THE PLAYFUL, THE CRAZY, AND THE NATURE OF PRETENSE

by Stephen Nachmanovitch Miller

I

O body swayed to music, O brightening glance,
How can we know the dancer from the dance?
W. B. Yeats

I would like to begin by relating a couple of curious observations. I will unmethodically state them and then ask you to keep them in the back of your mind while we develop some seemingly unconnected ideas on pretense and mapping and what they tell us about a great many other things.

The first observation comes from learning to conduct an orchestra. There you are, surrounded by a large number of musicians who are waiting to play a note, and you try to get them all to play together by flapping your arms and waving a stick in the air. By experience, you learn to feel what quality of motion the stick must have in order to synchronize the players. We should notice that orchestral musicians don't have to be deliberately trained to follow conductors. So what do conductors learn? If the orchestra is poised to play a note, and you simply drop the baton, all will play the note at the instant the baton hits the floor. People know all about gravity; through everyday experience with physical objects they develop the expectations which Newton verbalized in his laws of motion. A conductor exploits these expectations.

The second observation is that people from many very different cultures, and even some animals, seem spontaneously to “know” that a balloon is something to play with.

The superficial relationship between these observations is of course that when growing up we learn some kind of mapping of how physical objects can be expected to behave. In the first case this is exploited to make a large group of people expect the same event at the same time; in the second case a toy frustrates or disconfirms those same expectations. But there is more to it.

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Let us now submerge and do some theorizing. My aim is to show how patterns of expectation change, how that which seemed reasonable yesterday seems bizarre today, and vice versa. If I behave in what you regard as a bizarre fashion, you might say that I am being playful or you might say that I am crazy. What is really the difference between these two labels? I will approach the matter in the following steps: In this section, I will try to develop methodically an idea of just what "pretending" means—and to show in general that pretending is a ubiquitous and necessary life process. Building on this, we can then see a relationship between pretending and expectation, and some principles by which systems of expectation, of sorting out the events we perceive, change and shift. We can then consider what it means to be "crazy" and what it means to be "playful."

First I want to present a formulation in systemic terms, so that we can go on to talk equally well about how pretending and mapping are embodied in a wide variety of contexts.

Since the development of cybernetics, we have learned to look at many different processes as feedback loops. Any kind of system that regulates itself or that tends toward a goal can be conceptualized as a feedback circuit, usually modeled after the thermostat, that most hackneyed example of all cybernetic systems.

In a simple self-corrective system, a machine, function, or process (it doesn't matter what; we will denote it by a box) operates on some variable \( V \). Information about \( V \) is fed back into the machine to regulate or control subsequent events. In the case of the thermostat, there is one part of the machinery that warms or cools the room, and another part that takes the temperature of the room and tells the first part whether or not to keep operating. The air temperature, of course, is also part of the thermostat; the heater affects the thermostat through the air temperature, making a complete circuit:
The point I would like to develop is that a system like this cannot work in living organisms. If variable $V$ is important to survival, $V$ is useless as a source of information to the system that regulates $V$—because if $V$ reaches a harmful level, the system will be impaired in the process of gaining information on how to operate.

For example, it is known that a population of animals cannot be safely regulated by its food supply. If we have a simple loop, there will be trouble, because if the population grows to more than the optimum level for the resources available, the result will not be that the excess is killed off by starvation, leaving a "proper" amount of healthy survivors; the result will be that everyone in the swollen population will suffer from famine. Various mechanisms, especially territoriality, have evolved to control population before it comes up against the crucial variable of food supply. There is nothing intrinsically dangerous about crossing the imaginary boundaries of territories—the boundaries are important because they act in place of an untenable feedback situation. Or to take another example, blowing up balloons is always somewhat risky, because even though with experience we can guess from tension when a balloon seems full, we only get a sure feedback when we overfill and the balloon pops, and then it is too late to correct the situation.

Thus, as Gregory Bateson points out, "the homeostatic controls of biological systems must be activated by variables which are not in themselves harmful." Now if we carry the implications of Bateson's statement a bit further, a very neat formulation emerges. Consider our respiration circuitry. The purpose of respiration is to make sure that enough oxygen is taken into the body. But the body cannot derive its information on how much $O_2$ is around from the amount of $O_2$ itself, because that kind of feedback would require cells or sensors that signal $O_2$ deficiency; since $O_2$ deficiency makes its presence known by impairing cell functioning, such sensors would be incapacitated by the very thing they were supposed to measure. What really happens is that the body derives its information not from oxygen, but from carbon dioxide, which is in itself harmless. There are sensors for $CO_2$.

In a sense then, $CO_2$ excess "stands for" $O_2$ lack, so that the body will "know" about a developing oxygen deficiency without having the information carried by the lethal event itself.
When you think about it this is a very simplistic idea. It is the reason why, for example, we have distance receptors. We don't bump into walls, because we see them first. We don't act (turn away from the wall) because of the "real" consequence (physical injury), we act because of our visual image of the wall, which itself is quite harmless.

