EPISTEMOLOGY OF ALCOHOLISM*

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ABSTRACT

Here I offer the point of view that every way of thinking has its counterpart in a way of acting. Alcohol addiction as an adaptive behavior is the action correlate of a way of thinking. Through ways of thinking and acting knowing is done. The study of how knowing is done is called experimental epistemology. The theory of alcoholism presented here is premised on the experimental epistemology of cybernetics and double bind theory. This essay (1) begins with an examination of some of the premises of alcohol addiction; (2) proceeds with a discussion of the application of double bind theory to alcohol addiction and its correlation; and (3) concludes with a clinical illustration which includes an example of hypnosis and the focus on the patient within the family and other recursive systems.

KEY WORDS: Alcoholism, experimental epistemology, cybernetics, Cartesian dualism, communication, double bind, hypnosis, indirection, utilization

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* This article originally appeared in a different form in the journal *Alcoholism*, XXI:2 (1985), pages 71-86. With some sections omitted, it was included in the author's *Justice, Love and Wisdom. Linking Psychotherapy to Second-Order Cybernetics* (1994). It was reprinted, with omission of a few technical paragraphs as well as with minor revisions and some additional material, in *Hypnos,* XXV:4 (1998), pages 173-188.

BACKGROUND

Descartes opened an epoch by formulating a way of thinking that was to become the premise for future thought (Whitehead, 1985). He separated mind from body. The study of mind was to follow logical and mathematical rules. The body as a machine was to be studied by the laws of physics. Theories and therapies of alcoholism that stem from a Cartesian dualism of mind versus body create a duality that is imposed upon rather than found in living organisms. This dualism has entangled psychotherapy in a physical sciences model of energy and forces that perceives patients as possessed by forces that push them around. In the practice of hypnosis, vestiges of this dualism may still turn up. For example, it shows in the concepts of power, control and suggestion in those cases where these concepts are interpreted as an operator acting upon a subject as if to exert unilateral control over the subject.

As Descartes before him, Norbert Wiener opened an epoch. He did so by coming up with alternatives to the Cartesian epistemology. Wiener and the science of communication or cybernetics combined mechanical, organic and linguistic metaphors. Wiener defined cybernetics as the science that studies communication and control in animals and machines. He distinguished between the fabric, substance or matter that embodies the identity of an individual and the pattern (of communication) that gives an individual her identity (Wiener 1954, pp. 96-102). The fabric of the body (or what the body is made of—its structural components) is secondary to how the structure organizes and what it organizes. The organization is the communication.

Cybernetics conceptualized mind as embodied and body as always "minded" and embodying mind. It asserts that there is no body without mind since mind is conceptualized as the body itself interacting or communicating with itself and its environment. It asserts further that mind is always embodied in an interacting body. Body is conceptualized as an organized system of interaction. (Its organization also is considered self-organization.)

The science of communication brought forth by cybernetics proposed how not to separate mind from its embodiment. It works with the formation and exchange of concepts without respect to their embodiments or to the substance of an embodiment. Investigating actions of communication, and not things, cybernetics does not create objects. By not creating "objects" (as "things"), its challenge for each individual observer is how knowing, or seeing, is

done through acting (von Foerster 1989, p.808).

Cybernetics also proposed a change in logic to include circularity. The major acknowledgment within cybernetics is that circularity may not be excluded from communication, logic and science. Circularity accounts for how communication is possible, and thus how understanding and meaning making are possible. Cybernetics shows that all communication, including communication between living organisms, between living organisms and machines, and between machines, is always circular. From the circularity of communication and organization, it follows that control is not unilateral. It is not one way. Therefore, it is not located, for example, in an individual that appears to control another individual. Rather, the control is in between. For this reason, the observers for cybernetics are never outside looking in on what they are observing. They are themselves included in their observations. Here was a change that in practice overcame the Cartesian dualism of mind and body.

In conventional science, there are *observed* systems. In cybernetics there are "*observing* systems." That means that the observers are part of the system they are observing (von Foerster 1995, p. 128). (Even as observers observe *it*—and *it* turns out to be a system in which they are included?they are observing themselves.) Applied to hypnosis, this suggests that operators, including therapists, are never outside the hypnosis or the therapy. (This assertion counters the claims of hypnotists that they have never been in a trance or in a condition of hypnosis). To put it more graphically, the observers are themselves "observing systems" and they are within (and can never be outside) the system they are observing. (Even that system is also an observing system.)

Observers, so it turns out, are storytellers. They tell others what they have observed. No observer can report an observation except by telling a story about what she observed. Hypnosis and therapy are activities of story telling. Therapists (as professional observers) are accountable (within the science that studies communication) for the stories they tell, the metaphors they use, and how they use words to engender emotions and other activities.

EXPERIMENTAL EPISTEMOLOGY

My use of the concept epistemology is not as it is used in philosophy, which is to ground a philosophical position on the foundation of certainty. As an abstract umbrella term in philosophy, epistemology covers

theories of knowledge (Dancy and Sosa, 1992). I use the term as the founders of cybernetics such as Bateson, von Foerster, McCulloch, and Wiener used it.

How the structure of organisms define the terms for the way they think and act is now subject to experimental study within what was first called experimental epistemology in Warren McCulloch's laboratory at MIT in the 1950s (McCulloch, 1988). McCulloch showed how to investigate epistemology experimentally (Bateson, 1991, p. 216), and how it may become a scientific hypothesis. The most cited study that was done in McCulloch's laboratory, which was published as "What the Frog's Eye Tells the Frog's Brain" (McCulloch, 1988, pp. 230-255), attempted to correlate the activity of the frog's eye with its brain activity. Those investigations became the basis for biological, neurological and physiological work in many other centers. Their implications have been worked out subsequently by one of McCulloch's co-workers, Humberto Maturana in Santiago, Chile, as well as by a former student and colleague of Maturana, Francisco Varela, now in Paris (Maturana and Varela, 1980, 1992; Varela, 1992).

