Bateson and evolutionary biology
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I've just been reading the Festschrift for Gregory Bateson (1) and was interested to read that ethology was a major influence on Bateson's research group in the decade starting 1952. In a chapter headed "One thing leads to another" (pp 43-64) John H. Weakland (Department of Psychiatry, Stanford University) says of their approach to schizophrenia: "In getting into this, somehow or other, we were looking at all these things from a natural history, ecological approach. We used this viewpoint partly because both Bateson and I came out of anthropology, and partly because somehow we'd gotten into reading Lorenz and Tinbergen on animal ethology".

    If we accept that family therapy developed out of Bateson's group, then its birth depended on two coincidences. One was that Chester Barnard, then head of the Rockefeller Foundation, had read Bateson's Naven (2) about his work with the Iatmul in New Guinea (in which he starts to wrestle with the ideas of symmetrical and complementary relationships) and so provided funds for what would otherwise have been such a vague project as to be unfundable (its title being "The Significance of the Paradoxes of Abstraction in Communication"); the other was that premises happened to be found for them in the Veterans Administration Hospital in Menlo Park (near Palo Alto) where there was no shortage of schizophrenic patients - otherwise these two anthropologists might never have got involved with psychiatry and the double bind might never have been formulated. They were joined by two psychiatrists, Bill Fry who was just starting out, and Don Jackson, who had been practising in Palo Alto for some time; also by Jay Haley, whose background was in communication theory. Even then they did not limit themselves to the communication of psychiatric patients. Among other things, they studied a ventriloquist and his dummy, and the training of guide dogs, "interested in how the trainers would deliberately give two different and contradictory messages at the same time"; and they watched otters and other animals in the zoo, noting particularly the otter's "play face" which gave a context for the interpretation of the following signals, and gave them an experience of "metacommunication". So their theoretical approach was a mix of anthropology, cybernetics, communication theory and comparative ethology. From these origins they developed the "interactional approach" which emphasised the recursiveness of communication, and substituted the systemic approach for the linear epistemology of classical psychiatric theory and description. Psychopathology was seen as a function of the interaction rather than of the individual (whether "mentalistic" or physiological). From this seed, family therapy developed. And this influence of comparative ethology on the theoretical underpinnings of family therapy may be why the latter seems, of all approaches to psychiatry, the most in tune with our evolutionary perspective.

    The title of the Festschrift is a quotation from Bateson: "(as each year passes) we shall know a little more by dint of rigor and imagination, the two great contraries of mental process, either of which by itself is lethal. Rigor alone is paralytic death, but imagination alone is insanity".

    Here is another quote, from a chapter entitled "Forming warm ideas" (pp 65-81) by Arthur P. Bochner: "The only common denominator among imaginative theorists seems to be artful dodging". (!)

    Bochner (then an Associate Professor of Speech at Temple University) extracted from Bateson's work what he called:

BATESON'S RULES OF THUMB

1. Study life in its natural setting being careful not to destroy the historical and interactional integrity of the whole setting.

2. Think aesthetically. Visualise, analogise, compare. Look for patterns, configurations, figures in the rug.

3. Live with your data. Be a detective. Mull, contemplate, inspect. Think about, through, and beyond.

4. Don't be controlled by dogmatic formalisms about how to theorise and research. Avoid the dualisms announced and pronounced as maximums (sic) by particularising methodologists and theorists. (They'll fire their shots at you one way or the other anyhow).

5. Be as precise as possible but don't close off possibilities. Look to the ever larger systems and configurations for your explanations. Keep your explanations as close to your data and experience as possible.

6. Aim for catalytic conceptualisations; warm ideas are contagious......by warm ideas I mean ideas that compel us to move closer to our subject matter; ideas from which we can cast new rays of insight, open up new lines of thought, extend our territory into new avenues of enquiry, and amplify our understanding beyond what we knew before.

And Bochner urges:

1. <u>Scientific activity is recursive</u>. To see phenomena a scientist must transform them; having transformed them, he or she is transformed by them.

2. <u>Data cannot tell us what to ask of them, nor what they mean</u>. This suggests that the meaning of data is never beyond challenge, never closed to other meanings, never capable of absolutely falsifying or verifying. What we do to and/or with data is an intellectual activity.

3. <u>Ideas are as important as facts and nowhere is it evident that they are inducible from them (facts)</u>. We need imagination not rules; intuition not technique; warm ideas not cold facts. Particularly in the social sciences where the entire question of measurability of phenomena and lawfulness of behaviour is so troublesome, what we need is inventive people not conformists, fertile thinking not rigid rules to follow.