Thus we are talking about a kind of _double_ feedback loop:

![Diagram](image)

This kind of diagram is extremely paradoxical. The outer loop is like the old feedback diagram of a thermostat; it represents the flow of information about something that the living system in the box needs to control or optimize. Moreover, in this sort of loop the information is carried by the variable to be controlled—in the thermostat, information about temperature is gathered by measuring temperature. The outer loop represents the "real" purpose of the system.

The inner loop represents the flow of information about something _else_, some variable like CO₂ that does not have real consequences, which "stands for" or "represents" the variable (O₂) that does have real consequences. Now this relationship, in which one thing (amount of CO₂) is a representation or mapping of something else (amount of O₂) but without the consequences of the latter, is precisely the relationship known as _pretending_. So in this context we have a structure that looks like:

![Diagram](image)

But remember that the outer loop _does not exist_, while the inner loop does! The purpose of breathing is to regulate O₂ intake, but in fact there is no feedback system that responds to O₂; there is instead a system that responds to CO₂. The "pretend" system exists in the body, while the "real" system is an abstraction that we observers construct when we ask questions about the "purpose" of breathing.
Now to turn to the matter of play. In an article I wrote before I thought of this feedback business, I said that the question “Why do we play?” (and other “why?” questions like it) is really two questions: 1) “Why do we possess the capacity to play?” and 2) “Why is so-and-so playing at this moment?” These two questions have very different answers. The first question has to do with issues such as why did evolution select for play, why is play good for us, etc. The answer to this question is that play makes us flexible; the reinterpretation of reality or the production of novelty keeps us from becoming ossified and unable to deal with a changing world. Play enables us to rearrange our capacities so that they can be used in many different ways.

The answer to the second question, the reason that I am playing with this snake now, is that it is fun. Fun is one of the most mysterious concepts in existence; in psychology, at least, it has been most conspicuously ignored, if not feared. Besides, it is no doubt rather obscene to try to “understand” fun.

I sincerely believe that there is something obscene about intellectualizing play and fun, but my will at its best is flimsy and I can’t help having a few thoughts on the subject. The question of definitions is involved and strange, and I will avoid it for the time being (I would just say that I think fun has something to do with giving in to the tendency to entropy, rather than fighting entropy, which is what the metabolism and organization of living organisms seem intended to accomplish). What we can think about at this point is the relationship between fun and the so-called “functions” of play (adaptive flexibility, etc.). To say that we play for fun but there is play because it makes us flexible sounds suspiciously like the idea that we breathe in order to maintain CO$_2$ level, but breathing exists because we have to maintain O$_2$ level. No one who watches a monkey, a baby, or me galumph around can say that the player is thinking to himself, “Well, I’d better play now so I can be more flexible and learn faster and . . . .” So here is another pair of loops, where again the outer loop represents “real purpose” but does not exist, whereas the inner loop represents the flow of something inconsequential that masquerades as “real purpose,” but does exist.

If pretending involves unhooking something from its consequences, it was not unreasonable to label CO$_2$ as pretend O$_2$ or sense impressions as
pretend injuries. It can also be said that the variables carried on the inner loops of the different processes we have been considering tend to “symbolize” or “map” the nonexistent outer loops that we draw through the “real” variables. We can then unleash this monstrous diagram and let it gobble up diverse islands of knowledge:

One more feature of this picture has to be mentioned before we can let all this gobbling happen. In the earlier paper mentioned above, I discussed an aspect of play that I call galumphing. Galumphing can be described as a patterned elaboration or complication of a path towards a goal. We galumph when we voluntarily set obstacles in our way; when we hop instead of walk, when we take the scenic route instead of the efficient one, when we play a game whose rules demand a limitation of our powers, when we are interested in means rather than in ends. This inefficiency is importantly related to the flexibility function of play, because if we are always efficient, we get locked into the momentarily “best” solutions to problems and become rigid and ossified. The world of efficiency, of corporations and bureaucracies, is a world in which goals are defined and in which one has conscious purposes to attain them.

It is here that we see the intersection between the nature of play and Gregory Bateson’s very important ideas on the maladaptiveness of conscious purpose. Bateson’s point is this: Living systems are interconnected in circuits, feedback loops, complete cycles, while conscious purpose involves only an arc of a circuit, a lineal path from a starting place through a “means” to a goal. When you apply conscious purpose in an ecosystem there is likely to be a dangerous splitting of the system into categories of helpful and unhelpful things, which will backfire somewhere. We decide, for example, that we want to exclude feces from our lives, on the surface quite a harmless goal, so we build a lot of plumbing and machinery to carry it away quickly and efficiently. But the thing we excluded finally turns up at some distant point in the circuit, say in the water supply. In Bateson’s terms, wisdom is something immanent in a complete circuit, and when linear purpose is applied to an ecosystem, imposing a classification of helpful or harmful on elements of the system, wisdom gets replaced by clumsy attempts to maximize some visible variable, and the closure and stability of the system (whether ecosystem, society, or person) are distorted and possibly destroyed.
Consider the state of medicine today. What happens is that doctors think it would be nice to get rid of polio, or typhoid, or cancer. So they devote research money and effort to focussing on these “problems” or purposes. At a certain point Dr. Salk and others “solve” the problem of polio. At this point, they stop putting large quantities of effort and money into the problem of polio, and go on to the problem of cancer, or whatever it may be.