It was Gregory Bateson who worked out implications of the experimental epistemology that cybernetics proposed. Bateson (1972, 1979, 1991, Bateson and Bateson, 1987) saw that cybernetics proposed an epistemology and he spelled out the specifics and requirements of that epistemology. He defined epistemology as the premises for our understanding of systems. It is "the science that studies the process of knowing," This experimental epistemology studies "how knowing is done" (Bateson and Bateson, 1987, pp. 9, 20, 97). Bateson elaborated upon his understanding of that epistemology for science. He described it as the process of knowing. How we think, act and decide is how knowing is done (Bateson, 1979).

The research hypothesis of this epistemology is that science is a language. As such it is not privileged; its explanations are interpretations, not discoveries; scientists create themselves in their image of the material they study under the jurisdiction of science, society and nature (Bateson, 1991, pp. 93-110; also see Rorty, 1989, p. 4). An investigator may not be detached when epistemology becomes an experimental subject. Whatever "I, as an epistemology" study becomes "a normative branch of natural history" (Bateson, 1991, p. 217). Each individual for him is a way of knowing. Thus, he could say, "I am an epistemology."

This epistemology, Bateson reasoned, is a recursive study of recursiveness. As recursive, it always takes its last result as the basis for its next action. Action is a process that produces a product. The product then turns into a new process. This is not the same as repetition or replication since the process–product complementarity always brings forth something different from its predecessors.

In cybernetics, epistemology is linked with communication or dialogical activity (the sharing of concepts), learning, the acquisition and loss of skill, and contingency. This epistemology is disengaged from the concept of certainty. The disengagement holds even if certainty is credited to the observations of an observer, or is achieved through a theory or belief, or is the result of believing in the objectivity of a world out there that we can claim to know through representation. In cybernetics, the world present to my senses is not the world; it is my sensory world constructed by me in social contexts of making sentences where worlds are made and shared. In the words of Cavell, the world's "presentness to us cannot be a function of knowing. The world is to be accepted; as the presentness of other minds is not to be known, but acknowledged" (Cavell, 1976, p. 324).

The following assertions, themselves subject to further investigation, are the result of studies in experimental epistemology: Ways of thinking, acting and deciding that become habitual eventually sink below consciousness. We may expect any habitual way of thinking to impose limitations and reduce flexibility. We may expect those ways of thinking that are most habitual to operate involuntarily and unconsciously. Much of our individual epistemology appears to conceal itself from consciousness. Human organisms are not capable of direct perception. What we "see" is coded and mediated by habitual ways of thinking (including what we think about thinking), our background understanding, and our language.

PREMISES OF ALCOHOL ADDICTION

Alcoholism is conceptualized and treated (1) as a "body or brain" problem with variations here and there, or (2) as a problem of "mind" that challenges therapeutic ingenuity to find the "psychological" cure. (3) Some treatment methods have sought to overcome this dualism with explanations of the psychological aspects of alcoholism running *parallel* to the organic, or through an *interaction* of emotional and organic processes, or through explanations that see the

disorder in some instances as a *physical* disease and in others as *psychological*. Despite the efforts in these three approaches to overcome the Cartesian dualism, its premises are behind them all because they assume a split between the psychological and the organic.

Bateson was the first to use cybernetics to study the premises of alcohol addiction. His essay on alcoholism, "The Cybernetics of 'Self': A Theory of Alcoholism" (Bateson, 1972, pp. 309-337), made a "converse matching" between the way of thinking of the alcoholic when sober and when intoxicated. Included in his cybernetic explanation of alcoholism was the suggestion that the intoxication may be seen as "an appropriate subjective correction" for the way of thinking of sobriety in Western culture (and unaided by the principles of Alcoholics Anonymous). He further suggested that the difference in thinking between the sober and intoxicated alcoholic presents a parallel to two contrasting epistemologies. The way of thinking of the sober alcoholic coincides with the widely accepted epistemology in Western societies. The way of thinking about the larger system of the alcoholic when intoxicated suggests a more correct way of thinking as proposed by cybernetics and double bind theory.

By contrasting the thinking of the alcoholic when sober and the alcoholic when intoxicated, Bateson does not imply that intoxication is ever desirable for the alcoholic. Rather, Bateson is contrasting two different attitudes. The epistemology of sobriety of Western society encourages rivalry and competition whereas the epistemology of the intoxicated alcoholic proposes a more complementary relationship with the larger system in which the alcoholic is embedded. The latter epistemology is more in keeping with the epistemology of cybernetics and Alcoholics Anonymous. The issue here is neither sobriety nor intoxication but contrasting patterns of attitudes in Western society.

Bateson's essay invites consideration by those charged with the delivery of treatment to alcoholics. Many treatment programs are based upon an epistemology similar to that of the alcoholic when sober. Bateson cautioned that not any two alcoholics think in exactly the same way and that alcohol addiction follows different lines in different cultures. Bateson, therefore, does not suggest that his theory will apply to any specific individual addicted to alcohol, or to all cultures. His essay demonstrates the difference between the epistemology of alcoholism and the epistemology proposed by cybernetics.

The two sections that immediately follow summarize Bateson's converse matching of the ways of thinking between the sober and intoxicated alcoholic.

SELF-CONTROL AND PRIDE AS VARIANTS OF CARTESIAN DUALISM

The alcoholic is admonished by others to use self-control. She agrees that she should and could control her drinking. Control implies that she can decide when to have or not to have an uncontrolled overindulgence in alcohol colloquially referred to as a "binge." Nevertheless, she cannot command or plan her next "binge" in advance; it *happens* when she takes a drink. Sobriety is what she can command; then she can disobey the command.

In this way of thinking there is a variant of the Cartesian dualism between "will power" and the remainder of the personality. From this epistemology is derived the principle of alcoholic "pride." Bateson suggests that it is useful to examine this "pride" as if it were a result of a "learning-to-learn" in some context, and to ask what context of learning would include this "pride." The basis for it cannot be "past achievement" as a context for learning. The alcoholic cannot say, "I did it" so the emphasis of the pride is on "I can" which is a repudiation of the proposition "I cannot." As soon as the alcoholic becomes sure of herself, she takes the position "I can stay sober," and then she relaxes her determination. A "binge" is the result. The context for pride now changes from sobriety to the challenge of a risk of a drink.

