## COMMITMENT TO DREAMS

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Professor Parsons, an old friend, stated the situation succinctly when he said that since Mr. Burdick couldn't come you have to put up with an ugly scientist instead. You will have to bear with your disappointment, because, of course, what I will say will be different from what author Burdick would have said. However, I have chosen not to change the topic. I will talk about "Commitment to Dreams," but I will take the scientist's approach, the experimentalist's way. I will talk about the organization of the process of committing oneself to dreams, the structures of this process rather than the experience itself. This structural approach may be apposed to the existential in order to make the method clear.

You heard Dr. Parsons say yesterday that the family is changing and that perhaps it will evolve some new kind of order. My thesis is that it already has changed, that the new order is already here, that we must describe its structure. The problems that you have heard so much about may already be history; they may not really be the problems that beset the family today. When we can describe adequately the structure of the family as it truly exists today, the set of problems, or better, the

ottributes present, may look different from those already discussed. Only when we have done this can we tackle the appropriate set of basic attributes and face them with a commitment to dreams, not just a commitment to therapy.

The old-fashioned family of our immediate past, patriarchy or matriarchy, was organized into what I would like to call a "single-focus hierarchy." Today's family, though different, is not simply a disorganized single-focus hierarchy, as some would have us believe. Rather, its structure could be termed a "multiple-focus hierarchy." A multiple-focus hierarchy is not at all unorganized, nor unstructured. In it temporary dominances appear that govern the organization's interactions; these, in turn, are supervened by some other hierarchical organization.

This new family has evolved from the old and continues to evolve. Its attributes partake of those met in the study of evolution of any biological and therefore of any social organism or organization.

The first of these is to achieve stability. Stabilities in complex and changing systems can be achieved through any mechanism which is composed of two or more processes in reciprocal alternating communication with each other. Such a mechanism goes by the name "homeostat," which is a general form of the familiar thermostat. Biological systems built of many such devices become self-regulating and stable in the face of changes in their environment. I won't go into the details of the operation of homeostats to produce stability; you have to take my word for it that processes are stabilized by such a mechanism, and, of course, you have seen their operation yourself in the thermostatic regulation of temperature.

In addition to stability, two other attributes emerge when biological or social systems evolve: differentiation and change. In today's context, differentiation is the attribute which leads to the formation of dreams, and change is the one which results in commitment.

Let me illustrate with a simple experiment.

(He hits the desk with a hard piece of wood.) Most of you reacted to this sudden sound by measurable physiological and behavioral changes which together are known as the orienting reaction. Some of you started, some of you turned toward the sound. The electrical activity in your brains changed. This is called the alerting reaction. The electrical resistance of your skin took a sharp dip, and there was prob-

ably a slight shift in the distribution of your blood—less in the finger-tips, more to the brain.

(He hits the desk repeatedly.) Less and less do you react. This is called habituation, and for a long time we believed that habituation resulted when our nervous systems, our reactive systems, became less sensitive when repeatedly exposed to the same input—in this case the sound. Eugene Sokolov in Moscow showed this view to be in error through the following experiment: He habituated a person to a sound just in the way I did with you a moment ago; then he decreased the intensity of the sound. Immediately the person again showed the orienting reaction; all the same physiological indexes of orienting, alerting returned. Sokolov reasoned from this that the sensitivity of the nervous system could not be decreased during habituation. He tested his reasoning by experiment: He again habituated his subject and then shortened the duration of the stimulus. Again his subject oriented, but this time the orienting reaction was not to the sound but to the silence.

This fundamental experiment shows that through our experiences with our environment some model of this environment is built up in our brains. Another way of stating this is to say that we continually come to our environment with a model or expectation of what it will be like. This model or expectancy turns out to be very precise, and we alert, orient whenever any slightest deviation from the expected is experienced.

Differentiation takes place in a homeostatic system by virtue of these expectancies. Let me illustrate. Originally thermostats were crude. They helped turn on the furnace in the morning and that was a boon: we didn't have to go down at five o'clock in the morning to stoke the furnace. Just for the thermostat to accomplish that much and not to allow the fire to go out was already a tremendous help. But thermostats improved and one day people began to notice that around dinner time, around dusk, the house became cold and uncomfortable. They would go to their thermostat and see that it was still set at 70 degrees, just as it had been an hour before when the sun was shining and the house was comfortable. But now it was uncomfortable. Even after drafts were eliminated mother shuddered when she sat down to supper and said, "It is chilly in here. I wonder if you left the window open." Of course, there was no draft, no window open. The outside walls of the house

had become cooled and the radiation from the body to the walls accounted for these chilly feelings. As a result of its perfected stability the system had precise "expectations" which allowed for new sensitivities. The solution to this problem was, of course, to add another thermostat on the outside wall and to connect it to the first one to help modulate the regulatory functions of the first thermostat. Instead of a single-focus regulation, a dual-focus control system was now operating.

