## Book Review

A review of *The Emergent Ego: Complexity and Coevolution in the Psychoanalytic Process*, by Stanley R. Palombo, M.D., 1999. Madison, CT: International Universities Press, 365 pp. ISBN 0823616665. \$65.00 USD.

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Claiming that "[t]here is something new under the sun in psychoanalysis" (p. xv), Stanley Palombo begins a book that both updates traditional psychoanalytic theory and focuses unflinchingly on the process of change that the theory supports. As opposed to Freud's "overly pessimistic view of mental activity as a discharge phenomenon that necessarily increases the entropy in the psychic apparatus" (p. 339), Palombo claims that psychoanalytic interaction that functions at the edge of chaos triggers increased order in the patient's (and analyst's) mind that permits healthier behavior away from the couch. Contrary to Freud's belief that a patient's ego, once freed by psychoanalysis to function properly, would organize the contents of the unconscious without the help of an analyst, Palombo asserts that psychological change is dependent on the coevolving relationship between the patient and the analyst, on the discourse and understanding they generate together. Drawing on the work of Stuart Kauffman, Christopher Langton, Per Bak, and many others, Palombo constructs a scientific framework for the analysis of psychoanalysis that begins to illuminate the healing process and, importantly, draws guidelines for understanding the process as it unfolds that can significantly inform the interventions that psychoanalysts undertake.

Sounds wonderful, you might say. And what exactly does this have to do with education? My suspicion (and others'; see, especially, Britzman, 1998, 2003) is that psychoanalytic theory can have a lot to do with education. If, as Chodorow (1999) claims, transference is central to all human mean-

Complicity: An International Journal of Complexity and Education Volume 4 (2007), Number 1 • pp. 131–134 • www.complexityandeducation.ca ing-making, then such psychic forces as projection, introjection, and fantasy must play a role in the teaching and learning that happen in classrooms. Palombo's account in *The Emergent Ego* of the psychoanalytic process begins to clarify how these forces work in the psychoanalytic encounter; might his account shed light on classroom encounters as well?

First, his account. Palombo, heavily influenced as he is by Stuart Kauffman (with whom Palombo stayed in close touch during the writing of this book), frames his discussion in terms of co-evolution. The idea is that the analytic dyad is complex in its own right but consists, of course, of two complex entities that co-evolve, following the same basic laws that underlie any other ecosystem. As they impinge on each other, patient and analyst inspire mutations in each other—they reinforce, weaken, or forge totally new neural connections through work with emotions, memories, and dreams. This work can reach a "local optimum," where the patient feels the relief of initial improvement and resistance to the further suffering that more therapeutic work ensures. To avoid stasis, the analyst pushes the patient: she makes her expectations for further improvement clear and supports the patient as he moves away from the current peak into the rugged surrounding "landscape," what one might call the "learning landscape."

The hope for the patient (and for the analyst, who is also required to change through the therapy) is his self-organizational capacity. Throughout their lives, human beings (whether they go into psychoanalysis or not) rely on emergent self-organization to structure their psyches. People's earliest experiences "condense" into what Palombo calls "infantile attractors," which trigger habitual responses (actions or fantasies). Each infantile attractor has a "basin" that is fed by a "food set" comprised of the aspects of current experience that prove magnetic to the attractor and hence trigger the habitual response. These attractors become pathological when current experience cannot be distinguished from painful past experience (which has usually been repressed), and the habitual responses that preserved the child then are activated now, no matter how inappropriate they might appear to an outsider. The job of the analyst, and eventually of the patient who has developed the power to "selfobserve," is to identify the various attractors at work in a patient's life, sketch out their structural relationships, and provide "well-timed and well-dosed perturbations" (Moran, 1991, quoted in Palombo, p. 206) that can trigger a phase transition to a higher level of psychological order.