Consciousness operates in the same way as medicine in its sampling of the events and processes of the body and of what goes on in the total mind. It is organized in terms of purpose. It is a short-cut device to enable you to get quickly at what you want; not to act with maximum wisdom in order to live, but to follow the shortest logical or causal paths to get what you next want. [With the addition of modern technology,] conscious purpose is now empowered to upset the balances of the body, of society, and of the biological world around us. A pathology—a loss of balance—is threatened.

Consider domesticated animals and plants. They are genotypically uniform because they are bred for a purpose, unlike wild organisms, who are often a genetic hodgepodge. Domesticated organisms are therefore much less able to survive changes in the environment. We have to start upsetting more and more balances (using predators, insecticides, etc.) in order to protect the species from its own delicate uniformity. Diversity (and flexibility) are bred out in exchange for maximizing certain variables that suit our purpose. On a different level the same thing happens in learning. Usually we learn specialties at the expense of lability.

In general, purpose leads to simplicity (streamlining), which leads to a loss of options, which leads to instability, which leads to a need for purpose.

There are many cases in which it is not helpful to intend to do what you do. Try riding a bicycle by making a list of all the movements you have to make, in order, and executing them. Try it on soft grass.

Systems that work, that maintain themselves through self-regulating circuitry, are not deliberately seeking the goals that they are designed to assure. Societies get along with their environments through the mediation of systems of made-up entities that we call cultures; as we shall see later, people get along through the mediation of personal mythologies of various kinds. With this we can go back to my two-ring circus diagram and see some more things. We have already seen why it is dangerous to act directly on the outer circle. This is the same as having conscious goals—trying to do the thing that you really need to do. The existence of the inner circle—the myth, the pretend, the map—keeps the system from having to do this. The system in the box transacts with the inner circle, and things get done as long as there is a good mapping relationship between the two circles, as long as CO₂ excess is proportional to O₂ loss, as long as a culture’s nature mythology is a pretty good map of the ecology.

III

“Well, yes, we are afraid of witches, but our medicine man can handle them. Neither your doctors nor your gods can
control your governments, so you have more to fear . . . .
It is better to die in a famine than in war.
An old Hopi who had lived among the whites

I was asked to say something about how play relates to psychiatry. Intuitively there is certainly a close relationship between behavior that is called playful and behavior that is called crazy: they both involve deviation from an audience's expectations or a reinterpretation of "reality"—and at first look people distinguish them from each other by some version of the question "Are you kidding?" If I act strangely and seem to "really mean it," you think I am crazy.

In the rest of this paper I will examine "are you kidding?" in light of the ideas developed in the previous pages. To explore this, let us go back to the diagram with the labels:

A theory is a myth: that is, an organized system of symbols which map and unify a field of confusing events. Theories can be manipulated at will while data cannot, though theory largely (and often unconsciously) determines which data we will be able to perceive and which data we will blind ourselves to.

Psychologists habitually talk about a thing called "self." They dispute and experiment over whether it means anything to say that a person has, or more, what it consists of, whether it can be changed, and especially whether it would exist if there were no psychologists watching it. The most reasonable definition I have seen is Robert Jay Lifton's statement that a "self" is a person’s symbol of his own organism. The meaning of this kind of idea has been made clearer by mythematician Sybil Meyer, in the notion of "personal mythologies." She has shown how a person can map the cacophony of a day or a life onto an imaginary framework and thus comprehend it and make it his own, in much the same way that at the cultural level myths map the complexity of an ecology. As Meyer shows for personal myth and Levi-Strauss shows for cultural myth, we impose on life such essentially cognitive structures as binary opposition and mediating symbols that act as ways of domesticating or cooking raw data of events.

I am proposing to look at personal mythology, or "the self" or whatever you want to call it, as related to the events of life in the same way theory is
related to data, and proposing that that relationship has the features of feedback and pretense that were developed on earlier pages.

