Introduction to "Beyond open system models of organization"

Introduction to Pondy's "Beyond open system models of organization"

I was in his office, when Louis R. Pondy read the letter rejecting his 1976 article at *Administrative Science Quarterly* by decision of the editor, calling him a member of the "cute school" of organization theory. The paper was revised, with Ian I. Mitroff (Pondy & Mitroff, 1979), and published in obscurity. Over the next decade Pondy's solo article, circulated in the academic underground, became widely recognized as a seminal piece of system theory, often citing the section: "Human organizations are level 8 phenomena, but our conceptual models (with minor exceptions) are fixated at level 4, and our formal models and data collection efforts are rooted a levels 1 and 2" (Pondy, 1976: 6).

Pondy's main contribution was to point out the role of language that was more than sign-representation, where image, story, and symbol, as well as self-reflection interpenetrate complexity. As a story theorist, I was influenced by Pondy's call to get to a 'languaged' understanding of storytelling in social organizations (level 8). My contribution is to illustrate the timeliness of the nine levels model by showing its story implications to complexity. In Table 1, in first four levels, it is narrative, not story that is dominant property. Narrative is a restricted type of story, that since Aristotle (350 BC) must have beginning, middle, and end, and be just a few episodes that imitate experience, and not a more epic-story (which includes simultaneous telling by many more characters and more imitative incidents and detail).

It is at level 5 (organic) that the more epic aspects of story begin to emerge, and the first of four Bakhtin (1973, 1981, 1990) dialogisms emerge (*polyphonic*, meaning many voices and logics in dialog in the tellings). Level 6 is where image stories emerge, in a multiplicity of modes (written, oral, architecturally, etc.), in a *stylistic* dialogism (a dialog among the stylistic modes where no one mode captures the image story). Level 7 the more *chronotopic* dialogism emerges as a property of system complexity.

Stories, narratives, and metaphors highlight certain aspects, and hide others from view. Level 2 (mechanistic) level 3 (control) in Table 1, objectify organizations, as does the organic metaphors (Boulding, e.g., uses cell for level 4; plant for level 5, and animal for level 6). As one moves up the levels of system complexity, the role of language is more pronounced (level 6 image; level 7 symbol; level 8 social organizations (or multi-cephalous, Pondy's substituted metaphor); level 9 transcendental).

The narrative prison gives way to many ways of storying temporality and spatiality, or what Bakhtin (1981) terms the relativity of space/time. At level 8 a more *architectonic* dialogism (defined as inter-animation of cognitive, ethical, and aesthetic discourses) emerges as a property of system complexity. This is the level at which societal discourse, as Boulding (1956) remarks impacts upon the social organization, where a given organization is playing its role begrudgingly in a 'network' of organizations and communities. Boulding (1956)

and Pondy (1976) had no conception of the dialogisms, or how they might interplay at level 9. Pondy wanted to leave level 9 unspecified; Boulding, however, labeled it 'transcendental' and commented on the relation of what is unknowable, to what is posited as knowable. For me, this translates into a more spiritual awareness of how unknowable registers patterns in social behavior, and more explicitly in story, despite the triumph of modernity in making transcendental reflexivity in science taboo.

Table 1

Nine levels of 'storytelling organization' complexity

1. FRAMEWORK: Unique property is mapping the types of narratives in use by 'storytelling organization'. Narrative maps, such as tragic, romantic, comedic, satiric are dominant framework, but have forgotten 'epic-story' interactivity with such narrative types.

2. MECHANISTIC: Unique property is metrics to index time and travel motions of narratives throughout segments of the 'storytelling organization'. There are narratives about eras, summarizing everyday crisis points, but no biographical narration; time and space are mechanistic, imitative of machine metaphorization.

3. CONTROL: Unique property is centralized 1st-order cybernetic control of narratives behavior with rule-based mechanisms of deviation-counteraction. Observed narrative-scripts are compared to idealized narrative by a core of specialists noting deviations from the rules. 1st order cybernetics is a complication of machine metaphorization.

4. OPEN: Unique property is 2nd-order cybernetic deviation-amplification which opposes the level 3 deviation-counteraction, to accomplish self-maintenance while a throughput of narratives of the environment are sorted, without much or any knowledge generation. 2nd order cybernetics is further complication of machine metaphorization.