Ideally, Palombo asserts, psychoanalytic sessions function at the "edge of chaos," where thoughtful perturbations can help new salutary insights to emerge. Though "hardly ubiquitous" (Palombo, 1999, p. 214) and impossible to pinpoint, the edge of chaos can be facilitated, Palombo asserts, by cultivating four elements: an associational pattern in which the thoughts the patient expresses are fluid and connected; attunement between the patient and the

analyst, meaning both partners sense they are talking about the same thing and pulling in the same direction; a "workable strategy for recovery from defections," or a means of identifying and repairing miscommunications or deceptions; and ongoing "restructuring of the analytic discourse," when connections are made between current and previous sessions that deepen the significance of the present talk (Palombo, 1991, p. 329). Acknowledging that the edge of chaos is "inherently unstable," Palombo nonetheless claims that the concept "gives the psychoanalyst a normative description of optimal coevolutionary activity in the psychoanalytic process" (p. 180). Despite the risk of devolution, psychoanalysts, Palombo asserts, should aim for the edge of chaos if their goal of lasting change for their patient is to be fully realized. Important to the achievement of this elusive condition, Palombo asserts, is the expectation and willingness on the part of the analyst to learn and grow herself in tacit collaboration, or coevolution, with the patient—an expectation that is absent in traditional psychoanalytic theory. (Importantly, another essential element is a patient who wants to learn and grow, an element that is sometimes absent in traditional classrooms.)

Palombo bolsters his account of the psychoanalytic process with detailed discussions of the relevant concepts (fitness landscapes, phase transitions, self-organization, and attractors) as they have been explored through work on Complex Adaptive Systems (CAS). He also applies his framework to two psychoanalytic scenarios, one from his own practice and one from a book published in 1972 called *The Psychoanalytic Process: A Case Illustration* by Paul Dewald. Palombo's book, then, can appeal to complexivists who relate to talk about cellular automata as well as to those who prefer analyses of concrete interactions. Both angles can, I believe, be profitably applied to classrooms.

Just as with psychoanalysis, the purpose of education is change. In psychoanalysis, the change "involves increasing the connectedness and complexity of the patient's mental contents" (Palombo, 1999, p. 180)—a passable definition for learning. Obviously, the teaching environment is strikingly different from the psychoanalytic environment, but is the process that different? Surely teachers encounter maladaptive "infantile attractors" every day, both in their students and in themselves. They know the frustration of trying to move someone who is evidently trapped either in a behavior or a misperception and who fiercely resists any attempts at change. Many succeed in helping their students (and themselves) to shift by using the same basic techniques of listening, observing, and interpreting that psychoanalysts use. Many know the perils of "pushing," of nudging students out of their basins of attraction into the unknown "learning landscape," urging students to lay down their own path as they go. Teaching, at bottom, is a psychological exercise, a psychically-charged exercise, a quality that allies it, I believe, to psychoanalysis.

If the greatest potential for change in psychoanalysis resides at the edge of chaos, as Palombo (1999) claims, the same might be true for teaching. Indeed, teachers who find themselves teaching at the edge of chaos recognize its benefits and want to get back there (see, for example, Coleman, 1994). Out of classrooms that exhibit the "conditions for complex emergence" (Davis, 2004) (which Palombo's work suggests should possibly include "a teacher who intends to learn, or coevolve") often emerges the remarkable quality of collective cognition, or discourse at a level of sophistication and understanding that no member of the class possesses individually (Davis & Simmt, 2003). Might consideration of the ways in which phase transitions and self-organization happen in psychoanalysis, both at the individual level and at the collective, or discourse, level, profit teachers? Yes, I claim, not because teaching is psychoanalysis, but because the psyche is inescapably implicated in teaching and learning.

At the very least, Palombo has done a convincing job of applying highly technical discoveries about Complex Adaptive Systems to the analysis of a dyadic social system. His approach could undoubtedly inform the work of anyone attempting to do the same with a much more complex social system, the classroom.

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