

There Is No New Scientific Paradigm...Yet

(Toward a Most Practical Science of Social System Life)

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in memory of Kurt Lewin

There is nothing so practical as good theory

Summary

The object of this paper is (1) to establish that, despite the frequent references to paradigms and paradigm shifts in the management and organization literature, there are no new paradigms as Thomas Kuhn has described in his landmark essay, and (2) to make the case for the Oshry Whole System Framework (WSF) being a legitimate candidate for paradigm status, one from which research extending, elaborating, testing, and applying the framework follows naturally.

A visit to my local bookstore

This story begins with a visit to my local bookstore; I am there with my granddaughter, our primary business being to find a book for her. As she rummages through the shelves of the Young Adult Section, my eye catches a book lying by itself on an adjacent countertop: Thomas Kuhn's *The Structure of Scientific Revolutions* (1962). Though I'd never read the book, I had heard it referenced in countless conversations regarding one or another new approaches to organizational life; everywhere you turned there was talk of "new paradigms." Kuhn's book just had no business being where it was; this was neither the Science nor the Philosophy Section; its nearest neighborhood was the Young Adult Section, and I could not envision my granddaughter or any of her compatriots being engrossed by Kuhn, at this stage of their lives at least. So what was this book doing here? I leaned on the counter and began to read. After a few gasps and Wows! it was clear: The book was there for me.

There is no new paradigm

1. Despite the obligatory references to Thomas Kuhn's work, there is probably no field that talks more about yet knows less about scientific paradigms and paradigm shifts (as Kuhn uses the terms) than this field of management, management theory, organization development and so forth. In these fields, paradigm simply refers to some new way (generally the author's) of looking at management, leadership or other aspects of organization life; and proposals for paradigm shifts--from hierarchy to self-directed, from patriarchy to matriarchy--seem to be based less in science than in theology or politics. My intention here is not to denigrate such contributions which I believe are extremely valuable, but to distinguish them from science.
2. In science, paradigm "define(s) the legitimate problems and methods of a research field for succeeding generations of practitioners." Paradigms share two essential characteristics: (1) the achievement of the creator of the paradigm "was sufficiently unprecedented to attract an enduring group of adherents away from competing modes of scientific activity" and (2) the new paradigm "was sufficiently open-ended to leave all sorts of problems for the redefined group of practitioners to resolve." (Kuhn, page 10)
3. "Normal science" is what is carried on *within* the paradigm. "Research firmly based upon one or more scientific achievements, achievements that some particular scientific community acknowledges for a time as supplying the foundation for its further practice." **Is there such an acknowledged foundation in our field? I think not.** On the subject, Kuhn says, "...it remains an open question what parts of social science have yet acquired such paradigms at all." He goes on to say, "History suggests that the road to a firm research consensus is extraordinarily arduous."
4. Citing examples from electricity, heat, motion, statics, chemistry and geology, Kuhn describes a **pre-paradigm stage** in which "early fact-gathering is a far more nearly random activity...in the absence of a paradigm or some candidate for paradigm, *all of the facts that could possibly pertain to the development of a given science are likely to seem equally valid.*" (Kuhn, page 15, emphases are mine.) Given the diversity and non-connectedness of

the many books in this leadership, management and organization field, "pre-paradigm" seems to be a fairly apt description.

Back to the bookstore

Some weeks later I set out on a piece of admittedly unscientific field work. I confess that I came less in a spirit of inquiry than to substantiate Kuhn's point: "in the absence of a paradigm, all of the facts that could possibly pertain to the development of a given science are likely to seem equally valid." I returned to the bookstore this time focusing on the Management Section which houses the many books dealing with such topics as leadership, management and organizational change. My intention was to document what a scattershot this field of organizational behavior is; that, in the absence of a paradigm, one person's opinion, theory, set of prescriptions was as good as anyone else's.

One needs to understand how painful a process this was for me. Over the years I have taken great pride (false perhaps) in not reading any of the literature in these fields, my intention being to develop a framework for systems based solely on my own observations and experiences (primarily in the Power Lab) uncontaminated (and perhaps unilluminated) by the theories and frameworks of others. Now, here I am surrounded by hundreds of these books. My intention was not to read all of these books but to identify their themes and messages by skimming them, looking for summaries, and at the least reading their book jackets.

