

PAMPHLET 10

CHAOS

By Tom Heuerman, Ph.D.

with Diane Olson, Ph.D.

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In simple terms chaos is order without predictability. That is, there are systems, physical and social, that are well understood and yet are fundamentally unpredictable. Thus, chaos is not anarchy or randomness. Chaos is order, but it is order that is invisible.

T.J. Cartwright

All living systems, including organizations, are chaotic. Chaos is creativity in process; the place between the breakdown of the old, and the formation of the new. Living systems interact internally and with their environment, connections are made, relationships are formed, information is created, and "choices" are made. This dynamic interaction is messy, constant, and wasteful.

Chaos is not the random, lawless, and meaningless behavior it appears to be. Instead, chaos is stable globally while unpredictable locally. The behavior we observe is bounded by invisible rules, and an overall pattern exists (a strange attractor). When we step back, observe over time, from different perspectives, and from multiple frames, the patterned order may be seen. Although specific behaviors cannot be predicted, if the rules were understood, the behavior would be understood.

The disturbance of chaos can be from near stable to incomprehensibly complex and energized. At the extremes of order and chaos, dynamics are counterproductive to the system. Too much order and change will not cross impermeable boundaries. Too much chaos and the system loses its organization. Along this continuum of chaotic behavior is a place called the "edge of chaos" a location of maximized activity, balanced order and chaos, and enhanced creativity where new patterns, processes, and structures emerge from self-organization.

A chaotic system is sensitive to small changes. A slight difference at the beginning of a history can have a huge effect at the end of the history. This dynamic is called the "butterfly effect" the notion that a butterfly stirring the air today in Beijing can transform storm systems next month in New York (formally called sensitive dependence on initial conditions). Butterfly effects, large and small, are prevalent throughout all scales of living systems and produce the rich diversity and creativity in natural systems.

On a human level chaos is present (metaphorically) as long as people are alive. Chaos is the space between endings and new beginnings. At first this is a place

of fear, anger, boredom, anxiety, loneliness, restlessness, a sense of inadequacy, and a loss of the familiar. Many of us try to avoid these feelings because we feel so uncomfortable. Avoidance is a mistake because this is the place and time of freedom where creativity can happen. This is an opportunity to grieve and wander, and a time to quest for a new vision for our lives.

The "edge of chaos" is entered into fully when new possibilities burst through the turmoil. Creativity is in full bloom, synchronicity abounds, and we feel fully alive. We forget ourselves and focus totally on what we are doing. We are in "flow," and self-organize. The uncomfortable emotions are replaced by anticipation and excitement about new possibilities. Anxiety may be high "at the edge of chaos," and we need to maintain our discipline and work through the fear. This is the emergence of new growth.

In organizations chaos is the time when people feel crazy, confused, frustrated, and overwhelmed with data they don't understand. Old ways of doing things don't work anymore. The path forward is not clear. People try to return the organization to its comfort level. They clam up, seek experts, try to fix the turmoil, and do what is expected. They try to control others, events, and themselves and individual shadows become externalized. People hope for magic, lie to themselves, and look for quick-fixes.

This avoidance of chaos is a mistake. Organizations and people can get "stuck" in this ugly place and will die eventually. Transformation cannot occur without chaos; chaos is health. The task is to bring forth the emotion of the organization, to put people together with other people, and to provide and generate information. Creativity will emerge if people explore, receive constant feedback, sort out conflicting beliefs, and make choices.

For example, a self-managed team was in conflict and relationships and performance were suffering. I met with them. Afraid they would be criticized, they were apprehensive and distrustful. We talked for two hours we discussed feelings, shared information, confronted inauthentic behavior, and supported one another. Ideas came forth, and plans were made and responsibilities assigned. Pent-up energy was released. At the end of the meeting, everyone felt stimulated and enthusiastic; the team was ready to move forward. This intervention was not a quick-fix. The group worked through their differences and discovered new possibilities. Groups need help at times. This is a facilitation role for leaders to assume.

In organizations we take advantage of chaos by providing freedom, sharing information, having permeable boundaries, creating a deeply held and shared vision, and putting diverse and authentic people together in different settings. The many connections increase the possibility of "butterfly effects" in the direction of the shared vision. Experiments, trial and error, and a mindfulness of opportunities result in disproportionate outcomes small actions lead to large changes. Leaders utilize judgment to amplify and dampen the "butterflies" that make a difference.

Absent freedom, information, shared vision, permeable boundaries, and participation, butterfly effects (and self-organization) will still happen, but the dynamic will be restricted, fragmented, and driven underground. Outcomes will probably be incongruent with the organization's objectives. Under these conditions, the fears of letting go are realized.

How can we trust "letting go"? The study of self-organization teaches that when systems undergo transformation, and behavior appears random, ordered patterns emerge, and they emerge quickly. Every organism, at every level, moves toward constructive fulfillment of the system's inherent potentials. A natural tendency toward growth and development exists. Outcomes may not be what are expected—they probably will be better. On the other hand, the organization might get "hit by a train." Life offers no guarantees, but proceeding in harmony with natural dynamics increases the probability of sustainability.

The leadership principle of chaos is: Leaders welcome (and sometimes create) disturbance because they understand that creativity and order will not be far behind. They understand that the suppression of chaos, and the accompanying emotions, as taught by Newtonian thinking, is exactly the wrong thing to do. Leaders develop the skills to guide the "chaotic" process (and the accompanying anxiety). Leaders learn how to maximize creativity at the edge of chaos, are mindful of butterfly effects, and use judgment to know which butterfly effects to dampen and which to amplify. Then, they let go