

Psychological Chaos, Marginalization and Renewal

Bob Roan

March 2004

Robert.Roan@post.harvard.edu

You think because you understand one, you understand none, because one minus one makes none. But you must also understand “minus” (Sufi saying, paraphrased by Bob Roan)

This paper explores the similarity between the depth psychological chaos informed by the approach of Veronica Goodchild and the mechanical chaos of chaos theory. Goodchild views chaos as “...as a symbolic concept linking it to fields of experience that tend to be marginalized in our culture...” (10) Mechanical chaos can be viewed as a mathematical concept linked to fields of study that tend to be marginalized in the scientific culture.

I will start by describing the chaos of traditional chaos theory. Next will come suggestions of possible locations for various chaotic concepts in psyche, including a discussion of the similarity of complexity and complexes. Then I will begin exploring the process of marginalization by looking at the mechanics of margins, the psychological dynamics of marginalization, its relationship to anxiety, and the way our sense of anxiety opens us to manipulation. Then I will discuss entropic chaos in detail, which will lead to Goodchild’s suggestions about the promise of chaos as an alternative to the anxiety of chaos.

Mechanical chaos refers to the chaos associated with systems based on fluid, wave, quantum, gravitational and other types of mechanics. Computer models are frequently built in an effort to understand them better. Van Eenwyck describes two kinds of mechanical chaos: “deterministic chaos, which is a form of chaos within which patterns periodically appear and disappear...(and) entropic chaos, which never resolves into patterns. It simply deteriorates into total disorder, never to return.” (45)

Then he explains that deterministic chaos is really unmanageable complexity because “the dynamics of chaos are so complex they are virtually indecipherable. Nevertheless, they are not disordered. We simply do not have the enormous computing power necessary to keep track of all their outcomes.” (Van Eenwyck 46) This suggests that enough computing power leads to manageable complexity, of which there would be three types.

If we don't apply the computing power, we have manageable, but unmanaged complexity. If we apply the computing power to the system, we have managed complexity for a while. If we continually apply the computing power, we eventually have order. For instance, the first computer spreadsheets were marvels because of the way they let people manage simulations that had previously been too complex. However, those same simulations (if anyone still uses such simple financial models,) which seemed so complicated, now are an orderly part of every day life. And the leading edge of spreadsheet applications has moved to ever more complex systems.

This leaves us with five concepts for our discussion of chaos:

- Entropic chaos,
- Deterministic chaos,
- Manageable, but unmanaged complexity,
- Managed complexity, and
- Order.

Where in psyche does chaos occur? Perhaps

- Entropic chaos is located in the id,

Deterministic chaos is the modus operandi of the unconscious part of the ego, to which belongs “the dream censor and the process of repression” (Ellenberger 515,)

Manageable but unmanaged complexity dominates the shadow,

Managed complexity is the realm of the ego, to which “belong(s) perception and motor control” (Ellenberger 515,) and

Order resides in the persona.

If the three types of complexity (manageable but unmanaged, managed, and order) reside in complexes (the shadow, the ego and the persona,) synchronicity of terminology suggests that complexes may be complex systems. There are energetic and imaginal parallels.

The intensity of both depends on energy. Physical energy charges mechanical systems and psychic energy charges complexes.

Jung describes a complex as

“the image of a certain psychic situation which isincompatible with the habitual attitude of consciousness. The image ...is subject to the control of the conscious mind only to a limited extent and therefore behaves like an animated foreign body in the sphere of consciousness.” (qtd. in Van Eenwyk 30)

We can use parallel language to describe a complex system as the image of a certain mechanical system which is incompatible with the habitual attitude of predictability. The image is subject to the control of predictability only to a limited extent and therefore behaves like a strange attractor in the field of chaotic dynamics.

The next step in my discussion of the process by which we assimilate things into psyche is to explore the concept of margins.

A margin is a boundary or an edge. The margins are those things on the other side of the margin. Our books have margins. Things written in the margins stand out. If it's not

your book, it's rude to put things in the margins. Frequently things in the margin question the main text. We have margins of error to allow for the chaos of the unexpected.

Margins are the result of the tension of opposites between the needs for self preservation and renewal, the persona and the id. The Dark Ages preserved order but stifled new thinking. More recently, the 50s seem to have that reputation. Some people think the 60s went too far the other way.

Society needs margins and limits. "... Society arose when individuals willingly agreed to restrain their impulses—thereby subordinating their desires to the power of the community as a whole..." (Manson 82)

There are also actual margins and limits. We don't want to drive faster than the car, road, and weather conditions will support. We don't want to take on more work than we are capable of and thus disappoint people who are counting on us.

Everyone sets margins. Political districts set margins in the form of laws. Social groups set margins in the forms of manners and expectations. Organizations set margins. Scientific peer groups decide what ideas are reasonable enough to appear in respected journals. Pacifica has set a margin for the length and submission date for this paper.