After five mornings I abandoned the effort, not because Kuhn's point was wrong, but because it was so right, the task was overwhelming. To document the point would take many more hours of my life than I was ready to commit. Themes, strategies and prescriptions were coming at me from every direction; a sample of my first day's study covered books dealing with various sources of organizational power, the power that comes: from principle-based relationships (Lee), the power that comes from the radical redesign of business processes (Hammer), the power that comes from organizational alignment (Labovitz and Rosansky), the power that comes from techniques for influencing your peers and bosses (Fisher and Sharp). Then there is the ultimate power, the power that comes from stretching the envelope of all other powers (Peters). *None of these books makes reference to any other*; it is as if each comes from its own domain of study. Please understand that I am in no way questioning the value of these books; each of them has the potential for stimulating new thinking and opening up new action possibilities. My focus here is narrow: I am simply trying to make the case for something that is absent: a new scientific paradigm.

Various of the books make reference to their work being theory- or research-based. In this context, theory and research tend to mean the study of practices in the field rather than an encompassing theory of organizational phenomena, a framework that both describes and predicts: If one does X then Y will follow. Practitioners may not feel the need for a paradigm; in fact they may see the quest as more of the theoretician's analysis paralysis. One CEO put it nicely in the forward to a delightful and eminently practical book: "Bob has spared us from new theories, models or paradigms, instead offering us insights into the most energizing techniques that managers in companies across America are successfully using today." (Nelson)

In the absence of a paradigm, there is room for every point of view. The field imports from sports (*Sacred Hoops* by Phil Jackson, *The Winner Within* by Pat Riley, *Success is a Choice* by Rick Pitino), from Buddhism (*The Tao of Leadership* by John Heider, *Tao at Work* by Stanley Herman, *Tao of Management* by Robert Messing), from physics (*Leadership and the New Sciences* by Margaret Wheatley), from religion (*Jesus, CEO* by Laurie Jones), from popular culture (*Leadership Lessons from Star Trek: The Second Generation*), and the metaphorical possibilities appear limitless (swim with the sharks, roar with the lions, teach the elephants to dance).

Faster than a speeding bullet

On the first day of my study I had come across the paperback edition of *The Fifth Discipline* by Peter Senge. In the Introduction, the author expresses some concern over his work becoming another passing fad. He assumes that in the end it will fade like pet rocks and quality circles, and the challenge is not to prevent its passing, but to extend the cycle as long as possible.

On day three of my research I experienced Senge's dilemma dramatically. My bookstore has two locations for texts: the table and the stacks. The table contains thirty or so "hot" new items; the stacks contain the hundreds of titles which either never made it to the "hot table" or which had their period of fame only to pass into the relative obscurity of the stacks. It is not clear to me how or by whom it is decided which books make the "hot table" and which are relegated to the stacks. In my five days I never observed any transitions occurring, but something did happen between days two and three. At the end of day two, I made note of three books on the "hot table" I wanted to study on day three. On day three, all three books were gone, ignominiously dispatched to the stacks and presumptuously replaced by three or more upstarts. Even in the quiet of the bookstore I felt breathless at the speed of change.

In any event, after five days I abandoned my research project. Even my limited research was sufficient to make the point for me; in fairness, however, I entered with the point already established. I leave it to young researchers (or beleaguered graduate students) with more patience and more taste for the variety, to study this field more systematically. For me, Kuhn's point was well demonstrated: There is no new scientific paradigm; in fact, there was no old one from which a new could have diverged.

An amateur¹ proposes a candidate for paradigm status

5. For the longest time I have felt that the systems framework I have developed *is* solid science--a fact largely unrecognized in a field which is more engineering-oriented than science-oriented. Our organizational development field is modernistic, prone to staying on the surface of matters, leaping from fad to fad; and it is a field that demands immediate practical results. Neither tendency lends itself to serious science.
6. The Whole Systems Framework has evolved gradually out of my experience over the past thirty years with what at various times has been referred to as the Power & Systems

¹ I am using "amateur" in the sense of one who is not in the scientific academy yet brings a passion to the subject.

