

Interview with Gregory Bateson

by

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This is a tape of Badri Dass interviewing Gregory Bateson at the Mount Madonna Center for the Creative Arts and Sciences, February 27, 1980.

Badri Dass: One thing that I was struck by in preparing for this interview is the number of fields that you have effected: zoology, biology, psychology, anthropology, aesthetics, linguistics...

Gregory: All the same though.

BD: Hm, how's that?

G: (Laughter) The problem is the problem of the nature of order and the processes by which order is generated, destroyed, etc...

BD: Would you classify that as epistemology?

G: I would classify that as the whole subject which I'm interested in. Epistemology being one way into it. Aesthetics being another, etc... Actually, even economics is a way into it, but it's so blazé... But I tell you, people keep saying, "Why do you keep changing your subject, Bateson?" And I say, "No, it's the same subject."

BD: You once said, "Very few people have any idea of what I am talking about."<sup>1</sup> And the impression I get is that you're more of a thinker's thinker and not that accessible to the layman.

G: I think the layman's being taught so much nonsense.

- G: He's almost immune to the things that I say. But I don't think that they're difficult, you know, inherently. The people complain that they're difficult, but I don't think they really are. I think if you get away from some quite nonsensical ideas...
- BD: For instance...
- G: Well, these range from that mind is separate from body to that God is separate from his creation. This is really the same idea blown up bigger. To various sorts of nonsense about quantity - that quantity makes pattern, which we all believe in the West. To distrust of deductive thinking. I've been fooling around with that problem lately, the past few days. Apparently, deduction as part of mathematics, is quite late. The Egyptians apparently had none. All their mathematics is particular and is really arithmetic; the difference between arithmetic and algebra being the difference between "it", this particular number, quantity or whatever, and "any". And the moment you introduce "any" you've moved through arithmetic to algebra, and you have to have a name for the "any" which tends to be X, etc.
- BD: What I've gotten from what I've read of you is that that confusion seems to be a major problem.
- G: That confusion is one of the very important problems, yes.

- Gi: If you understand what the step was from arithmetic to algebra, then I think you're well on the way to finding that Bateson is very straightforward, with no difficulties.
- BD: What would help the layman, who is so brainwashed by the nonsense, to understand?
- G: Oh... Well, I always think that saying things like this is going to help, but I don't know that it does.  
(Laughter)
- What else is going to help? That initial chapter of Mind and Nature,<sup>2</sup> "Every Schoolboy Knows" was a sort of vast effort to try and help and an attempt to drive people into the abstract by giving them two pathways into the concrete. All that double-argument, that's sort of a half-hidden attempt.
- BD: By saying the two pathways or double-argument what do you mean?
- G: What you get by looking at the same thing with two eyes. All that double-structure.
- BD: Double-description.
- G: Double-description, yes... You see, if you have double-description you are carried out of the concreteness of single-description. I'd like to finish for a moment what I was going to say about deduction. It isn't 'til you get deduction, and deduction comes apparently about the Pythagoras period. (Well, if

G: (continued) Pythagoras really had proofs, I think he did.)

And then he came up against the curious fact that the hypotenuse of a right angle triangle is insoluble. You know that?

B: Insoluble? I thought it was...

G: No, no... The square of the hypotenuse is equal to the sum of the square of the other two sides, right?

BD: Yes...

G: Therefore, if the other two sides are respectively, one and one, the hypotenuse is the square root of two. But, the square root of two is not a number and it cannot be a number because it cannot be a ratio between two numbers - a fraction - because it would have to end in either an odd number or an even number.

BD: I think I'm following.

G: (Laughter)

You get to an absurdity.

BD: So, it's just a mathematical concept.

G: It's a mathematical concept and if you want to work it out, you feed it into a computer, make the computer do the process over and over and over again and it goes on until it runs out of ink... It's like pi; we now know there are lots of numbers like that. But, the poor Pythagoreans, who thought that number was the answer, number was pattern, you see... I've been close to being a Pythagorean, I like Pythagoreans. And they

G: (cont.) ran up against this little monster.

BD: So what did they do?

G: They made it the central secret of their cult. And nobody was allowed to be told that the hypotenuse of an isosceles right angle triangle is insoluble.

BD: Did they make it seem like it was soluble?

G: No, no. They made it into a secret. And if you were far enough initiated, you were told this dreadful thing. Now, from the impossibility proof, you see, you get proofs and proofs and proofs, but when you've reached impossibility proofs - the inevitability of inevitabilities so to speak - then you've got a deduction that has become hard. And when deduction is hard then you can have heresy, and all those things can develop. And you don't get heresy as a concept in religion until you've got the Greco-Judaic tradition, which goes back into those roots. And then, you see, you can, from the fact you go inductively in your science from detail to step - but now you've got something, a contradiction at that level and, swoosh, everything falls to pieces - that's what heresy is.

BD: Is heresy necessary?

G: I would say yes, but the modern trend, you see, is away from it. They now don't even teach proofs in elementary mathematics in schools.

BD: Is that, do you think, to circumvent heresy?

G: No, it's to circumvent the accusation of heresy, the concept of heresy - you know, all is already equal it doesn't matter what you believe. And you end up believing in these silly supernaturals; you get a decadence very quickly... You see, Hinduism has no heresy; Buddhism has no heresy. Because they've never made the deductive point.

BD: I see. And you see the deductive path that we're following now is a dangerous one.

G: Well, I think throwing away the deduction that we have followed is dangerous... I have more sympathy for heresy-hunting than I had before.