We have established some of the characteristics of the theory:data or myth:event relationship—we must now ask by what dynamic the relationship changes. I think two principles are important—two opposing tendencies: 1) The inertial property: theory has a kind of inertia—it mediates vision, so it blurs distinctions that tend to weaken it while sharpening distinctions that tend to support it. If events are “understood” by trans-action through the myth, events not congenial to the myth are less likely to be understood, i.e., they appear as background noise or gibberish. So theory is disposed to remain stable in spite of fluctuations in the data. 2) The adaptive property: Theory means something and aids survival only insofar as it maintains its map:territory relationship to data. Since theories are in all cases caricatures, it is inevitable that nonsupportive data will eventually squeak onto the territory that the theory maps, the outer circle. There is pressure on the theory to change or “adapt”—to be a better map of the territory. I am reminded here of the old story of Picasso and a disgruntled man who complained that modern art is not a faithful representation of reality. Picasso wanted to know what was. The man produced a wallet-sized photo and said, “There! that’s a real picture—that’s what my wife looks like.” Picasso looked, and said, “She’s awfully small.”

It is essential to the argument of this paper that you remember that the theory I am presenting here is also a caricature.

Before getting down to the level of personal mythology, it is helpful to see how these processes are embodied at other levels of system. One process that comes to mind here is evolution. Adaptation can be conceived of as dealing with two sets of items:

![Diagram of two sets of items]

(With the first set—what is good for the organism—we must consider items that may be good for the species but not for the individuals, such as altruism.) The contents of the first set keep changing, generally in small ways, and the organism is said to be adapted to the extent that the second set can coincide with the first. In a world where oxygen is good for us, it is adaptive to have bodies that enjoy keeping their CO₂ level down—at least as long as the relationship between the two gases remains such that the amount of CO₂ is a reasonable negative map of the amount of O₂. The
image here is of the boundary of the first set jiggled around by interface with other species, climate, etc., and the second set (largely embodied in the genome of the species) chasing after it. Of course when a species (like us) acts heavily on its environment, the chasing goes both ways. Now recall again the double-loop diagram and in particular the pretend relationship of the two circles (a mapping of A onto B with B not having A’s consequences). Reproduction is good for the species; we like sex. It is good to develop flexibility; we like fun. It is good for babies to be protected from predators; they like being within a certain optimum distance of mother.

If we take the discussion down a peg to the cultural level, we see similar sorts of things. For example, in some African societies where only lousy diets (literally) are available from the environment, a prolonged post-partum sex taboo operates to insure the survival of infants by extending the period of breast feeding as much as possible. When anthropologists ask women the reason for the taboo, the women give a theory that breast milk is poisoned by semen, a theory that maps the necessity but is also interlocked with the rest of the cultural symbology. A very clear example of all this is the history of science as described in Thomas Kuhn’s work on the structure of scientific revolutions. A science is made comprehensible by a system of myth (what Kuhn calls a paradigm), which encodes the rules of perception by which data are to be assimilated. If you ask why bodies fall, you will be told about a helpful but fictional thing called gravity. Now, when we get down to the historical level, things are changing fast enough for us to observe the operation of map:territory shift. Scientific mythology certainly has the inertial property, reinforced by the fact that people who believe in a theory or have invested much of themselves in it want to go on believing in it. It is also part of the scientific mythology that science ought to have the adaptive property, that it should fit the data. What we see historically then is that the territory, the outer circle, starts shifting as new data filter in, while the central myth remains the same as long as it can afford to and then just a little bit longer. In the Ptolemaic phase of astronomy, it was important for many reasons to perpetuate the central ideas that the earth is the center of the universe and that the heavenly orbs move in perfect circles. Aside from the effect of inertia, these beliefs were thoroughly locked into the cultural circuits of religion and world view and a great many things other than astronomy. (This is true of biological evolution, too—desire for sex may have been adaptive with respect to the need to reproduce, but it also is locked into many different systems: stabilizing the social group, defusing selfishness, etc.; and these interlocking circuits remain even if the primary adaptation drifts away.) Motion in perfect circles was damned important in the Middle Ages in many spheres of culture. So the basic theory tolerated a great deal of inconsistent data in order to maintain itself, was peripherally modified in horribly complicated ways in order to avoid what from our perspective
seems to be the much simpler, but very central, modification: discarding the theory of perfect circles and the stationary earth. But please notice that this last sentence is backwards: the medieval astronomers were not shying away from a heliocentric theory they didn't like, they simply couldn't conceive or see such a possibility. Data had to be assimilated into the only world-view possible, or it was gibberish. So what happened was that by Copernicus's time disconcerting data had accumulated in an enormous heap until a crisis was reached and the whole structure came tumbling down. If I may be permitted to draw a very silly graph of change through time:

In other words, the inertial property of maps creates a backlog such that when the map finally adapts, the change is often dramatic—a revolution.

IV

I felt a cleavage in my mind
As if my head had split;
I tried to match them seam by seam,
But could not make them fit.

The thought behind I strove to join
Unto the thought before
But sequence ravelled out of reach
Like balls upon a floor.

Emily Dickinson

At a still smaller level of system, we finally get back to people's lives and their personal mythologies. At this level I think it is things like play and insanity, art and love, that have to do with shifts in the relationship of the two circles, of myth to event. When people try to differentiate the playful from the crazy by asking the question "Are you kidding?" they are asking in part about the source of the shift. If you are controlling it, you are kidding; if it is controlling you, you are dealing with what is known as a "problem."

