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The Columbia Basin as a Metaphor for an Interdisciplinary Approach

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LIKE SO MANY OTHERS, I moved to the Pacific Northwest over twenty-five years ago to be closer to a nature that still remembered wilderness, to live nearer the Pacific Rim and its meeting of East and West. Not unlike the salmon, I found myself only half consciously following the vestigial traces of wagon trains that brought my father's pioneering family to Oregon in the mid-1800s. And when I finally arrived, the first place I headed for was the magnificent overlook above Crown Point and the Columbia River Gorge.

The Pacific Northwest is a place where you can feel geologic scale and catch the rumors of upheaval and transformation. It is a landscape that relocates us in a larger relationship than human to human and still speaks the language of universe, time, and immensity. Within five years of making this area my home, I had trembled before my first sight of salmon spawning, their reddened bodies ripped and shredded, half out of water, yet still going in this libidinal tenacity of life. I witnessed the uncanny quieting of a solar eclipse as shortly after dawn the darkness returned to the cacophony of animal sounds, then plummeted to the silence of beginnings. I inhaled our sobering interconnectedness in the aftermath of Mt. St. Helens, as towns miles away felt the weight of its ash falling on their doorsteps.

Yet I lived rather safely cocooned in these spectacular surroundings, not

really questioning why the Northwest has the lowest electricity rates in the nation, not knowing much about this very regional choice of topics, the Columbia River Basin. So I confess that preparing for this presentation has changed my life ineradicably and reminded me, to the core, that heightened awareness is one of the greatest gifts that interdisciplinarity brings, and deserves our attention as the psychological starting point for any genuine learning or transformation. In an atmosphere of creeping corporatism, a retrenching academia has drawn even tighter disciplinary lines. Far too often the boundaries between academic fields become turf frenzies that numb awareness, damming perception behind barriers that regulate the flow of inquiry. The people who organized this conference knew exactly what they were doing. The Columbia River Basin, draining acreage that includes provinces of Canada and seven Western states, is the multi-disciplinary microcosm par excellence, offering one of the most richly textured metaphors for the study of complexity and interconnection. Virtually every discipline has something to offer of special voice and critical insight: geology, biology, chemistry, physics, economics, political science, psychology, sociology, anthropology, mathematics, religion, philosophy, history, literature, language, music, business, engineering, education. As Northwest writers have analogized,¹ we can no longer afford the perspectives of the fabled blind men approaching the elephant, each extrapolating from partial perception to the whole. The entire web or system of relationships and perspectives must be accorded primacy over any partial point of view.

So what I am about here in these few minutes is positioning us with respect to three overarching themes: consciousness, complexity, and an ethics of connectedness. As a systems psychologist I think first of consciousness-raising, the task of expanding awareness and reclaiming the integrative power of symbol and metaphor, one of our few bridges out of bounded literalisms. Rivers are rare on this watery planet, comprising only a part of the one percent of the earth's liquid cycle not locked in ocean or ice (Dietrich, 1995, p. 111), yet we are water-filled, water-dependent beings. The river is lifeblood to the planet, a liquid journey and storied stream. The salmon returning from their ocean discoveries to struggle upstream are some of our earliest hero figures, carrying the aspirations of homo sapiens and other species in mixtures of mythic biology to feed dreams beyond stomachs. They carry the memory of a people and the embodied gifts of divine beings.²

Worldwide, water is regarded as archetypally life-giving, yet in the West, we stand in a pattern inherited from the Middle East—the struggles of warrior god Marduk, who dismembered his watery mother Tiamat—and we carry

this need to control the chaotic resonance of water to this day. The stalwart accomplishment of the fourteen dams of the Columbia River (Dietrich, 1995, p. 310), which drive our turbines and export our energy along channeled lines of power and decision, continues the chain of conquest, control, and manipulation that has characterized our modern human species. The Columbia suffers from the disease of advanced economies, an arteriosclerotic blockage of the passageways, with only minor and inadequate bypass surgery undertaken here and there in lower dams on behalf of the salmon.