(Laughter)

BD: What I'd like to do, Gregory, is to trace back certain events of your life and people that have been influential to you and see how they relate to your theories. I want to start with your childhood. You were a part of the upper-class, intellectual tradition of Britain with the Darwins and the Huxleys and the Whiteheads. Regarding your upbringing, David Lipset mentioned something that I'd like to pass by you and hear your comment. He said, "The children were trained to be naturalists, it would seem, in lieu of being allowed to be children."<sup>3</sup>

G: We were trained to be naturalists, I agree. Whether this precludes their being children, that'll be another question. Um...

- BD: I think his intent was that the scientific, rigorous, intellectual upbringing that mainly came down from your father molded you into a scientific way of thinking.
- G: Well, that's on the whole true, no doubt. Then again, we're related to this point I've just been making... (laughter) These things hook together.
- BD: His implication, though, when he says in lieu of being allowed to be children...
- G: There was a loss of some kind. Mmm... and it's hard to say what that loss was. I think he's right that there was a loss. I remember thinking that in passing it.
- BD: What does that loss mean to you?
- G: Well... Mmm... They were not unloving, in a funny way. They were undemonstrative; that's rather different.
- BD: So, you felt their love even though it wasn't demonstrated.
- G: I, on the whole, felt a good deal more. I think Martin, perhaps, my brother, was bucking against that. There wasn't a mixture of love with laughter that would've been nice to have.
- BD: Do you see any correlation of that upbringing with how your mind developed and the ideas which have come to you?
- G: Well, yes.
- BD: How?...

- G: It was strict... And one of the things that was ruled out, you know, was not so much being wrong or something like that, as being silly. Any sort of sentimentality was ruled out. That isn't quite the same as ruling out love.
- BD: Lipset gives the impression that there was not much intimacy. He says that the one time you remembered touching your father was wiping his nose after he died.<sup>4</sup>
- G: Well, that's a little bit overstated.
- BD: It seemed pretty heavy.
- G: There's some truth in it, too.
- BD: Let me ask you something else. When I was reading your early biography, I was wondering what effect the untimely deaths of your older brothers, John and Martin...
- G: Well, that's what tightened the whole thing up in the end.
- BD: John died in World War I and Martin committed suicide a few years later.
- G: They tightened up the conformity to whatever the core of Batesonism was.
- BD: I don't understand. Can you help me?
- G: (Laughter) No, man... Well, it was anti-political, it was anti-sentimental, it was anti-silly... it was anti-the whole of art from an intruding French Impressionism onwards... it's really crystallized in a

G: (cont.) funny sort of way.

BD: You said that your brothers just tightened that up?

G: Yes, it meant that, you see, in a sense his suicide was a terrible condemnation of whatever it was my father and mother stood for. And they knew it and it was. I don't think there's any doubt that it was correctly read on both sides. Whether Martin correctly read what they stood for, that'd be another question. Now that meant that for me to come out on the same condemnation was going to be at least very unkind.

BD: Did you contemplate that?

G: Well, I switched, you see, from zoology to anthropology - that was a piece of it; and that rather rocked the boat quite a bit. But it allowed me also, you see, to escape. My father died soon after I switched into anthropology, actually. And then a year later I went out to New Guinea and I was able to get out of a lot of that nonsense. Anyway, the trap... I think it becomes a trap when your epistemology, ethic, value structure, whatever you want to call it, gets too much hooked up into problems of not hurting people; and that, I think, was serious for my childhood, my sort of studenthood. Martin killed himself in '22. I went up to Cambridge in the fall of '22, so it hung over my Cambridge studenthood years, really. And in '27 I went out to New Guinea. It was all in that '22-'27 period, but that was a very important period

G: (cont.) in everybody's life.

BD: What was happening for you during that time?

G: Well, I was growing out of zoology. And it took me, you see, another ten years nearly to grow back into it - to be able to accept it as my own, instead of as theirs. And that's from breaking with zoology in '22 to the writing of Naven<sup>5</sup> in '36. Naven is the return to the problem of quote, "genetics" in a very wide sense, the processes of the formation of order. This is where we go back to the same problem, you see, (Laughter). But then it returned as mine, not as his, my father's.

BD: Was your fieldwork in New Guinea and Bali and the Dutch Indies instrumental?

G: Oh, that was enormously instrumental. Not the Dutch Indies so much; it was done by the time I was in the Dutch Indies.

BD: And that was the time that you met Margaret Mead?

G: Yes...

BD: Would you describe your relationship with Margaret Mead and her effect on your work?

G: Oh, Lord... (laughter) Must I dissect myself? Yes, you must, Gregory, go ahead...

BD: I don't mean so much the personal aspects of your relationship but just maybe how she effected your ideas... which I know is very personal...

- G: Yeah, you see I don't draw that line much... (laughter).
- BD: I'll try not to be a snoop but, at the same time,  
I want to understand you better.
- G: I'm sorry, but I just don't draw that line much...  
which makes it difficult sometimes...
- BD: Shall I go on or...?
- G: Yeah, yeah. I mean don't change the subject too often...  
I suppose Margaret was the first person who had a  
belief that I had something to say and whose opinion  
I could respect.
- BD: That sounds really valuable.
- G: It was very, very valuable, ... because I didn't  
respect my own value very much in those days. I did  
not think I had anything really to say. I had  
dreadfully high standards for about what it was to  
have something to say, and I did not believe I had  
anything according to those standards. And a lot of  
people, you know, gave me all sorts of benefits of  
the doubt. They gave me money to go to New Guinea  
and all this sort of thing. I remember the Biological  
Tea Club of Cambridge - but I didn't respect their  
opinions that I was worthwhile. And Margaret was the  
first person who made that register. I think that's  
true. I've never said that before, but I think that's  
true.