That has a nice sound to it, but what is "it" and how can "it" "control" "you"?

First of all, we can easily get caught in the clutches of our own myths—a possibility that has to do with the inertial property; it goes under a wide
variety of names. At the interpersonal level Harry Stack Sullivan called it the "theorem of escape . . . the self-system from its nature—its communal environmental factors, organization, and functional activity—tends to escape influence by experience which is incongruous with its current organization and functional activity." This is part of the reason, for example, that psychotherapy is slow—it is necessary to add a great many straws to the camel's back before it will break. Or compare again with the history of science: the central myth of a science will absorb, ignore, or distort contrary evidence for a long time before it (the myth) will change. On yet another level, contemporary ethology is showing how predilections of species, such as the enjoyment of aggression, often outlive their fittingness to the environment.

It is important to note that this property of inertia is necessarily inherent in our diagram. Remember that the inner circle, the myth, is a real circuit, a system. As such it has properties of consistency that the territory it maps does not have. What passes around the circle in a feedback loop is information. To a thermostat, temperature is information but humidity is not. Air temperature is "wired in" to the loop at both ends—it is affected by the system and it affects the system—so we can correctly say that the other parts of the system carry transforms of or information about temperature. But it doesn't make any sense to say that the thermostat "represses" information about humidity; it simply cannot "see" the humidity in the first place. We can say the same thing about the phenomenon of ignoring and distorting disconfirming data. Cognition is a process of projecting or constructing a system of myth or theory onto the external mess. The myth supplies the categories and distinctions necessary to handle the data, but any system of symbols can only carry certain kinds of information. This is quite the reverse of saying that there is a "censor" which removes unwanted information. Such censors are often posited. In the Freudian theory of defense mechanisms, your "ego" knows that "you" would not like to "know" about some particular thing your "id" is doing, so a process is activated (which you don't know about) to clean things up. Or in the cognitive dissonance theory, which is really quite similar, you know that you wouldn't like to know that two things you know are incompatible, so you change your knowledge of one of them. Tendencies to get rid of dissonance are attributed to a so-called "consistency motive," another kind of reified censor.

One of the most dangerous and instructive experiences you can have is to cross a busy street under the influence of LSD. Standing in the middle of the road, fascinated by the insects at your feet and by the shining chrome of the rapidly approaching car, you realize two very important things, and then quickly get out of the way. First of all you realize that what you always knew to be a street corner was a myth, a theory, a miserly constructed map
of a small selection of an expansive and rich territory. Second, you realize that this must be so, that otherwise you would never get across the street alive, you would never know that that complicated blob over there is your friend and will probably be good to you. "Reality" is a name we attribute to the fantasies we trust.

There are times in life when people reach this kind of realization. These are the times when personal mythologies are likely to collapse. Consider this statement by one of Laing's patients: "I seem to have been living in a metaphorical state. I wove a tapestry of symbols and have been living in it." She said this after she had emerged from a psychosis. She also reported having thought, during the psychotic period, the same sort of thing about her previous life. Now you don't need to have had a doctor accuse you of psychosis to experience this. When a revolution takes place (scientific, cultural, or personal), we suddenly find it easy to see the pretend or masquerade relationship of the old myth to its territory. We often see this phenomenon in religious conversions. It is one of the most notorious characteristics of mankind that we can see all of the ground but the parts that our feet are standing on. We are necessarily looking through some myth that provides texture and punctuation to the perceptual field, but because we are looking through it we only recognize it as a myth after it is discarded. A myth is called a myth only by a person who is not living in it.

The collapse of a person's theory of who and where he is can be precipitated in many ways—by a single piece of data so disparate the theory just can't swallow it, a backlog of slow accretions of paradox and contradiction, an uprooting from context, a drug, a piece of art. Help! When a piece of data cannot be labeled, the theory that generates the labels quakes. It's like the punch line of a joke, which explosively compels you to see that the theory in light of which you perceived the first part of the joke was all wrong. But in some cases the joke is not a circumscribed performance; sometimes the joke turns out to be your life.

What happens when a personal mythology crumbles under the weight of a territory it cannot map? A clear possibility is panic. If you learn that you cannot trust the theory by means of which you have been perceiving things, you are in a sense cast adrift in an ocean of chaotic events. You wildly throw an anchor out; and often the first recognizable thing you find is your own reaction of panic. A very great danger is the possibility of forming a new mythology based on your observations of your own panic. A related danger is that of reconstituting a personal mythology around someone else's observations of your panic. If you are exhibiting panic and a guardian of society happens to be watching, you can be labeled with an official diagnosis. If we quite ignore the thorny question of how much validity there is to the label "schizophrenia," there still remains the matter of how labeling affects people. In the case of someone cut loose from all moorings, being told by
an authority that what you are is a schizophrenic can amount to being handed a new trade to learn.