5. ORGANIC: Unique property is division of labor among mutually interdependent parts, each with highly specialized narrators, not doing much more than filtering environments for positive or negative narratives. Organization metaphorization framework, and machine-cybernetics coexist with mimicry of tree or plant. Up to this level narrative imprison story in sign re-presentations; mimicry of more polyphonic polylogic is emergent, not pronounced.

6. IMAGE: Unique property is the beginning of self-awareness and the narrating teleologically. Storying image of organization is differentiated from throughput processing of environmental narrative. Small antenarratives (bet and before fragments that aspire to narrative coherence) can transform a petrified image story. Metaphorization is computer-screen image mimicry achieved through orchestrating stylistic dialogism strategically.

7. SYMBOL: Unique is self-consciousness achieved through self-reflexive storytelling. Stories are self-reflexively co-produced and co-interpreted at symbolic level, not just mere signs or images. The 'chronotopicity' of constructing the time/space conception of history is salient. Metaphorization is history mimicry through chronotopic dialogism.

8. NETWORK: Unique property is self-reflexive awareness of organization situated in network of societal discourse that proscribes roles to organizations that organizations rescript. Architectonic inter-animation of cognitive, ethical, and aesthetic discourses, of which story is domain is manifest. Metaphorization is mimicry of computer network.

9. TRANSCENDENTAL: Unique is self-reflexive awareness of metaphysics of what is unknowable in opposition to what is knowable. Metaphorization is mimicry of spiritual enlightenment. However, the prior eight properties are still in interrelationship, including the Polypi dialogism of dialogisms of polyphonic, stylistic, chronotopic, and architectonic dialogism. Story has escaped narrative prison, but the narrative police are trying to arrest story (as always).

Pondy's work went unchallenged, until Robert Cooper (1989: 479-489, 495-500) critiqued it severely for challenging an input-output model of communication in system theorizing which Pondy did not escape even by using Chomsky. I answer Cooper's challenge above by pointing out the dialogisms. Cooper also claims Pondy's rendition of Boulding lacks the deconstructive cast Jacques Derrida brings to writing about system theory. Here too, I would say both Boulding and Pondy were doing moves that Bakhtin (1973, 1981) terms 'heteroglossic' which critics now argue presages Derrida's deconstruction theory. Specifically, heteroglossia is a language theory where centripetal (deviation-counteracting, such as level 3) language forces are being opposed by centrifugal (deviation-amplification) forces of language that commence at level 4 (open) and continue with levels of image, symbol, and through the four dialogisms (polyphonic, stylistic, chronotopic, and architectonic). I therefore claim Pondy's article remains seminal because it anticipates several of Derrida's deconstruction moves. Pondy's reliance upon Chomsky lacks the dialogical explicitness of Bakhtin's philosophy of language.

Readers of system complexity may be more familiar with Fred and Merrelyn Emery's version of open system theory, that is rooted in Pepper's (1942) world hypotheses: level 1 (frameworks) would be formalism, levels 2 and 3 (mechanistic and control) would be mechanism; level 4 (open) would be contextualism; level 5 (organic) would be organicism. Merrelyn Emery (1997) says, "Open system theory is alive and well" and firmly rooted in Pepper's *contextualism* world hypothesis: open system and environment changes over time through series of historic events; and that the formist, mechanistic, and organic levels in Table 1, theorize closed and static systems. She asserts von Bertalanffy (general system theory) is an incomplete conception of *open system*, which was corrected mostly by Emery and Trist's (1965) laws of causal-texture mutually of organization and environment, and finished up by Ackoff and Emery (1972) with 'on purposeful' and 'ideal-seeking' laws of open system to become an ecological 'learning organization' (Emery, 1997). The point here is that for the Emerys, the 'organic' level of Boulding/Pondy would be less complex, than open system, and the Emerys's open system theory would contain aspects of image (level 6), but nothing about any higher levels.

