



In biological systems rhythms pass through themselves interfering, augmenting, amplifying by setting resonant rhythms going which soak up energy which would otherwise be lost to relevant work. Rhythms that are more intrac-contained will tend to null out rhythms that are not convergent or that cannot find energies at the time they are needed . . .

To put it another way: Let's say you have a colony of birds and this colony of birds is in a mountain valley almost filling up the mountain valley, and the birds behave in the colony in a particular way that allows them to propagate so there are many more birds. The colony then becomes crowded, and individual birds start to behave in a crowded way; the colony is then changed. The way the colony changes influences the way the birds change. The way the birds change influences the way the colony changes, but the birds change and the colony's change are not simple additions; the colony is not made up of a million birds, nor is a bird made up of a colony, because there now starts to be *in time* an interaction, an active dynamic interaction between the single unit and the mass unit. The dynamic is not simply dividing the mass into the units. All of our theory and governmentology has been that the individual is simply a member of the class called mass. Now, however, we start to move to what the interaction is between the individual and the mass in a way that takes in the context which is beyond either the individual or the mass, that is, that which is contained around that totality; so we have always a system of three at least. You always have a context.

In the past all of our logic in all of our theory, in all of our ways of thinking, has been bound up with systems of two, systems basically true and false. But we know now that there's no such thing as high holy eternal noon, the time when all things are pure, because *things are always changing, because time always exists*. The Klein form helps you get your head into a space where time starts to exist and where things are constantly in dynamic motion with a different kind of dynamic relationship than you get if you're talking about spheres. The concern used to be: how do you get the mass contained in the single member; how do you get the class contained in a member of the class. You could talk about how members made up the class but you could never talk about how the class made up the members; you were never able to talk about it with any geometric representation. But now people can talk about this in terms of triadic logic (the man who taught me what I know is Warren McCulloch, and Warren was searching for triadic logic in asking questions about things); that is, how do you set up a contextual logic so that your experiments aren't for the purpose of destroying context. Usually experiments are done so as to eliminate context . . . Now, if you eliminate context you're then into what I call *mechy max* systems. Mechy max systems are mechanical maximizing systems which operate by Newtonian physics, which operate like a clock with its clockworks. This is what Buckminster Fuller was talking about. There is for the clock a winder which is the energy source and there is the energy sync which is the fact that the hands of the clock go around; between the source and the sync are a number of levers of various sorts: wheels, ratchets, the great clumpers and the like, but *the output never effects the input*; there is always infinite source and infinite sync, infinite beginning and infinite end, and we find now that this is no longer a reasonable way to think. Now Bucky talks about spaceship earth and how man has to take it over, and I say bullshit, because man doesn't want to take anything over, because man is a part of the universe but he is not controller of the universe. Once you start to think that you must take it over it becomes like a Japanese garden. A Japanese garden is a garden that is arranged for man's purposes and basically has none of the mystery, none of the uncertainty . . . (literally I have talked with people from NASA, people who are high up in government who think of our taking over the whole earth, artificial climate, artificial creation of environments . . . of mechy max coming in, destroying the environment, and then recreating it . . .

The thing that you learn when you start to play the game of building biological systems (what I call *biological optimizing systems* or *bioptemes*) is that there is a context which man has nothing to do with and is not in any way in control of. There's no way to recreate biological systems, because in the recreation you do what you did with hybrid corn; you make a better corn except that all the corn is exactly the same as the next; if any disease comes along it wipes out everything. There's no flexibility; *man-made ecology is of necessity a low variety system because it only contains that variety which man can conceive of. An ecological system is a high variety system* . . . We're making "toys" which help us to think about ecology. In these biological systems that we're trying to create, however, we

don't have control of the total system—we don't have control of the tools that we've built. "They" have a life of their own which is insensitive to the life that forms around them; each one is different from the next and if some part doesn't work it doesn't stop operating.

However, in a mechy max system, which is a clockwork, if one wheel stops turning the whole thing, because it's like a simple chain, and there's a weakest link, stops. If you have a densely interconnected system within itself where all the parts are connected with all the other parts, then all these parts are less densely connected with that which is outside which is the context; no two systems, then, are alike, and if any part dies, which it will, inevitably (because in some ways you try to make them as improperly, as inaccurately, as sloppily as you're able) . . . if any part dies then the thing just has a different way of going about its behaviors—it may not have the same behaviors, it may not have the same purposes, it may not achieve the same purposes, it may have different purposes . . . but death has occurred naturally and in one clump which leaves a hole, and that hole is taken up by the regeneration and evolution of other species which fill the hole.

In mechy max systems there are no holes because everything is as uniform as possible.

I started out as a physician and with mechy max biology, the biology of low information systems, the biology of vision: you see something, but you're not aware of the *effect* of your seeing; you smell something and you're not aware of the *effect* of your smelling; you hear something and you're not aware of the *effect* of your hearing—your hearing is not active (you're not aware of its activity though actually it is active), but with touch and the sensuous world you start to get into if you touch something, then you touch it, it touches you; you move it, it moves you; you change it, it changes you, and it's happening simultaneously. You are no longer in the world of weak interconnection—when you're into densely connected systems you're into everything that happens effecting everything else that happens; when you're talking about densely interconnected systems you're talking always about *effect*. . . . In eastern philosophy you talk about breathing out as well as breathing in; in western philosophy you talk about breathing in—everything is in; everything is need, everything is desire. And *effect*, breathing out and the sense of breathing, the whole sense of rhythming is something that eastern philosophy brings us close to. Western philosophy is the world of things . . .

In mechy max systems, low variety systems, you have as I said toys which operate like clockwork. There are carnivore mechy max's that eat people and eat animals—military machines of all sorts; and there are herbivore mechy max's—the tractors and the cranes and the giant earth movers which eat up all the greenery and spit out lines of sugar cane, of corn, fields of cultivated plants that are domesticated plants. You have a whole field of one kind like a whole group of people of one kind. The herbivores also stack up mud into houses and into new apartment buildings and they proliferate more mechy max within this: washing machines, heaters; the mechy max have gradually been taking over the people and we have what we call plastic people, mechy max people. Biological systems become like Newtonian machines. People become like Newtonian machines. Their logic is like that.

photo: J. Sibert

