ABSTRACT
                In open information systems, such as in the case of
human interchange with the self and the environment, input quantities
have no upper limits. The human information utilization system,
however, is psychologically and behaviorally unable to accept ever
increasing loads of information. Because of this apparent fact, human
information systems should periodically cycle into a closed mode to
prevent the possible psychoses of information overload and future
shock. (CH)

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OPENING AND CLOSING IN OPEN SYSTEMS

The artist who says, "I don't look at shows when I'm working," states a view held by many, that too much exposure to the work of others will stifle one's creativity. They retire to remote places to do their work. Writers show a similar need for seclusion for the sake of creativity. Likewise, every Ph.D. thesis-writer knows the predicament of collecting more data than one can use, with the chance of being swamped by facts or forging them into conclusions that relate to no theory, so adding to cluter for somebody else.

Such things challenge the conventional belief that openness is always better than closedness, that the more information the better—perhaps that one cannot get too much of a good thing. Since Aristotle, it has been accepted that "the mind desires to know." And since the eighteenth century, liberal theorists have held that an open mind is better than a closed one (Rokeach, 1960); likewise for society (Popper, 1952). In scientists, especially, closure to information—even too views like those of Doctor Velikovsky—is censured. Some sociologists go so far as to hold (contrary to those who view Future Shock with alarm) that there is hardly any limit to the amount of openness and change which society can adapt to (Bennis and Slater, 1968).

What is challenging the conventional view that openness is always better than closedness? First, there are substantial considerations about information-overload (Miller, 1960; *1971* Deutsch, 1961; Toffler, 1970; Klapp, 1972). Systems theory has reemphasized homeostasis in all living systems, as a balance between intake and outgo. There is new appreciation of the positive value of redundancy, not merely something to be cut out as quickly as possible. Optimization is of prime concern in systems theory. Psychologists, *like* Charles Crawford, of Simon Fraser University, are studying the thesis that too much knowledge smothers creativity. On the same score, a neglected educational wisdom whispers, assimilate to create, don't just swallow to regurgitate.

From this point of view, too much input is a threat because creativity is essentially an outflow from within, not an inflow from without. It is an inner change in configuration, not a recombination of pieces poured in from outside—almost, like a hand dealt in cards (or in a rather mechanical notion of cultural cross-fertilization). Creativity is a surge of vitality reshaping the world outside, seeking what is needed to complete a pattern. But, because of this, it is a closure to what is not needed for the jigsaw puzzle, too many pieces of which might hide forever the finding of the fit. Once a pattern is perceived, 90% of information becomes irrelevant, search ends.

Violating such needs perhaps today, we see an open

modern society which is subject to two paradoxes of deprivation
in the midst of freedom of information and plenty of goods.
One is a sense of restriction, a feeling of something missing,
reflected in cultic and occultic movements such as witchcraft,
white and black; astrology; flying saucers; extra sensory
perception; bio-feedback; and meditation movements of many
kinds, based often on religions from the East (Klapp, 1969;
Roszak, 1972))
Braden, 1970. Such seekers show a sense of something missing
from an overly technological, bureaucratic, matter-of-fact,
secularized, sensate, denotative, positivistic, banal or one-
dimensional culture (theories vary); but many could agree that
there is a restriction of some kind in the abundance that the
open society has made—a box, one might say—with mystery,
meaning and
wonder, cosmic consciousness lying beyond, as the
seers tell us. Progress, not an Inquisition, has produced
this box.

The second paradoxical deprivation of an open, plural-
istic society has produced what might be called a spasm of
closing among ethnic, religious and other groups. Archie
Bunkerism is on the rise, whose enormous popularity is by no
means clearly due to the message: the bigot put down. It is
an era of nativistic revivalism and separatism asserting the
spirit of unmeltably ethnics (Novak, 1972), provoking anti-
foreignism and backlashes of one kind or another. Such back-
lashes as the "seething intolerance" among long hairs, chicanos
and Anglos for each others' syles in Taos, New Mexico (Melville,

1972; 140-43), or the effort to restrict Hutterites in Alberta,
are more than economic in character, an effort to defend
collective identities (Klapp, 1972, Chapter I). Other signs of
closing are nostalgia for the good old days, reemphasis of
nationalism, immigration restriction and the "police dog and
padlock" syndrome in large cities.

In the two kinds of deprivation mentioned above, we
have illustration of the kinds of things giving rise to spasms
of closing, on the one hand, and surges or tides of opening,
outpouring enthusiasm and seeking, as collective responses.
Surges are overflows of social energy, characterized by
catharsis and synergy, as in the hero worship of Lindbergh
after his flight, or the election of Eisenhower as President.
The enthusiasm of a surge maybe in terms of gratitude, welcome,
rejoicing, market optimism, gambling fever, or gold rush.
During such movements, there is a greater willingness to try
fads, open doors, lets oneself go.