BD: Going on in your life, after World War II you were a part of the Macy Conferences. You said one time that membership in those Conferences was one of the great events in your life, and I'm wondering if you could say a little bit more about what was behind them, and how they affected your thought.

G: I think you probably had that in About Bateson, I'm not sure.

BD: Let me read you something John Brockman wrote and then you can comment on it. It's a nice quote. "We are just now beginning to recognize the new order resulting from the development of the science of cybernetics. Bateson believes that the cybernetic explanation is the most important fundamental intellectual advance of the last two thousand years. It tears the fabric of our habitual thinking apart. Subject and object fuse. The individual self decreates. It is a world of pattern, of order, of resonances. Bateson is special. He is the only living person fully equipped to construct the bridge between the world of nineteenth century science and the cybernetic world of today. He has lived on both sides of the bridge. On one side, the solid world embodied by his father, William Bateson; on the other side, the undone world of Gregory Bateson. A world of language...

G: The what world did they give Bateson?

- BD: The undone world of Gregory -
- G: (Laughter) The undone... (more laughter).
- BD: "... a world of language, communication and pattern."<sup>6</sup>
- G: Yeah, and that's an older statement of the solidity of William Bateson's world. I mean I claim that I was ready for cybernetics when it came. Partly because I had done the schizmo-genesis stuff, progressive change stuff. But, William Bateson was awfully ready for it. He was non-mathematical, he had all sorts of things which then he would've never gotten into. But he didn't believe in the flat, Darwinian world. He knew that there was something wrong with natural selection and didn't know what. He was a very unpopular zoologist; he wasn't an orthodox zoologist, by any means. I think Lipset thought he was orthodox. He didn't see W.B. as also a rebel in the same direction.
- BD: It sounds like in that sense you're following in your father's footsteps.
- G: In that sense I am following in my father's footsteps or pushing his footsteps further than he went.  
(Laughter)
- BD: Do you think if he was here or if he could see what you have done in the past years that he would nod approvingly?
- G: I like to think so. Especially with the paper...  
Do you have Steps?<sup>7</sup>

- BD: I don't have Steps here with me, no...
- G: But you have one. Um, there's a paper called "The Reexamination of Bateson's Rule" or "The Return to Bateson's Rule," I forget, which I think would have given him a certain pleasure, in which I both show that he was wrong and correct him and give the next steps to run down. (Laughter)
- BD: That sounds like a great gift.
- G: He'd better enjoy it.
- BD: Okay, so after the Macy Conferences you were invited to be a professor at Harvard in anthropology and...
- G: Mmm... in the same period. The Macy Conferences went on into the time I was out here.
- BD: Oh, I didn't realize that. I thought they were just into the forties.
- G: I came out here to California in '48. So I was in Harvard '47-'48 and I would say the first Macy Conference was '46, I'm not sure.
- BD: Right after the War.
- G: Yeah, and anyhow, yes?
- BD: So, the point I'm trying to get at is that you were a professor of anthropology at Harvard and it's said that you were politely asked to leave because of some comment which you supposedly had made - something about anthropologists ought to be psychoanalyzed, and then you somehow embarked, or made a transition into the field of psychology at that point -

G: What happened?

BD: Yes, what happened?

G: (Laughter) Um... yes, I was at Harvard and I taught a certain graduate student. I was teaching a research seminar in which they were supposed to do a little piece of research and report it to seminar. And could he take my seminar? Well, yes, why not?, he is an anthropological graduate student? Yes. Well, "But my research deals with material culture," he said. He had been out in Arabia somewhere with a fellow named Carleton Coon, a distinguished anthropologist nowadays, and they had studied quirns. Quirns are pieces of stone that you use to grind corn with. So I quizzed him about the Arabs. What had he seen? He had a good eye; he had seen quite a lot, and he wrote a paper on the Arabs, which was a good paper. I gave him an A, I think. Following which, he came to me and said he wanted to ask me something. Okay, let's go have lunch. And we went and had lunch. And about three-quarters of the way through lunch he finally got his courage up and said what he wanted to ask: Did I think that anthropologists ought to be analyzed? This was Harvard, 1947 and I knew that this was setting the stage for a battle. So I held on firmly to my chair and I said, "Well, if he wanted to study family structure, this might be a good idea, then presumably all anthropologists

G:(cont.) should be analyzed. If he wanted to study quirns, I didn't see any point in it." (Laughter) He then ran back to Coon and said anthropologists ought to be analyzed. Coon was chairman of the committee that was going to give me tenure in two days time. And that was that. Coon was also, I may say, in the state of negative-transference at that moment and that was the end of my Harvard appointment. Meanwhile I was sharing an office with Alfred Kroeber. Now Kroeber was already halfway a psychological anthropologist, as indeed was I, you know, and we had enjoyed sharing an office. Kroeber was past sixty-five and UC made him retire. But at the moment he heard I was out of a job he telegraphed California and Jurgen Ruesch picked me up at the Langley-Porter Clinic and I had a job in California within a week of that committee meeting in Harvard.

BD: Were you disappointed when you left Harvard?