As our society became still more affluent, people began to demand different temperatures in the bedroom and different temperatures at different times of the day. So, a third thermostat and timing devices were added to the system. It has truly been differentiated into a multifocus control system. When stability was accomplished, precise expectancies could be achieved through habituation, and new sensitivities thus allowed to develop.

Dreams—and I am not talking, of course, about the dreams one has when one is asleep but those one lives when one is awake—are developed in the same way. In the presence of a certain amount of equanimity, habituation to the environment proceeds to build up precise expectancies, dreams of what should or could be. These are fashioned, differentiated from the family or work situation in much the same way as our sensitivities to cold in a thermostatically controlled home. And we devise new ways to cope with these new sensitivities.

Let me give you another example, but this one is more biological. When the human organism first is born, he is very dependent on his environment, especially on his social environment, his mother. At first he considers himself and his mother to be a unitary system. After a while, it becomes evident to him that his mother and he are two separately controlled systems—he can function, in some situations, independently. After this initial differentiation which has so often been described, after the infant has differentiated between his mother and himself, he begins to realize that all the things that his mother usually does, such as feed him, are occasionally not performed by her. Once in a while his father will come in with a glass of milk or a bottle, and a new differentiation is made. Feeding is a system in itself and may be participated in by individuals other than his mother (and even himself), and this system in itself becomes regulated. A system of roles is formed. But the preconditions for role formation are seen to be stability

and the development of precise expectancies—only then can the sensitivities to what we label role be established. Our dreams are akin to the system of roles. The dreamer dreams his role in a projected universe.

And so we come finally to the most difficult part of this mechanism: how the attribute of commitment emerges. Given the fact that differentiation will take place, that people will dream, we now ask, how do they become committed to the dream? How do they change the stable order so that they actually do something about what hitherto had been only seen at first dimly and then clearly-differentiated out as walls becoming cold at dusk, as fathers feeding in lieu of mothers. What seems to happen is that the inputs which hitherto had been providing information to the system in its search for what was making it sensitive suddenly-and this usually takes place dramatically-become organized not only as expectations but into the antecedents of action. The organism apparently reverses "the tape recording" and plays through all that he has been building up but, in a sense, backwardand I mean this quite literally with regard to how the nervous system operates during this reversal. We are just beginning to program computers to do this sort of thing: a discrimination tree is built up through a program and then reversed when, for example, equivalences are called for. My suggestion is that it is this rather dramatic reversal that is at the basis of what we feel when we become committed. Whenever this happens, what was information before now values our performances. We are no longer differentiating roles, building expectations, dreaming dreams. We are now taking roles, planning on the basis of our expectations, living the dream.

Now if this is indeed the threefold process by which commitment to dreams is achieved, we have learned a great deal about the family of today. First, stabilities must be ensured; then differentiations will take place by virtue of the expectations that develop from these stabilities; and finally reversal, i.e., commitment, follows. Given internal stability and a rich external environment this family process should develop as assuredly as that of biological evolution.

As long as we had a single-focus family hierarchy there was no problem. Stability was assured and a single differentiated "tree" developed. Each time a reversal took place it originated at the top. Decisions were made, commitments undertaken by the head of the family; others participated in this commitment. The dream was clear, there was only one commitment to be made. But families today are organized in another way. There are several possible foci of control around which the family system can stabilize, and these interact and interrelate. Sometimes one and sometimes another member of the family, sometimes another role, sometimes one dream, sometimes another become the dominant one guiding the family. Therefore commitment may be postponed, since no single focus ever dominates sufficiently long or sufficiently strongly to allow differentiation and reversal to occur.

This then is our problem: to study the development of multifocus hierarchies and to locate the differences and similarities in the processes by which they attain maturity. Only then will we be able to ascertain how systems such as the modern family and the individuals that compose it can make their commitment to dreams. This much can be learned from the structural approach to the process of commitment. We have a way of describing what must be taking place in the current family which, contrary to some opinions, is not disorganized but has a multiple-focus type of structure. What we must now study are the attributes and thus the problems faced by a multiple-control system, one that is not pyramidally organized. This can be accomplished by the aid of simulation on computers, and we should learn a great deal this way in the next few years.

Finally, let me state that the particular view and approach that I have taken here is, of course, only one of several that would be of use. I have talked about structure; I have not talked about the events within the structure. I have talked of thermostatic systems, not of furnaces or fuel; of roles, not persons. But to talk of heat and people only also limits severely what we must understand. The structural approach to family process is effective, as already shown by the work of Drs. Don Jackson and Gregory Bateson, and their collaborators in Palo Alto.

And so the phenomenon of commitment to dreams, although an issue which has until now been thought to be purely the province of existential psychology and psychiatry, can be illuminated considerably by taking the structural approach. Dreams and commitments thus become not nebulous hopes despairing and defying treatment when they become problems, but scientific issues that can be examined and successfully operated upon.