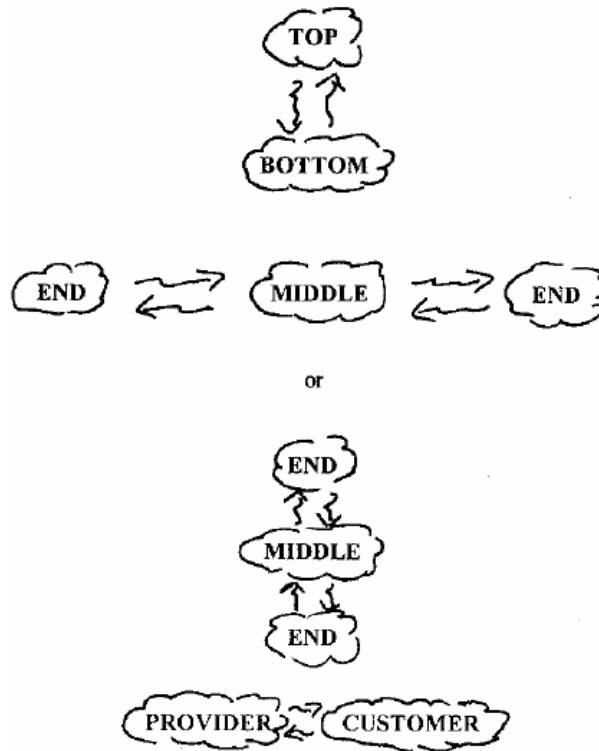
Laboratory, the Power Lab, the Power & Leadership Conference, and Power Camp. Over these thirty years I and my colleagues have been able to observe a multitude of multi-class whole systems live out their existence. These direct observations are the foundation of the Whole Systems Framework.

7. I believe that WSF has matured to the point that it can be considered as a serious candidate for scientific paradigmatic status, and I am proposing it as a candidate based on the following criteria:
 - a. **that it is descriptive and predictive,**
 - b. **that it offers improved solutions to existing social system problems,**
 - c. **that it opens up broad avenues for future research.**
8. The Whole System Framework does not pretend to be exhaustive--which is neither a requirement nor even a desired condition for a scientific paradigm. It *is* an encompassing framework which sets the stage for what Kuhn refers to as "normal science", aspects of which include extending, correcting and refining the theory, and testing its applications.

The Elements of the Whole System Framework

1. **Seeing systems as wholes.** WSF fits in and complements the field of general systems theory in which "a system has come to mean an integrated whole whose essential properties arise from the relationships between its parts *and the processes of the whole*, and 'systems thinking,' the understanding of a phenomenon within the context of a larger whole."² WSF meets this enlarged definition; it has a language for describing systems as wholes; and it is a framework which allows one to understand and influence the widest range of system phenomena: how system members experience themselves, their relationships with others, the system they are a part of, and other systems.
2. **The structure and processes of the whole.** In WSF, we describe the whole as a **pattern of relationships** (what the whole *is*) and as a **pattern of process** (what the whole *does*). (These are described more fully in my *Seeing Systems* and *Leading Systems*.)
 - (i) **Patterns of relationship: what the whole is.** We have identified three of the key relationships which determine the essential properties of whole systems (**Top/Bottom**, **End/Middle/End**, and **Provider/Customer**). These patterns of relationship exist *at all levels of social system--family, sports team, work unit, school and university faculties, organization, nation*. System members are constantly moving in and out of these relationships, sometimes on one side, sometimes on the other.

² From *The Web of Life*, Fritjof Capra, 1996. The phrase in italics is my addition.



There are predictable patterns of responsibility that occur in each relationship—*not always, not with everyone, but with great regularity*:

With regard to the processes in which they are jointly engaged:

Top becomes responsible, Bottom not-responsible;

Middle becomes responsible, Ends not-responsible;

Provider becomes responsible, Customer not-responsible.