G: Not very. They're awfully good students I was having, because it was just after World War II, you know, and we were getting all the veterans. There was a lot that I didn't like, and I realize when I think clearly that if they would have sacked me - if I had said that anthropologists ought to be analyzed, then I didn't belong there anyway. So the divorce was sort of mutual, as good divorces I think usually are. (Laughter)

- BD: So next was your stay at Langley-Porter and then to the Palo Alto Veterans Hospital.
- G: I then had a year and a half, two years, with Langley-Porter; a period when I was partly both because I had to finish my book with Jurgen Ruesch before I left him. And after that, Palo Alto Veterans, and in another, oh, just some years of course, I guess it was three years before we got onto double-bind.
- BD: How did that happen, the famous double-bind theory of schizophrenia?
- G: Oh, that's all published, that's in a book called, Beyond the Double-Bind.
- BD: Were there any personal influences that weren't published that...
- G: Oh, it's published now. What happened? We went to the zoo to do the otters; went to the zoo to see if animals knew that their messages were messages - which boiled down to did they have the use of the information that their messages are messages? Which meant could they lie? Could they correct their messages? Would a dog bark louder if he was barking to a dog far away? No, he barks louder at a dog closer to him... things like that. We got there and ran into the phenomenon of play. And play is, you see, another characteristic of classifying messages. What you do in play is what you also might have done in fight; but if you know it's

G: (cont.) play, it's different from if you think it's fight. So that there is a logical typing of messages of some kind; a hierarchic classification. And if there's a hierarchic classification then there are the possibilities of getting wrong in that classification. And these are the Russellian Paradoxes, etc, etc. At that point I got some money from the Rockefellers - the old man, he was President of the Rockefellers. Do you know a book called The Functions of the Executive, a very good book. Um... he had been President of Western Electrical.

BD: I'm not familiar with the name.

G: It'll come back probably as we talk. Anyhow, I wanted to get some money. I knew that if play is a classificatory term, a classification, that I was onto a very hot thing. I didn't know where it would lead, but it was stuff that nobody had really done or thought about, and it was obvious that you couldn't have behavioral sciences without that sort of an underpinning. And I couldn't think of where to get money from because it wasn't psychiatry, it wasn't anthropology. But I remembered that before we all scattered to World War II, I had been called in by this fellow who was then head of Western Electric for a luncheon. He never disclosed to me at the luncheon why he had wanted me, but he was looking for me to see if I would fit into some job or other

G: (cont.) he had in mind obviously, but he never told me what it was. But, he did tell me that he had a copy of Naven by his bedside and I had registered this fact. And I decided, well if he keeps a copy of Naven by his bedside and he's the head of Western Electric, he probably has something to do with circuit structures and might understand what it's all about. So I wrote to him and I got a cordial letter back saying come by next time you are in New York. So I made it my business to be in New York next week. (laughter) Chester Barnard, that's his name, and he should have credit. He was then seventy-five, I suppose. And I went to see him and he said well I don't know what you're talking about, Mr. Bateson. But how much money do you want? If I knew what you were talking about we wouldn't have to give you the money because you could just write it out for me. And I stupidly said thirty thousand; I might just as well have said sixty. And then I built my little project with Weakland and Haley and so on, this was to run two years.

BD: Is that the Mental Research Institute?

G: No, no, no, no... Mental Research Institute was a parasite that came and sat on our doorstep.

BD: Then what was your project with Weakland?

G: Mine was just the ethnologist office inside Palo Alto

G: (cont.) Veterans Administration.

BD: That was with John Weakland and who else?

G: Hayley and Bill Frye and then out comes Don Jackson to set up an institute to do the same thing on our doorstep... and trying to recruit my project into his. This was the idea of that Mental Research Institute... and once every year or two I would begin to think well, perhaps I should, and then I would sort of go to sleep on it and have a dream about how awful it would be to work under Don Jackson.

BD: You didn't like the man?

G: Yes, I didn't like the man. I mean, you know, charming, responsive, (not responsible really, but responsive), very intelligent, as ambitious as can be, enormously ambitious, insatiable, and deeply underneath second-rate in some way, a quick manipulator, not a philosophic thinker.

BD: Was Virginia Satir connected?

G: She came out and was connected to the Mental Research Institute, yes. And my Palo Alto thing fell to pieces, which I let it do, deliberately.

BD: How come?

G: Well, it ran for ten years; it had been very productive. It was sort of stuck and it was stuck on probably power. Haley is a very power-driven character and he must show that every move I made was

- G: (cont.) power-oriented which is something you can't deny, you know. So when one wants to believe it, he wants to believe it and that's how it is. I also got a little tired of Veterans Administration and tired of the parents of schizophrenics and I got an offer from John Lilly to go and work on porpoises. And I went. I went the day I got a double-step rise from the V.A.
- BD: Before we take our jump and we leave that aspect of your life, because I'm psychologically inclined I want to pursue some other things. I remember once telling you that I was applying to a graduate program in clinical psychology and you sort of winced. And when I pressed you on it, you said, "Well, it may be at best an irrelevant stepping stone." And the sense I've gotten from this is that maybe you don't hold psychology in such great esteem as a discipline as you do other behavioral sciences. I'm wondering if that's true.
- G: Well, it doesn't mean that I hold the others in very high esteem. (Laughter)
- BD: I'm wondering if you have some bias or...
- G: Oh, yes... Um...
- BD: What's wrong with psychologists?
- G: I think what's wrong with psychologists is they think psychology is inside people, which I don't really believe.
- BD: You believe in the relationship...