Another possibility is to build a new mythology around a thing instead of around a map. I mean that the mythology might take the shape of a line towards a goal instead of a circuit. This is formally related to the problem of conscious purpose; systems of pretense that work are not deliberately chasing after their “real goals”—they are mediative, not instrumental. The examples that come to mind have much formal resemblance to cargo cults. Cargo cults (and certain forms of neurotic belief, and forms of addiction such as the belief that the culture is failing if the Gross National Product is not exponentially rising) consist basically of trying to get the benefits of a symbolic system out of goal attainment. In the establishment of apocalyptic cults, a stable, synchronic mythology is often shattered by invaders (Americans and others in the case of the cargo cults, Romans in the case of Christianity). A new body of belief springs up involving the attainment of a tangible goal, transforming time from a cycle into a march towards an end. The cargo will come, the flying saucers will land, the gates of Heaven will open and oppression will be reversed by Judgment—we will all be so happy there will be nothing left to do; so time will finally stop. I am reminded of the idea of Liebestod in the myth of Tristan and Isolde. Their pursuit of perfect idealized love became synonymous (and interchangeable) with death. This kind of myth messes up interpersonal relations quite often: a person with a crisis involving the receiving of affection is sometimes seen to stop treating love as a process and start treating it as a “thing,” a goal to be attained or conquered, after which nothing need ever happen again. Indeed, nothing can ever happen again, because subsequently things could go only down—absolute ideals do not admit of circularity, and life will not admit anything else.

This is the kind of fallacy that existentialists were put on earth to deal with. One of the most dangerous things in life is to try to build a monument which you cannot afford to have fall. The myth of Sisyphus seems deadly when seen through the myth of progress, but it resembles many more life processes than progress does. A person who lives a myth of progress is looking forward to an age without oscillation, when things will really settle down—this is why the ideal in Tristan can be nothing other than death.
Some people who live in this kind of non-circular myth search from place to place, lover to lover, job to job, always unhappily finding something wrong with them, always looking for a better one, for more, never satiated or full because none of these things will stop time, stop life from oscillating.

Or alternatively, the myth of lineal progress can be lived by taking one’s way of looking at things and soaking it in formaldehyde. This is known as maturity. The idea of maturity, we must remember, was an invention of the Industrial Revolution. Efficiency requires that people be predictable and not fool around—behavior therefore became categorized as childish or mature and in our society there is heavy pressure on people to “act your age.” The most difficult thing I deal with in teaching classes on play is people’s terror of appearing silly, of appearing less dignified than they “really are.”

There is a feeling that accompanies mythological shifting. Here we must dip briefly into the unsavory topic of anxiety. Anxiety is felt at what we might think of as “Ptolemaic” phases in life. That is, when the theory wants to remain the same but is under pressure from contradictory data. We should consider H. S. Sullivan’s description: he thinks that anxiety is a derivation of a primeval kind of unpleasantness in infancy that differentiates into fear and anxiety. Fear and anxiety are distinguished from each other in that fear refers to an identifiable object or person, while anxiety refers to relationship between people. You fear burglars; you are anxious when in church. Anxiety refers to a context, a set of interconnections; in the language of this paper we say that you are anxious when the mythology that mediates your integration into a context is shaky. Sullivan speculates that the primitive emotion he talks about appears in later life under very rare circumstances; he calls it the “uncanny emotion”; he relates it to awe, or dread; and he thinks it can be recognized in the early stages of schizophrenia, sometimes under the influence of art, etc. He talks about feeling that your skin is crawling, and that on occasions of experiencing uncanny feelings “it is as if the world were in some way different.” He also talks about two different sorts of needs: satisfaction, which (like fear) deals with things; and security, which (like anxiety) deals with relationship.

“It is as if the world were in some way different”; this is, in the sense I have been developing here, exactly what is happening. When the theory that mediates our vision collapses, what we see of the world is different. If we were thermostats who “saw” temperature, and were forced to discard our theory of operation and “see” humidity instead, it would be proper to say that we were now living in a different world. This may be why Sullivan identified the uncanny emotion with the very young—their world, in this sense, changes often.

Since anxiety does not deal with “things” it cannot be dealt with instrumentally, in the sense that we can at least know how to remove ourselves
from a thing that frightens us. But relationships are embodied in things, and it is possible to commit the fallacy of thinking that a thing which participates in a relationship that causes anxiety is itself what is crucial. Thus a person lacking security might crave the tangible accouterments of power. This brings us back to the cargo cult business, the turning of a feedback loop, of a cycle, into a lineal pursuit of a goal. Thus we might see some sense in the observation that historically anxiety was an experience to which there were few references during such periods as Classical Greece and the Middle Ages, when cultural myths were stable and fairly satisfactory maps; and to which there were many references by people living in transitional times of mythological shakeup and realignment (Alexandrian Greece, the twentieth century).\textsuperscript{14} Compare the music of Handel or the novels of Henry Fielding—works whose conflicts are framed within a context of grace and equanimity—with the beautiful but tortured and uncertain works of artists like Mahler or Hesse.