The alcoholic pride places the alcoholism *outside* the self and she says to herself, "I can resist drinking." When she proves to herself that she can resist and success appears probable, she must challenge the risk of a drink. When she fails, she places the failure outside the limits of the "self." The concept of the "self," and all delimiting arbitrary boundaries, are products of a dualistic epistemology. The alcoholic's concept of "self" is progressively narrowed by the "pride." The pride is tested repeatedly. It can lead to suicide or it can prevent suicide.

This pride requires a real or imaginary "other" and Bateson characterizes this relationship as "symmetrical." In a *symmetrical relationship* the behaviors of Bill and John are regarded as similar and are linked so that if Bill escalates a given behavior it will stimulate more of the same behavior in John. Their relationship is symmetrical, then, in terms of this behavior. Alcoholic pride is contextually structured as

symmetrical which is the typical pattern of drinking behavior in Western culture. Bill and John will match each other drink for drink. Even when Bill is addicted to the alcohol and finds it necessary to become a solitary drinker, he continues the symmetrical response to challenge. Eventually he is involved in a symmetrical conflict with the bottle. He must prove that it cannot kill him. When the alcoholic has to test his "self-control," he does so to prove that "it simply won't work." The negation is expressed in the taking of a drink. Through testing his self-control, he goes back to drinking.

As the alcoholic's discomfort increases, it activates a "positive feedback loop" that leads to runaway. The discomfort of sobriety increases up to some threshold point. In his battle with the bottle, he has an alternative to his discomfort. He can return to the behavior that preceded the discomfort, so he gets drunk. He surrenders to a greater system. With the surrender a shift takes place from his symmetrical behavior with real or imaginary others to a complementary relationship (Bateson, 1958, pp. 193, 286-287).

In a *complementary relationship,* the behaviors of Bill and John are dissimilar but mutually fit together. The behaviors are linked so that if Bill increases his behavior it stimulates more of John's fitting behavior. When the alcoholic relinquishes his symmetrical struggle and surrenders to a bigger system, psychological changes are accompanied by lessening control and warmth toward others.

He repeats these episodes to test that there is still a larger system. Eventually he may "hit bottom." Others may rescue him from his crisis when he hits bottom so he recovers and returns to his symmetrical behavior and alcohol. He may even become addicted to their help. After each such episode of panic, he will hit a more disastrous "bottom." This opens to a possibility for change. Change, however, is not likely to occur in a period between moments of panic.

APPLICATION OF DOUBLE BIND THEORY TO ALCOHOL ADDICTION

The phenomenon of "hitting bottom" may be related to the double bind experience and to the epistemology of double bind theory. The Cartesian duality forms the basis for the alcoholic double bind. On the one side, there is the alcoholic's symmetrical pride and the obsession of his mind that compels him to competition, to rivalry—and to drink. On the other, there is the addictive nature of the body to the alcohol. A third compo-

nent of the bind is that the sequence leads to tragic consequences and yet the alcoholic is addicted. This double bind finds expression in the literature of Alcoholics Anonymous (AA) as "the obsession of the mind that compels us to drink and the allergy of the body that condemns us to go mad or die."

Double bind theory is a contribution to an experimental epistemology. It is not a theory of therapy but a theory of learning contexts. It also is about an experiential component in communicative discontinuities that induce pain.

Double bind theory begins with a distinction between two messages of different logical types that contradict each other. The double bind situation does not differentiate the logical types of the messages. Both messages are taken as equally true. People in such a situation are subject to "oscillate" between equally true but opposite messages, or they are subject to go into some "runaway" behavior, or they can "self-correct." A double bind situation can induce pathology of relationship. People surmount the double bind situation through breaking out of it into creative activity.

Thus, double bind theory describes the contextual structure of relationship. Specifically, it describes how the communication becomes entangled or "knotted." (For examples of knots in communication, see Laing 1970.) A double bind situation includes two or more persons involved in an intense relationship in which there occurs repeated experience of the same double bind sequence rather than one event. For at least one person caught in the situation, two orders of messages are experienced and one message denies the other.

The patterns of communication are such that one set of messages (or "concepts") will enframe and thus contradict another set of messages. Comment may not be made upon the contradictions arising from the differences between these messages. Three recursions of injunctions are included in the sequence of messages. There is a primary negative injunction that says "Don't do so-and-so or I will punish you" or "If you do not do so-and-so, I will punish you." A secondary injunction conflicts with the first at a more abstract recursion. Like the first, it is enforced by punishments or signals that threaten survival. This secondary injunction is commonly communicated by posture, gesture, tone of voice and meaningful action. If it were expressed in words it might say, for example, "Do not see this as punishment." Further, within the context of these messages, there is a tertiary

negative injunction that prohibits escape from the field.

The complete set of ingredients is no longer necessary when one has learned to perceive the universe in double bind patterns. When people are repeatedly placed in the wrong regarding the contextual structure of their relationship, the result is a double bind (Bateson, 1972, pp. 206-208).

Within such situations there is likely to be "suffering." Where this suffering leads to destruction (of body tissue or of the larger ecology), or where it vitiates the communication, it may be described (by one observer to another observer) as pathological. Scattered throughout Bateson's work are ample examples of how double binds engender suffering and wreck havoc.

(For a study of the pain imposed in extreme situations of torture where the subject is not allowed to give voice to the pain see Elaine Scarry, 1985. The relevance of her work to what double bind theory is about is found in two questions she discusses: "How is it that one person can be in the presence of another person in pain and not know it?" And, "How is it that one person can be in the presence of another person in pain and not know it—not know it to the point where he himself inflicts it, and goes on inflicting it?" She also discusses the lack of a language for pain [p. 12]. This helps the torturer attain his goal, which is to make the body "emphatically and crushingly *present* by destroying it," and to make the voice "*absent* by destroying it" [p. 49].)