Consciousness of the Columbia is also about story, that fundamental building block not only of psychological biography, but also of biological pattern in DNA. As Gregory Bateson, Thomas Berry, and writers in the Northwest remind us, we cannot recover truth without multiple stories, perspectives, and “pattern[s] which connect” (Bateson, 1979, p. 8).³ So the Columbia River Basin includes the cataclysmic story of upheaval, colliding plate tectonics, and repeated flooding from inland Lake Missoula, carrying half the volume of Lake Michigan through its narrow breach (see especially Allen, Burns, and Sargent, 1986); the story of thousands of years of Native American sustainable economy and salmon weirs ritually built for only ten days in serial succession along the banks of the Columbia (Lichatowich, 1999, p. 39); the tale of adventurers, trappers, explorers, miners, and pioneers; the story of New Deal construction in the face of post-Depression hardship; the saga of farmers wringing fruits and wheat out of desert irrigation; the story of clean electricity for the Northwest’s burgeoning cities and aluminum plants which made possible the aircraft of World War II; the story of the secret projects at Hanford that fueled the first atomic bomb tests and the bomb dropped at Nagasaki, leaving behind the largest hazardous waste dump in North America—ironically existing at the edge of the Columbia’s largest remaining wildlife reserve; the legends of fishermen and other creatures who recycle the salmon closer to the water; the story of Canadians upstream who watch the seemingly arbitrary variations of water level rise and fall for agendas far from their own; the tale of river pilots plying the mouth of one of the three most dangerous river bars in the world; the story of vested interests and politics, of pitched battles between environmentalists and use-oriented advocates and a decreasing sense that there is enough to go around. We must tell enough stories to do justice to the identity of this region, to represent its full range of voices in any dialogue or *multilogue* that will determine its future.

Second, in addition to the need for heightening consciousness, the challenge of studying the Columbia River Basin echoes the challenge of comprehending any system: the integration of complexity. In systems theory, the

unit of analysis is a whole that cannot be reduced to its parts, an “ordered whole in relation to its relevant environment” (Laszlo, 1973, p. 38; on systems theory see Olds, 1992). The constituents of systems are other systems, descending and ascending in a nested, embedded order of complexity, to encompass atom, molecule, cell, organism, ecosystem, or universe, with each level reflecting a synergetic wholeness. As the Indian poet Ghalib urges, “The greatness of a river depends on its magnificent face. / If we break it into bubbles and drops and waves, we are lost” (1999, p. 19). Complexity on the scale of the Columbia River Basin is as difficult to negotiate as distinguishing tributary from main current, which made mapping this immense river system a long-delayed achievement (Dietrich, 1995). We encounter complex implications as turbulent as the upheavals of this geologically most active part of North America (Lichatowich, 1999, p. 11).

The focus on the entire basin is critical; the river does not exist alone, nor, we now know, can we have “salmon without rivers” (Lichatowich, 1999). The university’s abstracted taste for experimental data removed from contexts has left us mired in what Whitehead called the “fallacy of misplaced concreteness” (1925, p. 58), but we are unable to predict to the individual case unless we re-immerses ourselves in actual complexity. And because, as a culture we lack tolerance for ambiguity, because we practice what Maslow called these “cognitive pathologies” (1966, pp. 26-30), we have not been able to evolve on a large enough scale, nor adequately teach the kind of cognitive maturity necessary for deciphering and living with complexity.

We are “in over our heads,” as Robert Kegan (1994) says in the title of his book on developmental structures of adult consciousness. We remain stuck at cognitive stages capable only of reciprocal thinking, where self and other are experienced either as separate entities in transaction or opposition, or as bound in role relationships (pp. 314-315). Instead, we need transformational capacities for retaining identity while empathically occupying multiple, alternative points of view, including the understanding that there are more inclusive frames to which both you and I belong, and from which new integrative solutions and wider metaperspectives are possible. Psychologists have begun to explore the importance of cognitive stages characterized less by abstraction, than by connection and synthesis.⁴ Can our epistemological *thinking about thinking* catch up to the world of complexity and our true cognitive potential? Can we evolve better win/win strategies of decision making, circles of inclusion where every party to potential conflicts is personally represented?