G: I believe in the relationship. There are parts of psychology that are inside people. The Weber-Fechner Law would seem to be, in a sense, inside people. And this always seemed to me to be the most important discovery that psychologists have yet made, but they now don't teach it anymore. They try to say that it's the two-thirds exponent, or something or other...

BD: What's the law again that you said?

G: Weber and Fechner... There you are, you see, Weber and Fechner were two gentlemen in Heidelberg, Germany in about 1835 to 1840 and Weber made the discovery and Gustaf Fechner saw the importance of it. The discovery was very simple and was that if you are asked to discriminate between two similar things, say two weights, the threshold for discrimination is a ratio, not a subtractive difference. If you want to discriminate two brightnesses, again the criterion is ratio. This twists around and becomes the statement that the effective stimulus, a given stimulus, is proportional to the log of the intensity of the stimulus. Beginning to recall this?

BD: I'm beginning to get lost.

G: You are beginning to get lost?

BD: I don't recall this at all.

G: You don't recall this at all? You went right through psychology and they never told you?

- BD: That's right. And that's what's wrong with it as you see?
- G: Yes, this is what's wrong with it.
- BD: I will look it up though, I'll find out about it.
- G: Yes, do, do, do...
- BD: One thing that I'm curious about is that you are often called one of the father's of family therapy...
- G: Yes, this I don't think is really a very sound statement.
- BD: Although your systems theory talks about order and patterns...
- G: I was a father of the idea that the family's natural history is important to look at and has to do with schizophrenia. Now family therapy, I never succeeded in doing any. I mean I don't think any family I ever worked on felt any better or was any better for my work, or that I ever said anything about what one should do to such a family. All I really ever got as far as saying was that you should study the damn things.
- BD: So your seeing of schizophrenics and parents of schizophrenics was mainly from an observational point of view?
- G: It was mainly, as far as I'm concerned, from an observational point of view. I am not really a therapist.

BD: What do you think of psychotherapy?

G: I'm awfully glad to be out of it...

(Laughter)

It's a murky business. Yes, I was going to say that I had, you know, an MRI career award for seven years; first for two years or a year and a half or something and then I changed my employer and therefore I had to have it renewed and then they renewed the whole thing for five years... So, in sum, I had it for seven years and it was time to apply for a renewal. And I got a letter which is somewhere in my files I hope, from the what do you call it, NIMH, National Institute of Mental Health, to say that they observed that my research was neither quantitative, nor experimental, nor clinical. They thought that if I wanted a renewal I should be one or two of these things. (Laughter) To which I replied that I thought that the disastrous state of behavioral sciences was due to people trying to make them quantitative, experimental or clinical, and that the sooner we escaped from that the sooner we might get some firm theoretical bases; and perhaps in fifty years we'd be willing to be experimental, clinical or quantitative. But, for the moment, I thought all that was nonsense.

BD: You live right now in the house that Fritz Perls used to live in. Did you ever meet him?

- G: Never did, no. Saw him across the Esalen Lodge I'm sure a couple of times, but never talked to him.
- BD: You mention sometimes Gestalt psychology in terms of some of your theories of...
- G: Who, me?
- BD: I believe so.
- G: No, when I mention Gestalt psychology I mean Gestalt psychology. I don't mean Gestalt therapy. I have never mentioned Gestalt therapy.
- BD: I understand that. But Gestalt psychology...
- G: Ah, that was very important. Gestalt psychology is the best thing psychology ever had, probably... The whole, oh, you know the business - all these double-image things, the notion of the figure/ground. Yes, that all seems to be very important. It tended to be visual and musical but... I mean nobody really did use the Gestalt psychology for dependency - what sort of a gestalt, what sort of a pattern - sequence between two persons is referred to when one talks about dependency. You see, that's all really Gestalt psychology too in terms of time sequence. That's where I've done half my work. All that deutero-learning stuff. That's all there. And that's very close in a sense to Gestalt psychology. But you see it's out there. The moment you let it get into an explanatory principle that you cannot see when you dissect the body, you're in trouble.

- BD: Do you see that there's any use for a clinical practice of what we call sometimes "talk-therapies?"
- G: What therapy?
- BD: Talk-therapies.
- G: Oh, very elegant.
- BD: Do they do any good do you suppose?
- G: I don't know, I don't know. (Laughter) Um... well, no doubt, I mean when I was working with schizophrenia, there were obviously some people who had a skill in their elbows or their assholes, or somewhere, (I don't know where they kept it), in dealing with schizophrenic people and getting results, getting remissions. Frieda Fromm-Reichmann was such a person. Joe Wheelright I believe to be a therapeutic person. He's into what he does. I don't think Frieda ever knew what she did. John Rosen for a period was such a person. Milton Erickson, I think, has probably helped hundreds of people. And he's the only one who does halfway know what he does do.
- BD: Do you see it as a non-scientific kind of art?
- G: Well, at this moment it's an art, yes. But it's subject to scientific analysis obviously; why not, any art is.
- BD: Do you think it can ever hold up to scientific scrutiny?
- G: Why not?
- BD: It would seem that it would have to be shown to work consistently.