THERAPEUTIC DOUBLE BIND

The theory demonstrates how a double bind may induce pain and destroy (individuals and other systems). It also shows possible therapeutic effectiveness of a double bind. Where suffering becomes the basis for "learning to learn" (by breaking out of the double bind into new and creative behavior), it may be said (by one observer to another observer) to be pedagogic. Due to the occurrence that the suffering or pain produced by (and within) the latter type of double bind engenders learning, it may even be said (by observers, of course) to be therapeutic.

Bateson also described how a double bind may be therapeutic. (On the therapeutic use of double bind and for examples see the transcript of his workshop in Bateson, 1978, pp. 197-229.) For a double bind to be therapeutic, the parties to the bind have to be willing to stay with both sides of the bind (and to find out where they will go by going there). They must be willing to accept both the personal pain that may be gener-

ated by the positive or therapeutic bind as they remain in their already given double bind situation. The expectation is that they will break out of the bind into a new and creative behavior. (Bateson conceptualized the addiction itself as a double bind situation. The body may become addicted to alcohol. If the alcoholic does not get alcohol, his discomfort increases. If he continues to drink, it can kill him. Bateson also conceptualized the breaking out of that double bind into new and creative behavior as what the therapeutic double bind is about. How the therapy might do that is the focus of the clinical case below.)

The original paper on double bind theory, "Toward a Theory of Schizophrenia" (Bateson, 1972, pp. 201-227), cited an instance of the therapeutic double bind from the work of Frieda Fromm-Reichmann. Examples of double bind contexts drawn from the researchers' observations of Milton H. Erickson's hypnosis procedures also were mentioned. (Discussions of double binds and parallels between therapeutic double binds and double bind theory in Erickson and Rossi, 1980, pp. 412-29, and in Erickson, Rossi and Rossi, 1976, pp. 62-76, are not exactly what double bind is about [as the authors note].)

CYBERNETICS: HYPNOSIS AS COMMUNICATION

Before cybernetics, hypnosis was not described formally as a communicative or dialogical activity. For example, Wynn, writing as late as 1939, was still describing hypnotism as making available to science "the greatest power yet known of influencing human minds and the best, even if limited, way of controlling physiological functions" (Wynn 1976, p. 43). (Note how he used the terms power, control and influence.)

Bateson had collaborated with Milton H. Erickson in the 1930s on various forms of everyday trance that Bateson and Margaret Mead had observed in their anthropological fieldwork. Erickson worked later with members of Bateson's research team, Jay Haley (1973, 1985) and John Weakland. In Erickson's writings, one can observe how his hypnotic procedures came to be shaped by cybernetics. Bateson rigorously defined hypnosis as communicative interaction. During the period of Haley's participation in the Bateson project on communication, he wrote: "We can observe the communicative behavior of a person, but we can only conjecture about his subjective experiences. A rigorous investigation of hypnosis must center on the communicative behavior of hypnotist and trance subject with, at most, careful

conjecture about the internal processes which provoke that behavior" (Haley, 1965, p. 268).

For Bateson patient and therapist are included within the therapeutic process and the hypnotic procedures. The procedures of therapists are constructions that are constitutive of the condition of hypnosis. Therapy, hypnosis and procedures are communicational. As such, they are material for study. All are to be included in the research. Today's reports on this research are about what the investigator was studying yesterday. Tomorrow's practitioners will be doing something quite different because of these reports (Ruesch & Bateson, 1987, pp. 255, 272).

Erickson's collected papers (Erickson, 1980) show how he was participating in the experimental epistemology that cybernetics proposed for Bateson. Erickson did not teach patients new theory or a new language; he responded to the unique communication pattern of each patient. Both his utilization approach and procedures for indirection differ from authoritarian and standardized hypnotic techniques. He defined hypnosis as a science of intercommunication (Erickson, 1980, IV, pp. 66, 70-75). A principle that guided and informed his approach is that the therapist accepts the way each person takes part in communicative activity and uses it in the service of the patient's outcomes. Near the end of his life he could say that he had "treated many conditions, and I always invent a new treatment" for each individual. Therapy "is an individual procedure." His method, following the philosophy of education of the philosopher, John Dewey (1930, p. 270), was to utilize the concepts, beliefs, resources and abilities of the patient (Erickson and Rossi 1979, pp. 53-84). Erickson urged therapists to learn to listen to patients with the idea that therapists cannot understand the individual interpretations and meanings of a patient’s vocabulary. Each patient has individual, idiosyncratic meanings for her words and concepts. No therapist can know a patient’s individual interpretation and meaning. Nor can the therapist expect a patient (or anyone else) to know the therapist’s interpretation and meaning of any concept. It is to be expected that the therapist will attempt to understand a patient’s concepts as the patient understands them. Erickson advised therapists "not to impose a theoretical formula on the patient" (Zeig, 1980, pp. 102-104, 130-131, 158).

In cybernetics, the words and actions of therapists are not simply given as signals, information or messages to patients. Individual words and sentences are not determined as

messages by the sender—even if the speaker is a therapist. The receiver, and not the sender, determines what constitutes a message and what the meaning is of each concept they share in the discourse. The hearing of words and the observations of actions involve individual processes of selectivity and construction. As in all communication, in hypnosis there is no correct or true meaning or final interpretation that may be determined by what a speaker says. Meaning is determined by the receiver of a discourse. Meaning is the result of each individual's interpretation. That interpretation is constructed by the individual both consciously and unconsciously.

The clinical case that follows touches on how the author's therapeutic approach was being shaped by the epistemology of cybernetics and double bind theory. It also demonstrates how that epistemology furthered his understanding of Erickson's procedure of indirection and the Dewey-Erickson utilization approach. In addition, it tells how he combined both the indirection procedure and utilization approach with other procedures to create a context to avert a possible runaway into alcoholism.

