

Thematic Foreword: Reflective Practices: The Legacy Of Donald Schön

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This issue of *Cybernetics and Human Knowing* celebrates the intellectual legacy of the late Donald Schön. As it is partly reflected just looking at the professions of the contributors to this homage, Schön's work touched numerous disciplines and professional practices.

Donald Alan Schön was Ford Professor Emeritus on Urban Studies and Education, and Senior Lecturer in the Department of Urban Studies and Planning, and Architecture, at the Massachusetts Institute of Technology, the institution he joined in the early 70's until his death in 1997. He received his B.A. from Yale University, and an M.A. and a Ph.D. from Harvard University, all of them in philosophy. Schön's work was early influenced by John Dewey's theory of inquiry, the subject of his doctoral dissertation. In his earliest book (*Displacement of Concepts*, 1963), he paid attention, as Malcolm Parlett¹ accurately put it (1991) to "the ways in which categories are used to examine "things" but are not themselves examined as ways of thinking." The interest in metaphor expressed in that book, would grow years later toward his elaborations on "generative metaphor," and its role in allowing us to see things anew. Thus, he was already showing some of what would be epistemological enduring interests for his inquiry, namely: learning and its cognitive tools, and the role of reflection (or lack of it) in learning processes in general, and conceptual and perceptual change in particular.

Technology and Change: The New Heraclitus (1967) was an early contribution related to his experience as an organizational consultant, an interest that goes back to his work with an industrial research firm where he was influenced by the work of Raymond Mainer. In 1970, he delivered the Reith Lectures on the BBC. *Beyond the Stable State* (1971) grew out of those lectures, capturing his consulting practice and early research in the area of organizational learning.

Since the early 70's Schön started studying what makes professional practice effective. He worked in teaching, researching and consulting collaboration with Chris Argyris, a professor of Education and Organizational Behavior at Harvard University, who shared his interest in professional learning and practice, learning processes in organizations, and practices to change them to operate in a more critical, self-reflecting way. They would co-author *Theory in Practice: Increasing*

[1] Parlett, M. (1991). "The Assessment of Hearing Impaired Children." In Schon, D. (Ed.) *The Reflective Turn: Case Studies In and On Educational Practice*. New York: Teachers College, Part V, Chapter 10, pp.213-232.

Professional Effectiveness (1974), *Organizational Learning: A Theory of Action Perspective* (1978), and *Organizational Learning II: Theory, Method, and Practice* (1996).

Schön's interest in professional knowledge and education would lead him to develop an overall epistemology of professional practice, based on the concept of knowledge-in-action. Starting his studies with the practice of design in architecture, he would include over time professionals from the fields of education, management, medicine, psychotherapy, law, city planning, and engineering, among others. He would describe the reflection-in-action that professionals bring to their everyday practices, while operating under conditions of complexity, uncertainty, uniqueness, and value conflict. He would also describe how professionals theories-in-use are tacit theories of action, guiding their moves when they are in the mode of practicing their professions, although they cannot have access to that knowledge when they are asked about it. Professionals would also describe how participating in a reflective practice with others on their knowing- and reflecting-in-action, would allow them to reconstruct their theories of action making their action strategies able to be explicitly formulated and open to criticism. His initial elaborations on these concepts appeared in Schön's book *The Reflective Practitioner: How Professionals Think in Action* (1983). In two other books Schön advocated for a "reflective practicum," following the tradition of the design studio in *Architecture: The Design Studio: An Exploration of Its Traditions and Potentials* (1984), and *Educating the Reflective Practitioner: Toward a New Design for Teaching and Learning in the Professions* (1987). He would expand the edifice of this new epistemology of professional practice in *The Reflective Turn: Case Studies In and On Educational Practice* (1991).

Along with Schön's explorations on the knowing-in-action of professionals, and expanding on the role of a "reflective practicum" in the tradition of the design studio, he broadened the notion of "design professions," showing how professionals of many disciplines create "design worlds." (1992) In collaboration with Jeanne Bamberger, he understood the design practices of many professionals as a "reflective conversation with the materials of a given situation" (1983, 1991).

In 1994, together with his long time colleague Martin Rein, he published *Frame Reflection: Toward the Resolution of Intractable Controversies*, in which they explored how policy practitioners can explore their own actions, reflecting in concrete cases, on the frames that underline their intractable controversies, even as they continue participating as players in the policy making arena. This was another domain in which Schön continued his inquiry into knowing- and reflecting-in-action.

During his last years Schön showed his interest in software design, the role of computers in designing, and the uses of design games to expand designing capabilities (1997). In a posthumous book (*Excellence by Design: Transforming Work Place and Work Practice*, 1998), in which Schön participated as co-editor, he showed also his interest in, as Jeanne Bamberger puts in her contribution to this

issue, “the relationship between the organization of an organization and the organization of the space in which that organization does its work.”

This issue of *Cybernetics and Human Knowing* collects contributions from professionals of many disciplines. We were all united by the desire to pay homage to Donald Schön, showing how his powerful ideas in some cases, the interaction with him in other cases, the collaboration with him as colleagues in still other cases, were generative of further developments still unfolding in the daily practice of our own disciplines.

Jeanne Bamberger, a Professor of Music at the Massachusetts Institute of Technology, and a colleague of Donald Schön for many years, gives us what she calls a “personal reminiscence,” tracing Schön’s enduring interests in the generative aspects of change and its permanence. **Pauline Sung-Chan**, a social worker at The Hong Kong Polytechnic University, did her doctoral dissertation under the guidance of Donald Schön. She writes about Schön’s “reciprocal-reflection theory,” and its role in “collaborative action research,” expanding it to conceptualize the process through which experienced practitioners acquire new professional knowledge. **Shoshana Keiny**, an educator at Ben-Gurion University of the Negev, writes about knowledge construction in learning, as it is facilitated by a simple tool she got from Schön during one of their working encounters. **Frederick Steier**, a cybernetician and organizational consultant with a background in engineering, and **Wit Ostrenko**, the president of the Museum of science and Industry, in Tampa, Florida, provide an instance of their reflective dialogue about that museum design and experience for attendants. Bridges are built between some of Schön’s seminal concepts and second order cybernetics. **Dan Bar-On**, a psychologist at Ben-Gurion University of the Negev, was the initiator of the “To Reflect and Trust” (TRT) approach of bringing together descendants of both holocaust survivors and nazi perpetrators, a project inspired by the work of Donald Schön. He writes here about an expansion of that project to bring together victims and victimizers of current heated conflicts in different areas of the world. **Martin Rein**, a professor of urban studies and planning at the Massachusetts Institute of Technology, an organizational theorist and policy analyst and colleague of many years of Schön, builds here on some of the concepts they dealt together with in their book *Frame Reflection* (1994), to introduce the distinction between primary and secondary reframing. Finally, taking advantage of Soren Brier’s invitation to include my own contribution, I, **Marcelo Pakman**, write from my experience as a psychiatrist and family therapist working for a community mental health network (Behavioral Health Network, Springfield, Massachusetts) and as a mental health educator, to advocate for Donald Schön’s call for a reflective turn in the mental health field.

We offer this collective tribute to:

Donald Alan Schön, *In Memoriam*

A bright mind, a warm heart, a gentle spirit.

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