These responsibility "dances" generally happen without awareness or choice, and they result in predictable relationship breakdowns:

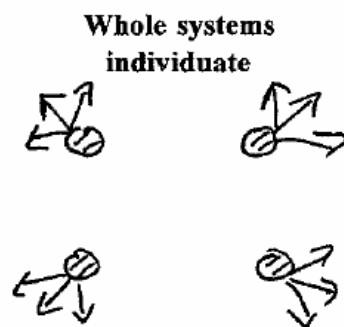
Burdened Tops and **Oppressed** Bottoms,
Torn Middles and **Disappointed** Ends,
Righteously Done-to (screwed) Customers and
Unfairly Judged Providers.

In the absence of WSF these breakdowns are explained personally rather than systemically, and the suggested remedies are also personal: fix, fire, rotate, separate, divorce, therapize one or more of the parties.

When one recognizes systems as patterns of relationship, then the remedies are also systemic: see the relationship we are in; notice the responsibility "dance" if it is on; and, rather than fix people, let us learn how to manage the systemic relationship we are in.

- (ii) **Patterns of process: what the whole *does*.** We have also identified six fundamental whole system processes (three pairs of processes) which the system engages in as it interacts with its environment: **Individuation and Integration, Differentiation and Homogenization, Stabilization and Change.**

Once again, *these processes occur at all levels of systems*, and the experiences of system members are shaped by the patterns of system processes of the whole.

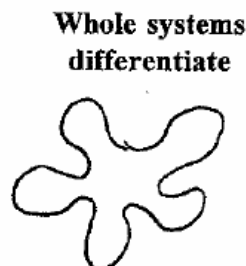


members function as wholes, operating independently of one another

**and they
integrate**

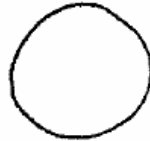


members functions as parts, operating as components of an integrated whole.



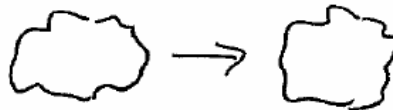
the whole develops variety--diversity--in form and function

**and they
homogenize**



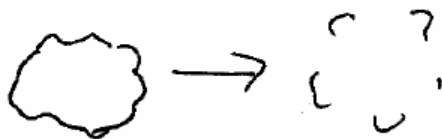
system parts and processes maintain their commonality.

**Whole systems
stabilize**



the system maintains continuity in form
and function over time

**and they
change**



the system changes in form and
function over time.

In the absence of WSF, systems blindly fall into processes which are either determined by their unique environmental conditions or are shaped by political considerations.

Environmental determinism goes something like the following:

Top systems, in environments of complexity and responsibility, differentiate without corresponding attention to homogenization, with the result that **members regularly fall into turf or territorial issues with one another.**

Potential Middle systems, in diffusing environments which pull members apart from one another, individuate without corresponding attention to integration, with the result that the **middle members regularly fail to develop themselves into a system.** (Academics within a university need only examine their relationships with their peers to verify this principle.)

Bottom systems, in environments of shared vulnerability, integrate without corresponding attention to individuation and differentiation, with the result that **members regularly fall into groupthink issues** with strong pressures toward uniformity and conformity.

Once again, in the absence of WSF, *whatever breakdowns occur in these systems are explained personally and the solutions are personal: fix, fire, rotate, expel, therapize one or more of the parties.*

And, in the absence of WSF, these processes are also politicized. For example, in "free societies" individuation becomes the valued process and integration the disvalued one (socialism, communism). Whereas in "socialist" systems integration is the valued process and individuation the disvalued one (selfishness, greed). In both cases, politicized systems, overvaluing their core process, weaken themselves by denying themselves the needed balance provided by their demonized counterparts.

When one recognizes system processes, the task becomes one of managing system processes while avoiding the pitfalls of politicization or environmental over-determinism.