To sum up what the nature of theory:data relationships has to do with pathology of personality or culture, we can say this: we need to use a tool—mythology, theory, map, eyeglasses, caricature—in order to perceive the world and deal with it, but the tool in many of its versions has characteristics that land us in a situation where it uses us. We can find ourselves wearing eyeglasses made out of flypaper; they stick and it really hurts to take them off.

This brings up the question of how our myths are kept from getting too stubborn, which brings us back to play.

"Hallo, Rabbit," said Pooh, "is that you?"

"Let's pretend it isn't," said Rabbit, "and see what happens."

"I've got a message for you."

"I'll give it to him."

A. A. Milne

How can "you" "control" the shifts of myth:event? What we suggested before was that the playful and the crazy deal with the borderline between being in control and being out of control, but in play being in control is the frame within which you may be safely out of control. We have to look closely at framing, which is the creation of a context for something. To do this, let us consider pretending again. Earlier I made a formal and unusual use of the word by saying that the inner circle has a relation of pretense to the outer circle. What about the more ordinary and recognizable embodiments of this relation?

There was a famous case that Freud described in \textit{Beyond the Pleasure}
Principle. A little boy of a year and a half dealt with the fact that his mother would go away at various times, by going off to play with a reel tied to a piece of string. He would repeatedly throw the reel away and then pull it back, shouting "gone" and then "there." Freud's interpretation was that the baby, who could not control the times of his mother's departures and arrivals, compensated by inventing a game in which he controlled arrivals and departures himself. This use of play (and in later life of fantasy) is not uncommon; we often see children repeating with dolls or in other kinds of play interpersonal events that they could not control. We see here the building of myth—these games have all the characteristics of the inner feedback circles that were developed in the abstract model in the first part of this paper: they are circular, they can safely be manipulated, they are cut off from the consequences of the "real thing," yet they are reasonable "maps" of the real thing.

Vygotsky in 1933 conjured up a nice way of talking about what goes on in children's overt pretending.\textsuperscript{15} A kid builds a world of interpretation around some object that Vygotsky calls a pivot. A pivot might be a stick which is interpreted as a horse, and this interpretation sets up a context in which surrounding objects too are now perceived in the light of the horse situation. The meaning of horse is severed from real horses and transferred to the stick. What we have again is the voluntary manipulation of myth.

Let us backtrack and reach this point again by way of a different path.\textsuperscript{16} In information theory, "noise" is a random component of communication that does not relate to the pattern being signaled; and "signal" is what is carried on feedback loops—information about deviations from pattern or "redundancy." Noise in a communication is variety which is classified as irrelevant by the receiver; if two people are simultaneously talking to you at a party, one conversation becomes "signal" and the other "noise," but you decide which is which. To go back to the question of "personality" again, a person decides with greater or lesser awareness that some of the messages he generates are signal (self-concept) and some are noise (irrelevant).

Noise can be found, or it can be made. Noise can be found in running across an undecipherable piece of data, in novelty, during exploration. One of the ways of defining play is to say that it is the deliberate creation of noise, while art (and scientific revolution, and good therapy) uses that noise to build new systems of assumptions.

The word "novelty" is often used in connection with play. I think people really mean noise, of which novelty is a subset. There is a need for noise in life, involved with the important emotion of boredom. The thing about noise is that it can come from either novel sources or familiar sources. You can make noise in the first way by simply introducing something from outside the system. The ubiquity of this principle is seen in sexual reproduction (for species) and exogamy (for cultures) and exploration (for individuals);
in these cases a system perpetuates itself by incorporating pieces of other systems.

You can also make noise in the second way, not by adding anything new but by changing the boundaries of the system:

creating a new context around a familiar thing. You pivot a horse-context around a stick and off you go into the sunset. Play (and this is why play is different from exploration) comes less often in the form of experiencing a novel object and more often in the form of reinterpreting something familiar so that you make it novel; your system of perceptual biases changes.

The simple situation of finding noise involves new data which breaks expectations but does not modify the myth. Sometimes I have the experience of picking up a large milk carton that I expect to be full, and it turns out to be almost empty. There is surprise and discovery as the arm shoots up into the air, of course, because the muscles were braced to exert a much larger force than necessary. I may laugh, but I'm certainly not playing. Similarly, we can only enjoy a steak, but we can have fun with words. Play cannot be a passive intake of novelty; you must be able to act on the novelty or actively pervert the known or expected until it looks new.