- G: No. It has to be shown to work sometimes. Why be quantitative about it?
- BD: Okay, I've fallen into the trap. (Laughter)
- G: (Laughter) If it worked once, it's open to scientific scrutiny.
- BD: One last thing before we go on to the John Lilly stage. Rollo May has compared you to Harry Stack Sullivan in the sense that you both deal with personality theory more in terms of the relationship rather than being inside the individual, and has likened you in your sense of humor and command of language. I'm wondering if you agree with this comparison.
- G: Yeah, I would agree with that. Of the various people that I respect overall in psychiatry, Harry Stack would be one of the top ones. I had two conversations with him.
- X Beginning of Side Two
- G: There was a meeting in New York City at which Harry Stack, we all spoke about - (what was it all about? I can't remember now). Anyway, Harry Stack spoke and was as drunk as a lord. He stopped in the middle of his speech, reached into his hip pocket and pulled out a flask, had a good swig of whiskey and went on from the podium, which reminds me a bit of Trungpa Rinpoche. (Laughter)
- BD: Sounds like something he used to do.

- G: And after the end of his speech and at the end of mine we both sort of slipped out of the crowd, and there was nowhere to go except to sit on the stairs. And he, very drunk, and I sat on the stairs and compared notes about what's happened to people shouldn't happen to dogs, which I think is the beginning of psychotherapy... I liked him... Irish, crazy, schizophrenic poet.
- BD: (Laughter).... Going on in your life, when you started doing research with porpoises, were you affiliated directly with John Lilly?
- G: I was his manager in the Virgin Islands for fifteen months, yes.
- BD: Manager of his research project?
- G: Of his lab. He built a lab in the Virgin Islands - not a very good lab for purposes of observing porpoises, because you really couldn't see much under water. While I was there I built a decent underwater porthole by which you could look in. Bless his heart.
- BD: Did you like John Lilly?
- G: In those days I liked him, yes. Lois<sup>9</sup> disliked him intensely. She now likes him and I'm a little lukewarm. But his courage, you know, you've got to give it to him for his courage.
- BD: Did you ever participate in any of his psychedelic research?

- G: Oh, I've been in his tanks a couple of times and I'd write up my experiences and they'd go into his big books.
- BD: Have you ever taken any psychedelic drugs?
- G: Never with John. But I have, what three times now, had small LSD trips.
- BD: What were they like?
- G: My God, (laughter) ... Two of them were interesting, the third was not. The first one I arrived on a Friday afternoon at the house of Harold Abramson, Long Island, I was lecturing out there for something or other... and he was doing research on psychedelics; partly giving psychedelics to freshwater snails. And he had a sort of panel, mainly people from Brookhaven Labs, who came to supper on Friday night every week at his house... I don't know, there were twelve, fifteen of them... and they were being given something to drink and a piece of paper on which to record their impressions throughout the evening. And they had become, in a year or more, quite expert in judging whatever dosage that they had had, or had they had a placebo, and which drug was which, and differences between LSD and Mescaline - Actually a very interesting and valuable psychological tool... pharmacological tool. So I said I wanted some, too. And he, indeed, gave me a drink. He didn't tell me what he had given me;

G: (cont.) and a piece of paper. Now, it so happens that the others had been given an antidote during the week and a dose of LSD that night which was not registering with them at all because of the antidote. He had, in fact, given me, I think, 35 gamma, which is about equivalent to one cocktail-a rather mild dose. And this was a half-social occasion-rigged that way. And I was sitting next to one of these people who was a Brookhaven employee or something, and he said, "How do you feel?" and I said, "Fine, I think I could give a lecture if I had to." And he said, "Oh, could you? What are you doing out in California?" - giving me the opening to give a lecture. I said, "Well, we were working on the nature of metaphor and meta-communication. And then I wanted to sort of short-circuit and move fast ( and if he was in Brookhaven labs he probably was into some sort of cybernetic thing or could be), so I asked him what his job was. And he said oh, he was a something, something... communications engineer. And I said well, that's fine - meaning now we can go fast.

BD: Did you go fast?

G: No, because I heard myself telling him that it was fine that he was doing what he was doing. This seemed to me to be a monstrous piece of patronage, patronizing, and I then set to work to unpatronize him. You can't do that. (Laughter)

BD: Was he upset?

G: No, he was amused. And I never did give a lecture... But this was sort of interesting because, you see, what I did was to double-bind myself. I took a second take, a second view of what I had done. What I had done was perfectly right in context, but I then saw it as part of a different context - reduced myself to a double-bind position.

BD: Do you see any of that as a function of the psychedelic drug?

G: I think this was a function of the psychedelic drug, yes. Well then that night... I spent that afternoon in the Museum of Modern Art where they had a big exhibit of Picasso; they must have had three or four hundred of small Picasso's and drawings there. And then I went onto Harold Abramson's in Long Island for supper and all that. When I finally went to bed I dreamt. And these very grotesque, savage sort of Picasso's - some sort of crab-like, bronze figures biting each other, you know - turned out in my dream to be very benign... they were all set in beautiful green meadows, sort of wrestling happily... and I think that's correct, actually... I don't think there's any headache in one hundred Picasso's... That's one psychedelic experience.