Cooper (1989: 495) critiques system theory, in general, for being tautological with many empirical studies "mimicking" the subject matter, for concealing the exercise of power/knowledge, and domination in the way we work and live in organizations. For example, Katz and Kahn's (1966) system theory is said by Cooper (1989:

495, citing Degot 1982: 637) to be tautological: "the organization is a system ruled by the system laws: the variability identified in this system are created by laws whose form is such precisely because the organization is a system." The same critique would apply to the Emerys's 'open system' that the system is open because it follows laws of open systems. The problem is there is an unexamined open system naturalness (as organization and environment mutually adapt) that privileges essences (tautological laws), and puts the processes of system consummation beyond critical analysis. I counter, Boulding as well as Pondy address teleology as one of the levels in system modeling (level 6) where there is some self-awareness and teleological behavior, but that self-awareness is not self-reflexivity (a property key to identifying a level 7 system) has yet to emerge.

Pondy critiques Thompson (1967) who draws upon Katz and Kahn's reading of open system, which Pondy (1976: 10) argues is a level 3 system theory, that calls for the field to move beyond the closed system equivalent of Boulding's (level 2) clockwork. In short, neither Katz and Kahn (1966) nor Thompson (1967) is theorizing at level 4 open system; both apply Ashby's Law of Requisite Variety, which is a (level 3) control system logic (thermostat is Boulding's label for level 3).

The craft of consummating systems out of narrative that is at levels 1 to 4, quite monologic, and does not get at poly-logicality, an emergent property beginning in level 5 complexity, has yet to be addressed in theory or research.

While Cooper (1989) is accurate in pointing out that Derrida goes farther in developing a languaged theory of systems, than Pondy, call it light years ahead is storyteller's hyperbole.

Notes

Originally presented at the Annual Meeting of the Academy of Management, Kansas City, Missouri, August 12, 1976. The *E:CO* editorial team would like to thank the University of Illinois for their kind permission to print this article for the first time.

References

- Ackoff, R. L. and Emery, F. E. (1972). On purposeful systems: An interdisciplinary analysis of individual and social behavior as a system of purposeful events, New York, NY: Aldine-Atherton, ISBN 0202307980 (2005).
- Bakhtin, M. M. (1973). Problems of Dostoevsky's poetics , C. Emerson (ed./trans.), Manchester, UK: Manchester University Press, ISBN 0816612285 (1984).
- Bakhtin, M. M. (1981). The dialogic imagination: Four essays by M. M. Bakhtin, M. Holquist (ed.), Austin, TX: University of Texas Press, ISBN 029271534X (1982).
- Bakhtin, M. M. (1990). Art and answerability, M. Holquist (ed.), V. Liapunov (trans.), K. Brostrom (suppl. trans.), Austin, TX: University of Texas Press, ISBN 0292704127.
- Boulding, K. E. (1956). "General systems theory: The skeleton of science," General Systems, 1: 11-17, 66-75. Also available in Richardson, K. A., Goldstein, J. A., Allen, P. M. and Snowden, D. (eds.) (2005). E:CO Annual Volume 6, Mansfield, MA: ISCE Publishing, ISBN 0976681404, pp. 252-264.
- Cooper, R. (1989). "Modernism, postmodernism and organizational analysis 3: The contribution of Jacques Derrida," Organization Studies, ISSN 0170-8406,10(4): 479-502.
- Degot, V. (1982). "Le modele de l'agent et le probleme de la construction de l'objet dans les theories de l'entreprise," Social Science Information / Information sur les Sciences Sociales, ISSN 0539-0184, 21(4-

5): 627-664.

- Emery, M. (1997). "Open systems is alive and well," paper presented at Academy of Management Meetings, ODC division session.
- Emery, F. and Trist, E. (1965). "The causal texture of organizational environments," Human Relations, ISSN 0018-7267, 18: 21-32.
- Katz, D. and Kahn, R. (1966). Social psychology of organizations, Hoboken, NJ: Wiley, ISBN 0471023558 (1978).
- Pepper, S. C. (1942). World hypotheses: A study in evidence, Berkeley, CA: University of California Press, ISBN 0520009940 (1961).
- Pondy, L. R. (1976). "Beyond open system models of organization," working paper of the Organizational Behavior Group, Department of Business Administration, University of Illinois (Urbana), published in this issue.
- Pondy, L. R. and Mitroff, I. I. (1979). "Beyond open system models of organization," in B. Staw (ed.), Research in organizational behavior, Vol. 1, Greenwich, CT: JAI, ISBN 0892320451, pp. 3-39.
- Thompson, J. D. (1967). Organizations in action, New York, NY: McGraw-Hill, ISBN 0765809915 (2003).