CLINICAL CASE

The identified patient, Atticus (a pseudonym), was a manager at mid-life whose behavior had shown a pattern of alcoholism for a few years. He denied any problem with alcohol. He appeared, however, to be approaching a crisis. (His company was contemplating that they might have to replace him because of his diminished effectiveness and the complaints from his team and colleagues about his interactions with them.) Therefore, he was invited to participate in a time-limited outpatient treatment experiment to enhance his personal and interpersonal skills. (To my knowledge alcoholism was not given as one of the reasons for inviting him to work with me.) He accepted the invitation without protest. Upon entering psychotherapy, he expressed doubts about what he might accomplish.

The therapist arranged the private sessions to include the family and work group though he never met with either but had contact with them through the referring psychologist who was consulting with the patient's company. (The psychologist is identified below in the verbalization script as Bill.) The psychotherapy proceeded with the assumption that therapist, patient, family and work group were recursions of communication loops within a thinking-deciding-acting cybernetic system.

The treatment plan that unfolded may be described as a series of ex-

periments that simulated a situation of "hitting bottom," thereby producing a crisis for the patient and the larger social system in which he was acting. The observations that were turned paradoxically were structured first to get symmetrical behavior patterns to escalate to a threshold of discomfort. Second, they were designed to encourage awareness that the social system is greater than any one of its parts. These experiments created contexts in which the patient could explore a complementary relationship to the larger system. Through a change in the interactions between "patient and environment," it was expected that the patient would achieve a relationship of "self-and-environment" to replace his competitive relationship of "self-against-environment." By design, the patient was pushed in the direction of his symmetrical pride. This was done within a context of his family and work group. Arrangements were made to ensure that they would become a safety net in case of any mishaps. My outcome was to bring him to accept himself as a responsible member of a larger communicative system of support and care by developing a complementary relationship to it as a corrective to his symmetrical pride. (The concept of the larger *social* system in which an individual participates—and with which he should not compete—serves as a viable alternative for therapists or patients who do not feel comfortable with using the AA concept, or another religious concept, of God for the system that is greater than the individual.)

Hypnosis was employed to teach the patient relaxation and to experiment with alteration of perceptual processes, habitual modes of thinking and other learnings. This work was done in response to the patient's interests and with his consent and cooperation.

It was observed that a crisis needed to be simulated for Atticus, as it was unlikely that he would "hit bottom" during the therapy. It seemed equally unlikely that any change would occur without panic developing. The goal was that he would create a situation that we could respond to with such ingenuity that it would simulate a crisis of "hitting bottom." The situation that eventually presented itself was around rescheduling a session.

Atticus was engaged in a demanding business and he often attempted to reschedule sessions, even on short notice. The occasion that seemed to present itself fortuitously as a double bind context in which to induce an alcohol-free crisis was his telephone cancellation of a very important and strategically planned

session only a few minutes before it was scheduled to begin. His explanations for his behavior were reasonable, justifiable and acceptable. The cancellation was accepted at one recursion. As it was important to keep him in the relationship, a new date was scheduled. However, at another recursion his explanations were rejected. This recursion included parts of the larger system.

It was reported to his family and work group that Atticus had canceled a therapy session at the last minute. Care was taken to intimate that Atticus must be avoiding something. He had canceled his session on a Monday morning from a distant city airport. Yet, he knew the evening before he would make the trip and not keep his psychotherapy appointment. It seemed reasonable to ask the others to consider if they thought he was avoiding the psychotherapy sessions. The others also were told that there was probably nothing they could do to help him. It was acknowledged that they would probably insist upon helping him and that they should persist even more vigorously in this pattern of behavior. They were urged not to overlook the importance of discussing his behavior with each other, especially when he was not present, but not with him directly. It was noted that they were likely to find new omissions for which they could blame him. (These prescriptions were of cultural behavior patterns that had gone into runaway within his group.) A new behavior was recommended: it was suggested particularly that they should insist that he do all the work that he was supposed to do, that they should tell him that they were not going to do his work for him. However, a proviso was added: any effort on his part to do anything on his own should receive immediate assistance from them. They were told that they should insist that he do things the way they had asked him to do them but with full awareness that he would probably not accept their way of doing things. (On paradoxical prescriptions in the context of family therapy see Palazzoli, Boscolo, Cecchin, Prata, 1978.)

A full-scale crisis developed. Everyone contributed to its escalation. The effect for Atticus was panic. The crisis became a serious situation for him, his family and the group, but without the toxic and tragic elements of the alcoholic crisis of "hitting bottom."

By the time of the onset of the crisis, Atticus had already had experience in hypnosis. At the next session, he was taken through a series of trances. After three hours of preparation for a somnambulistic trance, a verbalization script was used that had

been written specifically for him. (For a discussion of hypnosis in the treatment of alcoholism see Wadden and Penrod, 1981.) This verbalization script is an example of an indirect approach to treat initially an "alcoholic" patient such as Atticus. I submit it with the caution that this work was done in an unusual situation and in the context of a larger social system that was willing to cooperate actively in the patient's treatment. (What I did is not an alternative to residential treatment programs [especially those which incorporate principles of AA] for patients addicted to alcohol. Nor is what I write to be construed as ignoring the need for care following treatment.)

Note that the script for the verbalization printed below was used after at least 20 hours of preparatory work in hypnosis and following a crisis simulation. The verbalization takes into consideration the patient's rejection of any attempt by others to rescue or help him or to get him into a complementary relationship. Among other ideas, it incorporates allusions indirectly to self-confidence and feelings of increased adequacy and sexual potency. (Subsequently he mentioned in passing that his relationship with his wife had improved significantly and that their sexual relationship had never been better.)

Indirection, as developed by Erickson, opens new possibilities for unique and creative utilization by patients of different words, metaphors and phrases of the therapy discourse. It introduces an element of "random" into the therapy. This is preferred to the "direct" approaches that order patients to stop consuming alcohol, or that suggest that "Each time that you even think of drinking, you will develop a horrible disgust and taste for the alcohol by associating it with the most horrible, repugnant smell and taste that you have ever experienced." (A variety of such suggestions are cited by Kroger and Fezler, 1976. These authors also present a complete verbalization for aversion treatment. The epistemology that proposes methods that command patients to "Stop!" or "Control" their drinking by having some rational personality part take over the drinking is very different from—even contrary to—a cybernetic epistemology.)