Spasms of closing, on the other hand, are more negative
in feelings like anxiety, alienation and hostility. They may
contain with them both the backflow of the spent wave, due to
fatigue and other limiting factors; and defensiveness against
threat, invasion, or dissonance, perhaps from another group's
opening. Closing might also be to a sense of entropy wide-
spread in society, as Medieval people locked themselves up to
escape the plagues. Closing ranks with one's own kind not only
gives defence but reinforcement and intensification of "good

vibes" (needed redundancy) within, as illustrated by the

following statement by a member of an American Zen community:

> I feel there's great harmony here.....we tried to
> find and emphasize that harmony rather than the
> discord. And then we try to help people outside
> the building to experience this harmony. Or to
> make the building a more open place for people to
> come. . . .Those things are really why I'm here.
> Everything revolves around love and what that is,
> I think. It's the thing we never talk about, and I
> don't think it's probably right to talk about it.
> But, isn't it the issue? To get yourself to the
> point where you love whatever you're with, whatever
> you're doing. Constantly you're in a state of
> complete acceptance and you're completely utilizing
> your energy with no trace....It's decidedly harder
> for the children because they're the ones who intro-
> duced the elements that we don't want in the
> building, like noise and rowdiness.....I could
> speak of many transformations which I've gone
> through staying here and sitting the sesshin, but
> I have to see what comes of them when I leave and go
> back to my life outside. I want to continue sitting.
> It's the only time that I get the impression that I
> reverse the flow. Otherwise I have the impression
> of being the prey of something else. It's very hard
> to explain....Here I am trying to learn a life style,
> a way of living that turns life into a constant
> creative thing. I want to open myself to growth,
> instead of living in a way where I'm always having to
> protect myself and fight things off and be afraid.
> I really like the people here. They're trying to be
> careful about themselves and each other and their
> lives. There's a feeling of order and preserving,
> taking good care of things, not being destructive
> and careless and wasteful. (Wind Bell, Publication
> of Zen Center, Fall-Winter 1970-1971.)

Such things illustrate how the cult opposes entropy, by

enclosing its members in a fellowship which provides both

needed redundancy and creative synergy in terms of meaning,

faith, or rebirth (Klapp, 1969).

So we see opening and closing as a natural tide or

rhythm of collectivities, indeed,

throughout the living world.
The sea anemone in a tide pool outstretches and retracts its
green tentacles. The turtle, snail, ~~and clam~~ withdraw into
shells when openness gets to be too much. Hibernation is a
seasonal closure. The Old Testament says:

> to everything there is a season....a time to get
> and a time to lose; a time to keep and a time to
> cast away...a time to keep silence, and a time to
> speak. (Ecclesiastes 3:1-7)

The Sabbath is a traditional closure to worldliness once a
week. The pupil dialates when light is dim and contracts
when there is too much. Youth is a time of risk while old
age is one of saving and stock taking. The child crawls,
reaches, tastes, then curls up to rest. From such things, we
see that what we call aliveness—resilience, adaptability—is
not continual intake, nor any constant policy, but sensitive
alternation of openness and closure. The mind listens
alertly, then turns off to signals. The natural pattern is
alternation; and the more alive a system is, the more alertly
it opens and closes. In such a view, closing is not, as some
suppose, merely a setback to growth and progress, but evidence
that the mechanisms of life are working, that the society has
resiliency. More alarming than swings to closure would be a
deadness of public response. A perpetually open society would
suffer the fate of a perpetually open clam.

Opening and closing, therefore, is part of the game of
life, a transaction with the environment, in which open

systems seek to gain information from variety, to get order
while defeating entropy. At the organismic level $_\wedge$ is *closing*
governed by needs for homeostasis, growth and adaptation. At
the psychological level, it reflects factors such as arousal
and satiation (Berlyne, 1960), consonance-dissonance (Festinger,
1957) and structural features of belief systems (Rokeach, 1960).
At the social level, opening and closing is a response to
transaction of information through communication, with factors
such as noise, information pollution, or sense of threat to a
group playing a large part. When things are going well, there
is no gain, perhaps a loss, of entropy. Should signals
indicate the reverse, the gate slams, if but momentarily.

At the social level, we suppose that a focal point of
opening and closing is feeling about "we" or collective identity,
embodied perhaps in style, "soul", heroes, or group symbols.
We assume that a more knit group is, the more sensitive it is
about its honour, the more resistant to criticism of its
rightness, and defensive against enemies and traitors.