The second one was with a man named Joe Adams, a

- G: (cont.)       psychologist. And this was at his house and just as I was getting a bit of an effect, he gave me, I think, 100 gamma, which is already a dose loaded with good stuff in those days...
- BD:               When was this about? In the 1960s?
- G:                '59... somewhere around there... I was just going under, or getting the effect, and I explained to him that what I wanted to do with this was to get ideas about the aesthetic organization of the universe; and he said, "Well now hold it while I get the machine." He then went off to get his tape recorder, and when he got his tape recorder he said, "Well, now will you tell me what you were going to say?" That was a big mistake. And he should have known better. So, we had a bit of a battle on our hands for the rest of the day. And he would keep telling me, "Gregory, relax, relax. Stop thinking." And I would say, "But Joe, you know my job is thinking. I'm here to think this morning." And then he went off and got a rosebud from the garden. He came in with drops of what was supposed to be dew. I think he put it under the faucet - you can't trust psychologists. (Laughter) Anyway, he said, "Take a look at that. Stop thinking. Take a look at that." So I held it and I looked at it; and yes, it was a very pretty rosebud. So equating evolution with thought, I said, "Gee, Joe, think of all

G: (cont.) the thought that went into that." He didn't like that. And then lunchtime came and we listened to music - lots of Bach and Handel. And getting sort of visual, geometric things along with the Bach, and we sort of broke for lunch. I said, "You know, Joe, all this sort of stuff, it's like, it's so trivial - pretty, but it's trivial." And he rose like a big fish to that and said, "What do you mean, trivial?" And I said, "Well, it's like fractures of water or rock... all you really see is the plainness of fracture. You know, Joe, Prospero was wrong when he said, 'We are such stuff as dreams are made of.' What he should have said was that dreams are bits and pieces of the stuff of which we are made. What that stuff is, Joe, that's another explanation." (Laughter)

BD: You enjoyed it?

G: I enjoyed it, yeah... Those hostile bastards, I like putting people in their place.

BD: About your work with porpoises, you described it as fascinating, but thought them to be terribly difficult animals to study. I'm wondering if there was any significant contribution from this work.

G: Oh yes. We got, I think, two things. One, I got what to look for if and when we start to observe them in the field. And that is, the pattern in which they swim when resting - when, you know, half-awake. Because

G: (cont.) the protocol, the peck order, is the pattern in which they go into when they are resting. Now when they are hunting or playing it all gets broken up and you don't really know in any sociological sense who's who. But if you know them from their resting patterns and then see them playing, you can see the sociology working in their play. I think that's a nice little contribution. And finally, I took a risk and published it. It was something one didn't dare to publish - the observations having been done in tanks, and this sort of thing could be, you know, faked up by the prison situation. But we had a little material from a cliff in Hawaii where we observed them looking down. I could see them in resting formation and, quite evidently, it was this same sort of thing going on. So that wasn't so bad. And the other thing was a little piece of deuterio-learning, as we used to call it - I still call it that; nobody else does. The trainers (this is all published in Steps) had taught a porpoise, Cristino, to... and what's happened is that the trainer is giving a show to the public and the trainer would say to the public, "Look when the porpoise comes on state, (there were some holding tanks behind) I want to show you how we train a porpoise." Says the trainer, "This porpoise already knows that if I blow the whistle, she has done the

G: (cont.) right thing and she will come over and get a fish. And then she'd do it again, so I will watch her until she does something that I can call a piece of behavior. Then I'll blow the whistle, something that I want her to repeat, and you'll see her come and get the fish, and then you will see her repeat it, and that's how we train her." And, indeed, the porpoise knew this game, evidently; had been trained to the whistle and the fish, but knew that when she came on stage she should do something new. Now, you see, this is one step above training her to do a particular thing from a particular stimulus. She has now got to do something different from what she last did for that stimulus - three, perhaps five shows a day, six days a week. And if it were done on the same piece of behavior each time, this would be sort of cheating, yes? And obviously, the porpoise knew. I said, that's very interesting, what was the training process by which the porpoise learned? And we got a new porpoise out of the sea and trained her to the fish and the whistle, and then set up an experimental situation in which she would have ten minute learning sessions, (had to be worked in between the public shows because we needed the tank and so on...) A learning session would run about ten minutes; there will be one or two of these a day, and the rule of the game was that she should never be

G: (cont.) given a fish for what she had already done in a previous session and been rewarded for. She should only be given a fish for doing something called "new." So the porpoise comes on stage and swims around, does something with its head, and the trainer blows the whistle and the porpoise is given a fish. And then the porpoise goes on doing that with its head for the rest of that ten minutes, gets three or four fish. The next session, the porpoise starts immediately doing that with its head - no fish; does it again, no fish; does it again, no fish; wastes three-quarters of that session doing the thing for which it is not being rewarded - then becomes annoyed; does a tail flip to express the annoyance; whistle blows; and you see the fish repeat the tail flip until the end of that session until three-quarters of the next session. And this went on for fourteen sessions, in which only at the end of the session would the porpoise discover something new, or the trainer find something new in the porpoise's otherwise random behavior. Between the fourteenth and fifteenth session, the porpoise went absolutely mad in the holding tank, did all sorts of back flips and somersaults and God knows what; came on for the fifteenth session, did twelve absolutely new pieces of behavior, one after the other (eight of which had never been seen before) and had to be trained

- G: (cont.) now to do only one new thing when it came on instead of...
- BD: Sounds like schizophrenia.
- G: Well, I mean this is double-bind, you know. We put the porpoise in a double-bind and it found a way out. And there was, I think, another interesting thing in that story - namely, that the trainer would never obey our instructions. She would insist on throwing unearned fish at the porpoise. And we would say, "Don't". And she would say, "But if I don't, I shall lose the porpoise. That is, I have got to maintain the premise that there is love between me and the porpoise to keep the porpoise working."
- BD: Sounds like her counter-transference.
- G: Well... her counter-transference if you like; but perhaps, true too, you know. (Laughter)  
That's about all I ever got out of porpoises.
- BD: Did you enjoy working with them?
- G: They're nice people, yes. (Laughter)
- BD: Better than psychologists, anyway.
- G: I know worse psychologists... Better than graduate students.
- BD: Your stint as professor at the University of California, Santa Cruz... I'm assuming that you published your Steps sometime around that time as well, is that correct?