SCRIPT FOR THE VERBALIZATION

(The script for this verbalization was written in advance specifically for Atticus. Different phrases had been practiced in advance so that embedded statements [printed in italics] could be spoken in ways that would not invite Atticus to process them

either consciously or rationally. The words spoken to him are in bold type. Line breaks and ellipses […] in the script represent short pauses. Parenthetical comments are included for the reader's clarification; they were not part of the verbalization.)

> **You have been told that**
> ***You* could benefit by *work*ing *with the skills* of a skilled therapist.**
> **You *tell me you* "*trust* Bill and his *ideas.*"**
> **You have told him you are *willing to work with a therapist* when he asked you,**
> **"Are you willing to work with a psychotherapist?"**

(Each statement is both report and command, and may be interpreted as both simultaneously. How a statement is interpreted as either report or command depends upon how any given individual interprets the statement both consciously and unconsciously. My assumption is that in hypnosis we are engaged in many dimensions of interpretative or mental activity. I am speaking words to Atticus that he can hear and respond to consciously. Other words are spoken to invite more complex thinking processes than we consciously seem capable of. I am saying things Atticus can respond to consciously and other things that he can respond to [hopefully, without awareness] through gestures or ideomotor signals. [Various ideomotor signals have already been established in previous sessions.] The concluding question gives him an opportunity to respond consciously to what he has already responded to in the previous phrase: "*willing to work with a therapist*..." His multiple, though slightly detectable "Yes" signals both to the indirect statement and to the question indicate to me, as I interpret them, his deep commitment and sincerity.)

(What follows is a statement of what appears to me to have been the case. The symmetrical pattern of his behavior is described in a way he can understand consciously. Other statements and ideas are inserted and interspersed. My hunch is that he might understand unconsciously the latter statements.)

> **Now, of course, you did not *listen to what Bill told you* about what he thinks. If a person shuts things out that people say and... how do *you listen* to others? How do *you hear about* their *problems?***
>
> **How do you *hear* or pick up *their concerns*?**
> **If a person is told how his colleagues *see and experience* him, he can defend himself *and* he can *learn* from the situation** . . .

(Here I am telling him consciously what he did *not* do while I am saying to him unconsciously "*Listen to what Bill told you ... You listen ... You hear about ... problems ... Hear their concerns ... See and experience ... and ... learn ...*"

HOW *CLOSE* YOU ARE *TO A CRISIS* and . . .

(He shows that he is close to a crisis which is the reason that he was invited to participate in the brief therapy. I prefer that he experience the full-blown crisis right now. In the room with the therapist he will not "hit bottom" with alcohol or be relieved of his job or be presented with a divorce. In the session and in his condition of hypnosis he is offered full protection to have the full crisis!)

and how frustrated the people are if you don't *listen to their problems* but *talk* about your problems instead and then they again *wonder,* "Will you miss their concerns?" When a person doesn't *act*, others may get in and *act* for him.

(This is a description of his addiction for help and reassurance from others. When he gets it, he usually rejects it. Again, a conditional "don't" statement has a different kind of statement embedded within it.)

How do you avoid? And how do *you* get a lot of people to do *work* for you?
How do the people who *need your engagement* get it?

(There is a long pause lasting for many minutes. He is given time to work with his own thoughts. The therapist shifts his seating position to indicate a significant content change.)

You have* come for *therapy,
You have *requested* help,
and the history *you have* given of your
***problem* leads me to *believe* strongly that**
***trance* work *will help* you.**

(I am telling him that it is now time for us to do the work he is in therapy with me to do.)

However, on the conscious level a person comes in
and *tells* you *one* story that is believed fully
at the conscious level and in *nonverbal*
language can give you a *story* that is entirely
different . . .

(He has not admitted to me—or to anyone else to my knowledge at the time this work is occurring—that alcohol is a problem for him. Nevertheless, through ideomotor and other

nonverbal responses, he has told a story of his alcohol addiction. It is only fair that the therapist express to him candidly that he is aware of the problems and respects the different levels [or recursions] on which they can be described and discussed. [I borrowed the idea of telling stories at two levels from Erickson.])

Already many people have tried to help you;
others have failed despite their prolonged
efforts . . .

(The subject of failure needs to be out in the open. If the subject is going to be brought up, the therapist should do so. If others have failed, the implication is that the therapist also will. The therapist admits defeat so now the patient is on his own.)

From our experiences together, you have told me with
your behavior that I cannot help you, and
with equal frankness, you have . . . resisted.

(This is no time to be indirect. With the therapist admitting defeat, the only course of action open is that a shift take place in another direction.)

***Already hypnosis* has been *employed* and**
***your* resistance may be**
despite your earnest *desire* and effort *to cooperate*.

(There are many sides to his behavior. Why not use them? While my statement consciously speaks of resistance, my statement unconsciously proposes the opposite. He knows from our work in hypnosis during the 20 hours we have already been together that "*Already hypnosis ... employed ... your... desire... to cooperate*.")

I don't believe *You know what to do.*

(What is denied and negated at one recursion is affirmed at another. The next statement is intended to have the same effect, but now the discussion is getting down to the basic issue of his problem with alcohol.)

I don't . . . *t h i n k* . . .
y o u *w a n t t o s t o p*
a b u s i n g a l c o h o l . . . (?)
I use to tell my students,
"I do not work with people who *have problems with alcohol (?)"*

(Now the issue of alcohol is really out in the open. He signals "Yes" answers to my embedded questions: *[Do] you want to stop abusing alcohol? [Do you] have problems with alcohol?* A long pause follows.)

There were *no alcoholics in* my *family*

and I never as a child *developed a* need to *cure*
alcoholics when I grew up. It was different with
other problems, hysteria, for instance.