Two major kinds of concern, or need or crisis, *triggering*
the closure we have noted in society today, we suppose are:
threat to (the consonance) of collective identity from excessive
noise generated by "barbarians" and other outsiders; and *attrition*
of collective identity—too little belongingness, as seen
in extreme alienation and anomie. The assumption here is that
normal identity requires both self-identification and collective
identification; and the loss of either, beyond a point, might

provoke closing to extremes represented by schizophrenia or

closing ranks in a small separatist group.

Collective identity is built and maintained by flow of

"we-relevant" information in appropriate nets and channels.

Historical inputs, such as conflicts and the deeds of heros,

nourish collective memory. Ritual recalls and intensifies

the images and feelings of togetherness. Interpersonal inter-

action supports—or denies—it by verbal and nonverbal,

conscious and unwitting signals in daily life. Intrusion of

outsiders and their noise into a group might challenge and

strengthen collective identity; and in other circumstances,

perhaps high mobility, dissolve it. Some hypotheses are offered

elsewhere (Klapp, 1972, Chapter I). For a well developed

collective identity, Some members of the group should perform

functions of the gatekeeper (reading the incoming signa

screening and interpreting them for group benefit); elaborator,

retouching and embellishing the image of "we" (poets, artists,

biographers); custodian of collective memory (arbiter,

archivist, storyteller); decider; and actor (effector, agent)

acting for the group on the environment, whether in real life

or in drama as hero (Klapp, 1964). For strong collective

identity, all members should get sufficient feedback from

participation in such a net. Conversely, anything which

interrupts this flow means attrition, perhaps crisis, to col-

lective identity. It is at such a point, as we have suggested,

when a lot of people feel too much entropy to collective identity, that closing occurs to protect the net, to exclude noise, to intensify signals which affirm common values, and perhaps to define more clearly an enemy.

But sometimes there may be no particular enemy, only *triggering closing* a generalized sense of malaise, of entropic signals coming from one can hardly say where. Entropic communication is a huge subject, including such things as semantic corruption, insincerity and manipulation of information, betrayal of trust, excessive inconsistency of rules and expectations (including the "double bind" of schizophrenia), "bad vibes" (nondiscursive signals) from other people, and various kinds of "bad news." *Entropic* communication within a group might be called "information pollution."

So when one interprets such things as the furor over busing ~~school~~ children (Rubin, 1972), or the rights of "Kith and Kin" versus immigrants, one should do so in terms of such a communication context and broad societal rhythms of opening and closing. "Open" societies may close just as often as "closed" societies, but in different ways and at different points on a range, at one end of which there might be the authoritarian system allergic to small increases of information, and at the other end the ideal liberal society with a progress ideology emphasizing the modern and devaluing the old—hence vulnerable to a crisis from information overload and loss of redundancy. The closing of such a society

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would occur largely by ingrouping (intensified pluralism if
you please), as in such things as increased college fraternity
enrollment or "snob zoning" in suburbs. But one would not
expect it to swing all the way to authoritarianism expect
under extreme conditions of entropy. Rather, the "open"
system oscillates within a range different from that of the
closed system, on a continuum which stretches theoretically
from high solidarity (cohesiveness, morale, espritdecorps,
etc.) at one end and total alienation at the other. As we see
it, opening and closing reflects a balancing of redundancy—with
variety necessary in all living systems.

Indicators are needed to study such pulses of opening
and closing more systematically, derived perhaps from content
of mass media, message-flow (rumors, telegrams, etc.), legisla-
tive issues such as immigration or invasion of privacy, fashions,
measures of prejudice and dogmatism, experiences of door-to-
door solicitors in a neighborhood, perhaps even Baptism of
children with novel and exotic names.

If all societies are subject to opening and closing as
a natural process, some revision may be necessary in current
assumptions about progress and the "free market of information."
Is it possible to get too much of a good thing? No living
system takes an unlimited input of anything. Why, then should
information have a special exemption? Or is it, too, subject
to overloads and entropic effects comparable with overproduction
of goods in economic markets and polluting side-effects of

"growth?" If closing is necessary to an open system, then
perhaps redundancy is an insufficiently appreciated value in
modern society. At any rate, closing needs to be seen in a
more sympathetic light than just the bad end of a continuum
of which open is the good end. And perhaps Archie Bunker
represents more than the ignorance end of a scale of which
the opposite is knowledge.

What this paper essentially suggests is an amend-
ment to the open social system model. A flabbily open
system is no more viable than a rigidly closed one. Only
under some conditions is the "free market of ideas" of
J. S. Mill closely descriptive of a pluralistic society.
A more accurate picture, it seems to me, is continual
oscillation between relative openness and closedness--
resilient adjustment to intakes of information/entropy.
When such oscillations are properly analyzed, we may have
better understanding not only of how open systems work,
but of such things as ethnic revivalism, cultic move-
ments, mass contagions, fads and fashion cycles, which
have meanings yet to be adequately explored.

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