But when we pivot an "imaginary" context, a new texture of expectation, around our stick, we are giving ourselves some elbow room. As human beings we have the extraordinary capacity to know that our words are words, and not the things they represent; that our interpretations are interpretations, that our theories are theories. But there are times when we do not, times when we cannot, times when we cannot afford to, exercise this capacity. Remember the LSD example—it is often extremely adaptive to be unconscious of the fact that your perception is mediated by a myth. But if we never pretend, never reinterpret things, especially if we live in a culture
or context where events, people, things—the data of experience—are changing and straining the assimilative capacities of our theories, there is the danger of painting ourselves into a corner, of being controlled by our theories often at the cost of much hurt.

When we intercalate play or imagination with life, we are living in different "worlds" of interpretation at different times. There is a paradoxical dual nature to the ability to know that your myth is a myth, corresponding to the converse of the inertial and adaptive dynamics by which myth:event relationships shift. Play is creative in that we make for ourselves more mythological or interpretive elbow room, and it is destructive in that the conventions and expectations by which people get along are contradicted. Throughout the world this duality is embodied in traditions of sacred clowns and fools. This is especially true of the Trickster mythology and the association of sanctity and buffoonery that was so widespread in North American Indian cultures.18 Trickster was at the same time the creator of culture and the shameless violator of all of society's laws.

Here is Wakedjunkaga [the Winnebago Trickster figure] pretending to be thoroughly socialized and about to embark on a warparty. But let me tell you what he really is: an utter fool, a breaker of the most holy taboos, a destroyer of the most sacred objects!19

Wakedjunkaga commits one unspeakable violation after another, and yet this capacity also enables him to see otherwise than through the spectacles of culture—to incorporate noise into culture and thus be its creator.

From there on he continued alone. He ambled along calling all the objects in the world younger brothers when speaking to them. He and all the objects in the world understood one another, understood, indeed, one another's language.

It was the embodiment of this duality and paradox, the same creative-destructive paradox which I think characterizes play and madness, that made Trickster such an incredibly sacred figure.

The most important statement about the nature of perception that I have yet seen was made by Don Juan, the Yaqui sorcerer Carlos Castaneda wrote about. After years of trying to overcome his Western skepticism, Castaneda genuinely experienced by himself some of the uncanny things that previously were either hearsay or attributable to drugs. Castaneda returned to Don Juan now prepared to believe in his new mythology, his new way of looking at the world. But Don Juan was not that facile—he knew the difference between map and territory:

Perhaps you now know that seeing happens only when one sneaks between the worlds, the world of ordinary people and the world of sorcerers . . . Yesterday you believed the coyote talked to you. Any sorcerer who doesn't see would believe the same, but one who sees knows that to believe is to be pinned down in the realm of sorcerers. By the same token, not to believe that coyotes talk is to be pinned down in the realm of ordinary men.20
I think we can now dredge up the two observations I planted at the beginning of this paper and look at them again.

Music, especially great music, is full of surprises and ambiguities. When a conductor exploits people's intuitions about motion, he makes the ambiguities seem lawful; he adjusts the expectations, and if he is good even the breathing, of his musicians so that the surprises will be inevitable to them.

What a balloon does to people in exploiting their intuitions about motion is the opposite—it is a real physical object and does obey laws, but the laws of air resistance are not often "seen" by people because most familiar objects are dominated by the law of gravity, and we so often perceive with an attitude of gravity. A balloon makes inevitable events surprising.

The two situations are both mappings of the way objects behave; each has a field of vision and a field of blindness.

When we try to differentiate the playful from the crazy by some transform of the question "Are you kidding?" we must remember that "kidding" means a kind of mapping, a patterned transformation between two worlds of vision.

We recognize in the behavior of a balloon a mediation between order and unpredictability.

Inevitability and surprise are necessary correctives to each other. If everything is inevitable we are turned to stone, rigid and inflexible. If everything is surprising we live in a world of chaos, mad. We have to keep a foot in each world. If that sounds too abstract, it can be translated: Do something foolish today.

NOTES


6. "Crazy" is the most honest word I can think of. "Schizophrenia" and other such diagnoses are, as medical entities, under increasing attack as being of very dubious value; and even if a unifying characteristic is ever found to justify them, they have often been used as a means of professional mystification (see Theodore Sarbin, "The Concept of Hallucination," Journal of Personality 35 [Sept. 1967], 359-380; and "Schizophrenia Is a Myth, Born of Metaphor, Meaningless," Psychology Today 6:1 [June 1972], 18-27. "Deviant" may be a better term, but it implies a false stance of objectivity—a pretense that there is no negative valuation involved.


8. Sybil Meyer, "Journey from South to North"; "Play-Space in the Handball Courts." Manuscripts, University of California, Santa Cruz.
14. This idea has been developed at length by Rollo May in The Meaning of Anxiety (New York, 1950) and elsewhere.
16. See Stephen Nachmanovitch Miller, “Play and the Klein Bottle,” manuscript, University of California, Santa Cruz, 1973, for full background and development of these ideas.
17. An important exception is that you can play with mashed potatoes.