(If he wants to be in the family, he knows what he has to do. He also is told that his cure will not cure anyone in the therapist's family. He will develop his cure.)

As a child, I did not *develop that special*
***sensitivity* to problems with alcohol abuse.**
I was never attracted to those alcohol clinics and
treatment centers, and those bums on skid row
never had an attraction for me.
I learned of my disinterest in the treatment
of alcohol when I was in my clinical training.
I had a treatment group made up of a variety of people
from different backgrounds.
Some were really burned-out.
They had been in group therapy with some of the best ¼
Others could not afford therapy;
some thought they would take a chance with a clinical trainee.
Joel was a member of that group. And he came to
every group meeting with the odor of alcohol on his breath.
And he liked to talk.

(Interspersed in my story about my clinical training is another story, which is about the relation between Atticus and others. In the description, I continue to embed commands and questions. Here are direct commands [such as "Stop…!"] within a narrative that makes them seem indirect. My description of my supervisor's advice on the double bind would be different today. I no longer talk about the therapeutic double bind as something a therapist does.)

I had learned to ask people,
"What do you want from this experience?"
"What behavior do you want to change?"
Joel did not want to
***Stop Talking!* Make a contract to change!**
Stop drinking!
So I did not *know what to do* (?)
So I asked my supervisor,
How do you deal with a problem like this?
He said it would be good to put Joel in a bind. From experience he knew Joel *liked to participate in the group and to talk*—even talk about what he would like to do. He suggested that I tell him,

"You are always *welcome* here.
***To* talk and participate you need to *be sober.*"**
And the *plan* was *simple . . .*

(What follows is a plan for breaking up the drinking pattern. The idea is presented to "abstain" for twenty-four hours first and then abstinence can develop in stages, step-by-step. This is not the plan I necessarily expect him to follow. He will make his own plan.)

"Abstain from all use of alcohol!
Before the next session *Abstain* from all use of alcohol *for at least twenty-four hours* to be able to talk and participate. And the session after that for forty-eight hours, and the session after that for seventy-two hours, and after seventy-two hours there is alcohol no more in your body"
Following my supervision session I was
Eager to implement the plan (?)

(This last statement is directed to him as a question.)

with Joel, and to invite him to . . .
***cooperate and respond* positively**

(Said very gently.)

Now Joel was a bit curious about how to
Carry out that plan!
He did not get to talk at that session or the next,
and to the following session, he *comes sober.*
And you could feel . . . see the joy of *coming sober!*
and being able to speak clearly and *spontaneously* afterwards.

Immediate follow up and fourteen-year-later follow up

The immediate follow-up reports from the patient's family and work group indicated that he developed a non-competitive relationship with them. They reported that his listening improved and that he was doing his share of the work. During the several years of following the patient's progress, he did not abuse alcohol. He discussed the subject of alcohol openly with others following the session in which this verbalization script was used. Nevertheless, he and the therapist did not have an open conscious discussion of alcoholism during the thirty hours of his treatment that extended over a period of months. After his therapy, I participated in meetings with his management group. There were no references to alcoholism. Atticus accepted low alcohol beer at dinner. He barely tasted it. He and I locked eyes as he removed the glass from his lips. I perceived our brief eye contact as a

mutual confirmation of our agreements. (I usually recommend that therapists have open discussions with their patients, especially about their addictions, as open discussion is usually indicated. In my work with Atticus, I felt it was counter-indicated.)

Fourteen years later Atticus was a senior executive in his company with a distinguished career. He is recognized as a trusted leader who takes responsibility for his organization and his relationships. His relationship patterns in his company could be described as a balance of both symmetrical and complementary. Bill, the psychologist, who has had periodic contact with Atticus has seen no signs of abuse of alcohol. (Respect for Atticus' unconscious processes, ethics and good manners preclude any direct or indirect discussion with Atticus or others in his company on this matter.)

DISCUSSION

That alcohol addiction is the behavioral correlate to an epistemology, or way of thinking, suggests that treatment to correct alcohol addiction also is the behavioral correlate to a way of thinking. The epistemology of cybernetics and of double bind theory offers a different way to think and talk about alcoholism and its treatment. Three implications of this epistemology will be discussed.

First, each individual's activities are both communicative and mental. The alcoholic patient's system also shows characteristics of communicative and mental activity. No part of such a system can have unilateral control over the remainder of the system. The mental processes—the unconscious resources—of the alcoholic know what is best. Alcoholic patients have often been paying attention to a rigid, controlled (and conscious) way of thinking. Their solutions to the addiction have become the problem. These solutions are usually the result of conscious purposive thinking. The original AA insistence that the alcoholic "hit bottom" was an attempt to break up a purposive way of thinking that perpetuated the problem of drinking.

Psychotherapy that starts with the patient's pathology employs ways of thinking that alcoholics use when they are sober. Such an epistemology lacks the flexibility to enter the system in a different way. The possibilities for change are already within the system that is larger than the alcoholic patient. Are rigid, conscious, purposive thinking and procedures as likely to cure alcohol addiction as alternative approaches such as AA? Are alcoholics likely to effect a change in their individual epistemology (which could further their treatment of their addiction) if their

treatment follows a rigid regiment arising out of conscious or purposive thinking? These questions call for ongoing research and discussion. Even so, AA came forward with the position that alcoholics have to find a way to let go of their "pride" and the thought that they can control or master the bottle. It follows that the treatment process needs to conceptualize itself as part of that larger system of communication in which alcoholics can participate to change the premises of their thinking—their epistemology—which might have led to the addiction. Behind the pride, the competitive attitudes and the rigid thinking are mental processes that can be activated to establish a context for learning to learn. It is necessary to use each patient's metaphors to get the cooperation of the unconscious processes to create such a context.