Since all groups are made of individuals, it is ultimately the ego, mediating between the id, which may not even understand boundaries, and the superego, which has great respect for them. As an individual, I set my own margins and decide which margins of larger groups I will honor. I don't have to turn in this paper on time. I can decide to drive faster than the speed limit.

Goodchild's suggestion we view chaos as "...as a symbolic concept linking it to fields of experience that tend to be marginalized in our culture..." (10) invites us to do the converse and view marginalization as a symbolic concept linked to chaotic experiences.

Whether it's our own superego or some collective persona, the process of marginalization is rooted in anxiety, as a quote displayed in class explains: "Out of our anxiety we always feel a need to construct new centers, to associate ourselves with them and then marginalize those who are different from those values" (J Powell)

Marginalization depends on where on the chaos-order continuum we start to feel anxious and what we perceive as the chaos-order level of the experience.

We feel different levels of anxiety in the same situation. Some people look at strange, new ideas and think "how interesting" while others get heart palpitations.

We see different amounts of chaos in the same situations. For example, a computer support person can look at a system behavior which makes no sense to a user and see patterns which allow her to resolve it. Standardized tests are full of questions which show a number of elements and ask for the next in the series. For some, the elements have patterns of order and for others there is total confusion.

Today's anxiety provoking situation may be tomorrow's norm and vice versa. Interracial marriage, which once appeared to many as a dire threat to civilization is now accepted by many. Pre-marital sex has also become much more accepted.

The boundaries do not shift in the same direction. Circumcision, once considered part of the order, is being viewed by more and more parents as brutal and barbaric (and chaotic?) Politically, it once was very accepted to be a liberal and conservatives seemed a threat to our way of life. Then it changed. The feminine, which Goodchild uses as an example of something that is marginalized in our patriarchal culture, appears to have been much more accepted in the past, at which time the striving paternalism which is accepted today was marginalized.

Awareness shifts our perception of anxiety by helping contents move between the id, the unconscious part of the ego, the shadow, the ego and the persona. Jung, according to Ellenberger, believed that “The first step in any psychotherapy should be bringing the patient back to reality and particularly to the awareness of his present problems.” (713)

Jung dealt with the unconscious by using active imagination and an analysis (through awareness) of the emerging symbols. If the unconscious part of the ego is the seat of repression and we share Janet’s view that repression is a “narrowing of the field of consciousness” (Ellenberger 539), then expanding the field of consciousness through awareness is a way of bringing things toward the conscious ego. The shadow “is related to the phenomenon of unawareness, not unconsciousness.” (Ellenberger 707) Order may be the result of repetitively focused awareness.

Because anxiety can occur “as a warning signal against danger from the drives,” (Ellenberger 517) it makes us vulnerable to manipulation. If any of the personae can convince us that the (chaotic) drives are about to overrun us, we will respond with anxiety and the process described above by Powell will follow. This manipulation can occur by drawing our attention to the chaotic, anxiety provoking aspects of a situation so we can’t see the forest for the trees.

For example, a light seems simple. However, if you are trying to analyze the way the electrons of one atom on the filament change energy states to emit a photon you will experience chaos.

Psychologically, when you ask me how I feel, I can give you an approximate answer that I feel good. But if I go deeper into my body and my soul, I may realize that my back is a little sore, my feet a bit cold and my feelings a bit hurt from what my lover said last night. Then I may

wonder what it means to “feel.” I could spend all day pondering the question and not get anything done.

Our discussion of chaos started with Van Eenwyck’s observation that a large combination of orderly interactions can look chaotic. We can now add to that the observation that enough scrutiny can make even a simple interaction seem chaotic. Every situation is both chaotic and ordered. Our perception of the location on the chaos-order continuum depends on what we choose to view and the level of scrutiny. Sound bite discourse is a good example of attempts to manipulate us into seeing or ignoring the chaos that exists in every situation.

Van Eenwyck explains that the boundary between entropic and deterministic chaos is shifting because as “...our ability to analyze complex dynamics improves, we discover that what we thought to be entropic chaos is actually deterministic. Perhaps one day we may discover that all chaos is deterministic.” (45)

I believe that all chaos is not deterministic and true entropic chaos exists at both the very small and the very large level. Fortunately, life takes place in the middle, where patterns delude us.

At the very small level, there are two principles which guarantee entropic chaos.

The uncertainty principle tells us it is impossible to know either where something is or how fast it is traveling. If we don’t even know where something is, how can we tell if it fits a pattern?

Although the uncertainty principle allows for approximate measurements, quantum mechanics itself does not allow deterministic predictions, even within the limits of uncertainty. There is no definite if-then, just probabilities. If we excite an electron, it could wind up anywhere in the universe (admittedly with an extremely small likelihood for most locations.) However,

although each interaction is not deterministic, probabilities yield very predictable patterns suggesting quantum mechanics may be at a boundary between entropic and deterministic chaos.