WSF as a Paradigm Candidate

The following are reasons for proposing WSF as a prime paradigm candidate:

1. **WSF offers better explanations.** WSF explains system phenomena better than competing models. It resolves those "recognized anomalies whose characteristic feature is their stubborn refusal to be assimilated to existing paradigms." (Capra) One such anomaly is the regularity with which certain interpersonal relationship patterns and breakdowns occur *independently of the personality characteristics of system members, and independently of the content of their systems.* Examples are the regularly occurring territoriality (turf warfare) among Tops, alienation (dis-integration) of Middle peers, and groupthink (pressures toward conformity) among Bottom peers. *Person-oriented and situational-oriented frameworks cannot explain these regularities; WSF does.*

2. **WSF offers (suggests) improved solutions.** The WSF explanations of these phenomena point to improved strategies for problem solutions. Rather than personal solutions (fix, fire, rotate, therapize the parties), help parties see and master the system conditions that are shaping their relationships. With regard to system relationships, this means shifting the locus of responsibility in the Top/Bottom, End/Middle/End, or Provider/Customer relationships. With regard to system processes, this means adjusting the balance or intensity of processes: individuation, integration, differentiation, homogenization, stabilization or change.
3. **WSF offers broad avenues for future research.** The research that has led to the development of WSF has been largely though not exclusively limited to our observations of Power Lab and Organization Workshop interactions over the past thirty years. These have been our opportunities to stand outside systems, see them as wholes, and eventually begin to see them as patterns of process and patterns of relationship. As significant as these breakthroughs have been, we see them as only the beginning in understanding the full possibilities of WSF.

Once one chooses to work within the WSF paradigm, unlimited research opportunities open up, both for uncovering additional patterns of relationship and process, and for elaborating, testing and applying the model. The process of performance evaluation is one example of a research and application direction that follows from seeing systems as patterns of relationship; the flaws of person-centered performance evaluation are revealed: one party in the relationship being evaluated negatively by the other (generally a failing Bottom, Middle or Provider) rather than both parties evaluating how they are managing the relationship. When one sees systems as patterns of relationship, then the appropriate task becomes one of assessing how well we are managing our Top/Bottom (or End/Middle/End or Provider/Customer) relationship. The systemic alternative: *Evaluate the relationship, not the person.*

Relationship research. More broadly, WSF offers broad strategies and predicted outcomes (creating partnership) by shifting responsibility in the three relationships. However, no systematic research has been done in studying the shape and consequences of existing patterns, or studying the strategies and consequences of changing strategies, i.e., *how* one creates shared responsibility in T/B, E/M/E, and P/C relationships and what are the *consequences* of such shifts. Broad avenues of research are available here.

Process research. In the same vein, WSF offers broad strategies and predicted outcomes for preventing or repairing breakdowns in relationships among Top peers, Middle peers, and Bottom peers. Again, no systematic research has been done in studying existing patterns of process in these systems and the consequences of these existing processes; or strategies for changing processes (helping Top, Middle and Bottom peers learn how to master their systemic conditions). More broad avenues of research are available.

Social implications. WSF has implications for such societal phenomena as tensions based on differences in race, religion, ethnicity, gender, sexual orientation, and others. The model

provides a framework for understanding these tensions, preventing them from developing, or resolving them when they do arise. Again, no systematic research has been done in any of these areas. There are also as yet unexplored implications for families as systems and relationships among system members.

It is on these bases that I offer WSF as a prime paradigm candidate.

Does Anyone Really Care About Scientific Paradigms?

I am back at the bookstore noticing the slightly modified configuration on the "hot table" and reflecting on this paper and its likely consequences:

(1) I will be misunderstood by some as disparaging their work. That is not my intention. My purpose is to establish a framework for the scientific study of systems. It is my hope that many students of systems will be stimulated to work with this framework: elaborating it, testing it, developing applications from it. One measure of the success of this paradigm will be not in the number of books it spawns, but in the number of research papers. Yet I am also aware of the limitations of a paradigm, as Kuhn says, "Frequently... revolution narrows the scope of a community's professional concerns, increases the extent of its specialization, and attenuates its communication with other groups, both scientific and lay. Though science surely grows in depth, it may not grow in breadth as well." (page 120) I want to separate science from the rest without disvaluing the rest--the contributions that come to us from intuitions, metaphors, observations in the field, moral convictions, spirituality, connections to other disciplines, synchronistic inspirations (such as the one that brought the Kuhn book and me together), and so forth.