G: Steps was put together largely by Mark Engel and my secretary; it was put together before Santa Cruz, the end of my period in Hawaii. The Oceanic Institute, which was the porpoise research outfit, was going bankrupt and they wanted me to get half my salary somewhere else, please. We'd like to keep you, but if you could pick up some money on the side. So I got a job taking thirty students around the world. And the Oceanic Institute had me on half-time and the International Honors School of America, which took students around the world, had me on the other half and the book actually came out when I was going around the world with the students. When I came back, OIE was broke and I moved on to California and got the job at Santa Cruz...

BD: And a few years ago was appointed regent by Governor Brown...

G: I was still teaching Santa Cruz when I was appointed Regent. It overlapped by a year there. I had to have a special easement, or something, from the Regents to be both an employee and a Regent.

BD: And then Mind to Nature, you just completed when you were down at Esalen?

G: Mind and Nature. Well, I had been working on it for two years; then I went off to India with Lois to Sai Baba; came back; was diagnosed with cancer; and

- G: (cont.) following the cancer they gave me a month, so I thought I'd put a little extra sweat in; and young Catherine came in, my daughter from Iran, and we more or less finished the book in that month. I did another chapter after that, down at Esalen, but that was sort of pushed through fast.
- BD: It was important to you to finish the book before you...
- G: It seemed a good idea to do it before I died - I wouldn't do it afterwards, obviously. (Laughter)
- BD: How was your meeting with Satya Sai Baba. What was your impression of him?
- G: I like him... Now, I'm not a joiner... I know that every religious leader is under terrible pressure to produce miracles. The more a religious leader he becomes, the more he has to produce miracles. Our friend here really doesn't produce miracles, I think, and I respect him and like him for it.
- BD: Baba Hari Dass, you're referring to?
- G: Hari Dass, yes. But I'm afraid Sai Baba does produce miracles. I don't like it, frankly.
- BD: I read at the end of Mind and Nature, something about miracles being materialistic.
- G: The materialist's dream of how to escape from materialism. They all have this materialistic aspect to them.
- BD: So I'm assuming that you don't see yourself sitting here

- BD: (cont.) today as a miracle, given that the doctors pretty much gave up on you.
- G: Well, it's a pleasant surprise. (Laughter) I certainly don't think it's a miracle that the doctors cure anybody. (Laughter)
- BD: I know this is a difficult question but with your death seeming imminent, at least according to what you heard, did that affect any of your thoughts that had developed over the period of your lifetime?
- G: It clarifies... It puts a little hurry on things... Um... well, it has the effect, rather like the effect that a little LSD has of brightening up all the colors, you know?
- BD: That sounds clear. I think it's interesting that you say you are not a joiner; you disdain spiritual materialism; and yet just sitting here with you I experience you as a very spiritual person. Your concepts of spirituality seem to deal more with order and aesthetics than the more traditional religious paths...
- G: Yes, well this is true. Yeah... (Sighing)
- BD: I want to read a passage from Mind and Nature and get your comment.

We have lost the core of Christianity. We have lost Shiva, the dancer of Hinduism whose dance at the trivial level is both creation and destruction but in whole is beauty. We have lost Abraxas, the terrible and beautiful god of both day and night and Gnosticism. We have lost totemism, the sense of parallelism between man's organization and that of the animals and plants. We have lost even the Dying God. We are beginning to play with ideas of ecology, and although we immediately trivialize these ideas into commerce or politics, there is at least an impulse still in the human breast to unify and thereby sanctify the total natural world, of which we are.<sup>8</sup>

G: Um, hum... That's a paragraph I'm pleased with. It makes sense.

BD: Is there anything left that you want to do...

G: Before I die again?

BD: Before you die again?

G: (Laughter) Well, I've got a book going, you know.

BD: At the end of Mind and Nature you mention that the new horizon is consciousness, aesthetics and sacredness...

G: Well, it's at present being called Angel's Fear. The quotation being that fools rush in where angels fear to tread, which is pope; in which I think that pope is at least partly justifying the fools, saying it sometimes pays to rush in where angels fear to tread. However, the book starts from the ancient mariner who, you remember, has some trouble with an albatross, and this thing is tied around his neck and the whole voyage is going to hell rapidly; there's no water and the sailors are all dead. And then somewhere in the tropical Pacific he looks out in the moonlight, and

G: (cont.) he sees the seasnakes dancing and he sees the phosphorus falling off of them as they dance in the moonlight. And they're so bloody beautiful that, quote, "I blessed them unaware." And at that point the albatross falls off his neck, he is able to pray and he is able to sleep, and when he wakes it rains and there is water to drink. Now, if he had not blessed them unaware, if he had gone, say, to a local shrink and been advised to go down to the South Seas and look for watersnakes to bless them, it wouldn't have worked. And what sort of an intrusion on a sacred, total mental, spiritual network is it that consciousness occasionally does? What is the formal nature of the Faustian sin? Now this is not an easy book to write, I'm afraid. It consists mainly of little pieces. But anyway... It's as much as I can tell you about it... Let's have lunch.

BD: Let's do. Thank you, Gregory.

Footnotes

1. About Bateson, p. 5.
2. Mind and Nature.
3. About Bateson, p. 26.
4. About Bateson, p. 28.
5. Naven.
6. About Bateson, p. 13.
7. Steps.
8. Mind and Nature, pp. 17-18.
9. Lois Bateson.