Emergence; and 6) Complex adaptive systems (interacting agents).
4. Developmental Action Logics (DAL) are representation of ways of meaning making that align with the capacity for taking perspective of more inclusive perspectives of reality. Four logics were features in this study: Individualist; Strategist, Alchemist and Ironist. Deeper discussion of these logics can be found in a forthcoming article by the author.

*A list of references is available upon request*