(2) I will be attacked, abused or ignored by those whose frameworks are challenged and threatened by the Whole Systems Framework. This is likely to be particularly true of those whose careers have been based on the primacy of understanding systems through understanding individuals, those who have put all their eggs in the basket of personality. Systems are not understood by the nature of the characteristics of its parts. "Living systems are integrated wholes whose properties cannot be reduced to those of smaller parts. The essential, or 'systemic,' properties are properties of the whole, which none of the parts have." (Capra, page 36.) That fact simply has to be faced. The regular disintegration of "middle" groups, coalescence of "bottom" groups, and territoriality of "top" groups has little to do with the character make-up of its members; and confronting people on their personal styles or generating norms of authenticity or creating climates of feedback are likely to have limited and at best short-term success. To paraphrase Salter, it is high time that in matters of understanding social systems the cult of personality, like the elephant of the ancient fable, dragged itself off to some far distant jungle and died. **We are not autonomous entities; we are systems creatures; our experiences of ourselves, others, our system and other systems, are shaped by the structure and processes of our systems.** This fact will be hard for many to accept.

(3) And finally there is the question: Who cares? In a field that is driven by pragmatism and by the need by both practitioners and their gurus to always be on the leading edge, the question of science may be largely irrelevant or, worse, a diversion. Speed. What's the latest? Results. The

gurus want to get their latest thinking onto that "hot table," and the practitioners want to get whatever will give them a leg up on the competition. Science is not the overriding concern for either group. [At Power & Systems we have been conducting seminars and workshops for close to thirty years; and not once has it occurred to us to trumpet the science-base of our work. Who would care? It's results that count.] Still, in the ongoing tension between the practical and the theoretical, Kurt Lewin's dictum bears repeating: "There is nothing so practical as good theory."

Enter Academia

I have been cautioned by a colleague (Lee Bolman, personal communication) against putting too much weight on "bookstore research" while ignoring scholarly work in the field. "Most of the work in bookstores is aimed primarily at managers rather than scholars. The scholars represent another intellectual world that overlaps but is distinct from the stuff written for practitioners. The academics and popularists tend to take little note of one another." Dr. Bolman goes on to point out potential competitors for paradigm status that seem to be getting the most attention in academic circles in recent years: institutional theory, resource-dependence theory, population ecology, transaction-cost theory, and cognitive theory. In the competition for paradigmatic status, the tests are these: Do these theories explain social system phenomena better than other models? Do the theories allow one to predict outcomes? Do they offer improved solutions to existing social problems (If one does X, will Y follow?) Do they open up broad avenues for future research? I spend much of my time in the field dealing with executives, managers and workers, and I have never heard reference to any of these theories or their applications. It seems reasonable to ask: Where in the world, outside of academia, do these theories show up?

What is unique about WSF is that it is both academic (though not yet sufficiently recognized in academia) and popular. While the theory has been developing, it has concurrently, for over twenty-five years, been the basis for education about life in organizations in ways that organization members can take specific theory-based actions to produced specific theory-based outcomes. The staying power of the theory and its resulting applications--even as other frameworks have come and gone--speak for the power of the paradigm. Naturally, it would be my fondest hope that academicians would also take a close look at the WSF, for it is in academia that the testing and extension of this framework rightfully belong.

There is a science of social system life, and the Whole Systems Framework provides a solid foundation on which system scientists can build--testing, elaborating and applying.

Summary of the Whole Systems Framework

- Human social systems are wholes and the wholes have properties which none of parts (members) have.
- Human systems are **patterns of relationship** and **patterns of process**. Some of these patterns have already been identified; presumably there are more waiting to be identified.
- The identified patterns of relationship and process exist at all levels of systems--family, work group, community, organization, nation, racial/religious/ethnic groups, humanity as a whole.

- Consciousness--that is, how system members experience themselves, others, their system, and other systems--is shaped by the structure and processes of their systems.
- System members tend to be unaware of the connection between their consciousness and the structure and processes of their systems; as a consequence members tend to personalize and politicize that which is systemic. This system blindness has resulted in misunderstandings and conflicts among system members; warfare: hot, cold, intra-organizational and cultural; separation and divorce; missed opportunities for productive partnerships; family and organizational disintegration; and such catastrophic disasters as holocausts and ethnic cleansing.

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