At the very large level, there are two phenomena which suggest structural entropic chaos.

Although entropic chaos permeates the fabric of the universe through quantum mechanics, apparent determinism starts to dominate at a very, very small scale. However, black holes can be thought of massive concentrations of entropic chaos unmediated by determinism. All matter appears to be ripped apart down to the subatomic level as it enters, so it loses any order. Things that enter black holes never return, period, to order or anything else. Since we can't see into a black hole, we never see patterns. And we have no idea of the laws of physics inside black holes so there is no way we could ever predict deterministic outcomes.

If computational power is the way to recast entropic chaos to deterministic chaos, what happens as we create more and more complex computer systems to tackle the more entropic mechanical systems? Won't that computer system itself along with the hardware schematics, software flowcharts and design of the integrated chips composing it become so complex and difficult for us to understand that it would qualify as chaotic? We may find that the complexity of a system needed to analyze a complex system brings the complexity of the observer into the picture and we are left with a chaotic form of the uncertainty principle.

These four factors may have applications to depth psychological chaos that support the idea of irreducible entropic chaos in psyche, an agency we call the id.

The uncertainty principle is based on the primacy of light and the indivisibility of a certain fundamental unit of energy, Planck's constant. This implies there will always be chaos as

long as light is our path to knowledge. In a psychological sense, light is illumination and understanding. So perhaps an approach to psyche that relies on understanding can never get rid of entropic chaos. Goodchild suggests an alternate approach, when she tells us “we are a mystery to be revealed, not only something to be known.” (87)

The quantum mechanical model of an unpredictable essence yielding reliable patterns is reminiscent of dreams which integrate a latent and manifest content. The archetype could be similar to the electron cloud, manifesting in the wave aspect of the wave-particle duality. It is everywhere and nowhere. As it constellates in the latent dream, it goes through a process similar to the energy state transformations of the electron. These constellations form images, which is a process similar to the electron giving off photons of light. The probabilistic nature of the process yield patterns, which take on form in an analogy to the particle aspect of the wave-particle duality. These appear as the manifest dreams.

Are there black holes in the psyche that surround us with entropic chaos? Perhaps this is what Jung was describing when he spoke of being “...submerged by the unconscious as happens with schizophrenics.” (Ellenberger 699)

Is there a built in limit to how much sense we can make of ourselves? As we learn more about ourselves, don't we become more complex? As more complex beings reflecting on our own complexity, can we hope to find anything but chaos?

Goodchild's view of the relationship between chaos and marginalization in our culture suggests we prefer order. However, she feels we are missing valuable opportunities in our flight from chaos. She is not agreeing that manageable complexity should be our standard and just proposing that our problem is seeing chaos when we could see order. She disputes the very paradigm of management and advocates that we embrace chaos for its own self.

“Chaos can never be civilized without losing its essential nature, yet it conceals a hidden purpose. To mine its treasures, we have to visit its dark mysterious waters, descend to its realm to glean the wisdom that lies waiting for us there, ready to birth new levels of our being.”

(Goodchild 56)

She feels that in our culture of order, the “most profoundly oppressed is Eros...”(Goodchild 115) who may be “...the god who is behind the individuation process...”(Goodchild 8)

What else but Eros could come out of chaos? Eros is the impulse to make connections, to come together. Chaos is the absence of that impulse so any such tendency must be expelled. As the ground of Eros, chaos is necessary for his constant renewal and vitality.

Our fear of true chaos and the resulting emaciation of Eros have reduced our ability to love. For not only is love erotic, it is also chaotic because it “takes us out of our mind with its neatly ordered arrangements, and our carefully constructed world comes completely unraveled” (Goodchild 63)

The feminine, with its dark, juicy, non-linear chthonic aspects is more chaotic than the male and Goodchild suggests an alternative to the patriarchal order. She calls this a clitoral consciousness, “a joyous, juicy way that re-members ourselves as chaotic, holistic, connected, irrational, responsible, body affirming; it celebrates beauty, creativity, and an earthy sacred sexuality.” (32)

This paper has used ideas about mechanical chaos to explore psychological chaos. It suggested a theoretical framework for imagining chaos in psyche, and then discussed how various situations are processed into this system. It also demonstrated the existential existence of entropic chaos and showed why that is something to be embraced instead of feared.

WORKS CITED

Ellenberger, Henri. *The Discovery of the Unconscious*. New York: Basic Books, 1970

Goodchild, Veronica. *Eros and Chaos: The Sacred Mysteries and Dark Shadows of Love*. Diss. Pacifica Graduate Institute, 1998

Manson, William. *Riddles of Eros*. New York: U P of America, 1994.

Van Eenwyk, John. *Archetypes and Strange Attractors*. Toronto: Inner City Books, 1997