Finally, a chapter by W.B.Pearce, L.M.Harris and V.E.Cronen (from the Department of Communication Studies, University of Massachusetts) entitled "Communication theory in a new key" (p 149-194) gives a definition of relationship in terms of episodes:
"the development of a close personal relationship may be described as a movement from employing episodes as the context for defining the relationship to the evolution of relationship concept that forms the context for assigning meaning to episodes" (p166). They make a rather incomplete attempt to make a classification of episodes, describing enigmatic episodes, episodes characterised by unwanted, repetitive patterns and episodes of value-expressing ritual. They do not include episodes of agonic interaction in their list, but they do in fact give a case history of a married couple in whom there is a cyclical pattern of "conflict" episodes (about their level of closeness) followed by "confrontation" episodes which feature "self-disclosure, validation and acceptance in which they try to eliminate the conflict episode". They point out that the pattern of interaction is the same as one described by the Bateson group, in which there is a cycle of intrusiveness and withdrawal, punctuated by the intruder as intrusiveness caused by the other's withdrawal, and by the withdrawer as withdrawal caused by the other's intrusiveness. This is a case of a switch into the agonic mode due to conflict over the definition of the relationship on Birtchnell's horizontal axis of closeness/distance, another example of the complex interaction of attachment and agonistic behaviour. The same group describes elsewhere another example of switching from mode to mode, mentioned in my contribution to the <u>World Futures</u> symposium.
    Before leaving the paper by Pearce et al., I should mention their splendid double-bind in which Jan says to Dave, "I want you to make me more assertive". They use a lot of algebra which I find incomprehensible, but the text makes sense without it. They are very concerned with logical levels (one reason for their affinity with the Palo Alto group) and recommend "...the process of tacking back and forth between higher and lower levels of meaning (p 169)". Also they are interested in the interface between interactional description and the description of the mental states of the interactors, which has been a subject of discussion in the Birmingham group: "When two or more persons exchange interactions, the "logic" of the interpersonal system consists of the interface of the logics of each person's intrapersonal system (p 168)". So, here is a group which studies dyadic interaction in long-term relationships, and who have discovered and described the process of switching back and forth between the agonic and hedonic modes.
    The volume also contains an important paper by L.Edna Rogers (at the Department of Communication, Cleveland State University) entitled "Symmetry and complementarity: evolution and evaluation of an idea" (pp 231-252). "In a complementary transaction the interactors' behaviors are fully differential. The relational control definition offered by one interactor is accepted by the other. In a symmetrical transaction one interactor behaves toward the other, as the other behaves toward him. There is a similarity of control definition between the interactors" (p239). There are two types of symmetrical relationship, an agonic one characterised, e.g., by mutual boasting; and a hedonic one in which "an ongoing reciprocity of asymmetrical exchange produces a symmetry of relationship over time" (p 235). Lacking the two modes concept, the interactional researchers clearly have difficulty conceptualising these two types of symmetrical relationship.

Since Palo Alto was such an important fountainhead of ideas both for family therapy and for communications researchers, it might be helpful to clarify just what "Palo Alto" was.   As

far as I can gather, there were three different but related organisations (apart from Stanford University) working in and around Palo Alto:

1. Bateson's research group at Menlo Park, operated from 1952 to 1962, when Bateson left psychiatry and went to study dolphins.

2. The Mental Research Institute, founded by Don Jackson in 1958 , ? still going.

3. The Brief Therapy Centre, a subdivision of the Mental Research Institute, whose work is described in "Tactics of Change" (3).

In a final chapter entitled "The charm of the scout" (pp 357-368) Stephen Toulmin (Professor of Social Thought and Philosophy at the University of Chicago) likens Bateson to an American Frontier Scout, "leaving the safety of the settlement and reappearing unpredictability, bringing a mixture of firsthand reports, rumors and warnings about the wilderness ahead - together with a tantalizing collection of plant specimens, animal skins, and rock samples....". He also likens him to Francis Galton - neither of them got a PhD or held a tenured university post, and so were able to cross disciplinary boundaries without constraint. "...all of his notable contributions to science have sprung from his habit of viewing the mental life and behavior of creatures as functional, adaptive activities that need to be intelligently related to their evolutionary history and habitat."

References

1. Wilder-Mott, C. & Weakland, J.H. (eds) (1981) Rigor and Imagination: Essays from the Legacy of Gregory Bateson. New York: Praeger.

2. Bateson, G. (1937) <u>Naven</u>. Stanford: Stanford University Press.

3. Fisch R, Weakland JH, Segal L. (1982) The tactics of change: doing therapy briefly. San Francisco: Jossey-Bass.

4.
Berger, M.M. (ed) (1978) <u>Beyond the Double Bind: Communication and Family Systems, Theories, and Techniques with Schizophrenics </u>New York: Bruner/Mazel.

Bateson, G. (1972) <u>Steps to an Ecology of Mind</u>. New York: Ballantine Books.