Second, each individual addicted to alcohol has the capacity to respond to difference. The larger systems in which alcoholism is embedded also has the capacity to respond to and generate "differences that make a difference" (Bateson). The alcoholic's discomfort activates a positive feedback loop to increase the behavior that preceded the discomfort. To set up a context for learning to learn will push patients in the direction of their symptoms. This is what the therapeutic or positive double bind is about. The double bind confronts the premises of the epistemology that might have led to the drinking in the first place.

The way of thinking of alcoholism comes from a failure to recognize the logical typing of ideas. Not only have treatment programs been built on ways of thinking that parallel the premises that might lead to addiction, it seems that many treatment strategies begin with the patients' pathology. They begin with the alcoholism, and not with the way of thinking, acting and speaking of individual patients. This limits the range of what therapists can do and it reduces the flexibility of the larger system in which the treatment participates. When the therapy begins with the addiction it has to impose something on patients or it has to control their drinking or even punish them or do something to force them to stop drinking. Forcing patients off alcohol may avoid the consequences temporarily of their addiction; it may keep them alive. Solutions that concentrate on the pathology might be applied repeatedly with the assumption that they will work. The fewer the results turned up by the "solutions" the more rigidly they are likely to be applied. Patients (or someone else) can then be blamed for failure.

Third, every individual participates in nets of discourse. Psychotherapy can begin when the severely addicted patient is able to participate in conversations with others. Both the patient and the therapy need to be framed within a larger system of discourse. The challenge of psychotherapy is to respect the integrity of the larger system. Within that system are the resources needed by the patient (and the therapy). These resources are both deep within the individual's mind and between it and the larger mind outside. Within the larger system, individuals can accept what they have been made by the combination of the premises of their thinking, their language of self-description, and the alcohol. From there, they can learn to live with the outcome of "one day at a time without alcohol," change the premises of their thinking as well as the way they think about and describe themselves.

If we as psychotherapists begin to talk about, and to develop, a vocabulary with which to work on the premises of our own thinking, we can learn to think and talk differently about alcoholism and the individual addicted to alcohol. A shift from a Cartesian epistemology to the epistemology proposed by cybernetics can lead to the following:

(1) A shift from the pathology (alcoholism) to the patient, and then learning each patient's unique communication patterns;

(2) A shift from trying to determine etiology to an acceptance and utilization of each patient's behavior within the larger system of communication in which the patient participates, and then framing the therapy within (rather than outside) the larger dialogical system;

(3) A shift from reaction to what is called by therapists the resistance and rigidity of patients to the flexibility of psychotherapists. This shift leads to matching the variety in a patient's behavior with variety in the therapist's behavior (Ashby, 1971). It uses even resistance and rigidity as resources of patients through which they can develop and maintain sobriety.

I have proposed neither a theory of the treatment of alcoholism nor techniques for its cure. I have suggested two kinds of changes for therapists. One is a change of our epistemological premises. The other is a change in how we talk about our ways of thinking and understanding. Even as I advocate a change in our epistemology, I am cautious about what constitutes a change of epistemology. It is not done simply by learning a new theory or new tech-

niques. (Admittedly, we are shaped by learning a theory and applying techniques.) A shift in epistemology is not merely to add new theories and practices to our old habitual ways of thinking; it is not a piecemeal correction of viewpoints. A change of epistemology requires discipline. My experience with shifting epistemology leads me to claim that it is not easy to make our learned habitual ways of acting, conversing and thinking the basis for experimenting with alternative actions, vocabularies and conceptualizations. It may not even be possible if we do not accept the possibility of learning to learn. Second-order learning begins with studying how we learned our present theories and techniques. It implies a change in how we think about our ways of thinking and acting.

What has the way of thinking and behavior designed by AA suggested for the epistemology proposed by cybernetics and double bind theory? Double bind theory defines individuals who maintain sobriety on a daily basis as having changed from their epistemology when sober (which leads to symmetrical interactions) to their epistemology when intoxicated (which leads to complementary interactions). This theory supplies an analogy for a change of epistemology for psychotherapists.

It seems reasonable to propose that as we psychotherapists develop consciousness of any of the premises upon which we have been thinking, we also attempt to find out ways we may have been unconsciously working out the logical implications of our epistemology. Two questions remain with us:

(1) As awareness develops through dialogue of the logical implications of the Cartesian epistemology, is there discipline available to work out the details of this new consciousness?

(2) Is it possible to adapt involuntarily and unconsciously to a new epistemology and through this adaptation become addicted to perceiving, thinking and interacting differently?

My conclusion is on a note of caution about the ongoing commitment and discipline required to effect a change in our personal epistemology—even if a change is desired.

SUMMARY

The thesis considered in this paper is that both addiction to alcohol and its treatment are behavioral correlates to an epistemology or way of thinking and acting. The paper begins with a contrast between the epistemology of Descartes, which separates mind from body, and the epistemology proposed by cybernetics, which surmounts the Cartesian dualism. I re-

view how the concept of epistemology developed in cybernetics and how it became experimental. I move on to give an overview of Bateson's theory of alcoholism. I do so within the framework of cybernetics. His theory framed self-control and pride as variants of Cartesian dualism. He applied double bind theory to alcohol addiction. As further preparation for a clinical case presentation, I discuss communication patterns of the therapeutic double bind. The case demonstrates how my therapy was being shaped by the epistemology of cybernetics and double bind. It also shows how my efforts to shift from a conventional epistemology enabled me, on the one hand, to apply Erickson's procedure of indirection and his utilization approach to create a context to avert a possible runaway into alcoholism for the patient. On the other hand, it furthered my awareness of some of my own dualistic assumptions. The verbalization script that I prepared specifically for the patient is included. It is accompanied by my commentary on what I was proposing through the dialogue of hypnosis. In the discussion that follows, I spell out three implications for hypnosis and therapy of the epistemology of cybernetics and double bind theory. The first is to conceptualize each individual's activities as both mental and communicative. The next is that each individual has the capacity to respond to differences. The third is that every individual is part of a larger system of discourse. I then suggest that we learn to talk differently about alcoholism in therapy by shifting from the pathology to the patient, from etiology to dialogue, and from reaction to flexible interactions.

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