Third, beyond new cognitive structures more accurate to complexity, systems theory suggests that we need to explore a new kind of ethics of

interconnectedness. It is the whole fabric of reality, the network of interrelated systems that witnesses to value; a human-centric ethics falls short. Systems thinking, like the ancient Native American perspective, calls us to a form of ethics grounded in respect and reverence for all that is, an ethics of responsiveness to the lived truths of interconnectedness, not mandated duty abstracted from principles.⁵ Gregory Bateson cautioned that systems ethics required decisions made from the most encompassing point of view, not in the sense that more is greater, but that judgment be made in the context of the most inclusive system and its complexity, and he urged that policy making only be entrusted to those capable of reflecting this kind of vision (1972, p. 463).

The Hua-yen Buddhists of China and Korea image the universe as an infinite net, each intersection hung with a crystal jewel, mirroring every other part of the shimmering universe.⁶ In the giant web mapped out by the Columbia River Basin, the salmon flit as fisheries scientist Jim Lichatowich writes, “like silver threads woven deep into the fabric of the Northwest ecosystem,” talismans of the fate of the Columbia (1999, p. 6). They, along with other neglected dimensions of a use-propelled economy, become the hidden costs of our abundant energy powerhouses and irrigation systems, though any single focus here risks partial vision. The terms of the debate have changed as public consciousness has changed. There is hope here. But can there be an evolution in consciousness fast enough to match the turbulence and complexity of this region?

Heraclitus reminded us that change is the nature of the universe; the Taoists knew this too with their metaphors of water. We never step in the same river twice. Yet today we cannot step in the same river even once, for the Columbia River is no longer a living river, as William Dietrich (1995) and Robin Cody (1995) observe. Dubbed part “robo-river” by historian Richard White, with only a few free-rolling sections, the Columbia is a “regulated system” (qtd. in Dietrich, 1995, pp. 44, 309, 315), a river we *run*, orchestrated by computers and human decision making, its dams “the stops on a massive pipe organ” playing the destiny of water (Cody, 1995, p. 275). Yet despite all this, the Columbia lives. In Woody Guthrie’s ironic homage to a river whose roll was being stopped by the very dams he celebrated, “Roll on, Columbia, roll on.”⁷ The Columbia River Basin is as close to a symbol of the Northwest as there is, and as ecological philosopher Joanna Macy urges, we are asked to witness for the planet, to carry memory in front of us (2000, pp. 245-249), to keep the nuclear dumps, the mud-clogged river banks, the lost sound of Celilo Falls before our eyes and ears.

This presentation has changed me. Now, when I turn on the electric light at night, I realize I turn on a river; when I choose to order salmon at one of our celebrated seafood restaurants, I know the cost of the millions who perished to offer me this one slender gift. At the mouth of the Columbia, the river heads out to sea, leaving a haunting image a mentor bequeathed to me of life, aging, and immortality.⁸ There the story of the Columbia River Basin rejoins the even larger system of which we are all a part, making the unique witness of this small part of the world even more precious, a part of the biography of the planet in our backyard.

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Notes

1. See Allen, Burns, and Sargent (1986, pp. 49, 53) and Dietrich (1995, pp. 23-24).
2. On salmon as a gift, see Lichatowich (1999, pp. 34-37).
3. On the centrality of story, see Lichatowich (1999, p. 223) and Berry (1988). For vivid explorations of the multiple stories of the Columbia River Basin, see Dietrich (1995) and Cody (1995).
4. On post-abstract and post-Piagetian cognitive modes, see Koplowitz (1984, pp. 272-295). On connected procedural knowing and constructed knowing, see Belenky, Clinchy, et al. (1986).
5. See Olds (1992, pp. 97-101); also note similarities to the distinction of an ethics of care and an ethics of principle in Gilligan (1982).
6. On the image of Indra's net in Hua-yen Buddhism, see Cook (1977) and Olds (1992, p. 130).
7. On this unintended irony, see Cody (1995, pp. 151, 266) and Dietrich (1995, p. 303).
8. Conversations with Dr. Jonas A. Jonasson, Professor Emeritus Professor of History at Linfield College.

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