

Altered States of Consciousness  
in Western and Buddhist Psychology

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I will begin this paper with a well known statement from Abraham Maslow. "If the only tool you have is a hammer, you tend to treat everything as if it were a nail"--keep this in mind throughout what follows.

I am writing from the perspective of a Western psychologist. My special interest within psychology has been human potentials: how can we be more than we are, how can we be healthier, happier, more creative, more giving, more intelligent? I've been particularly interested in altered states of consciousness and so have studied phenomena like hypnosis, drug effects, meditation, sleep, emotional states, and so forth. I often express this as an interest in developing a scientific transpersonal psychology. From all the spiritual traditions that have come down to us, filled with lots of ideas, some of which make marvelous sense and some of which are probably nonsense, how do we separate out what is really applicable and what works for us today? How do we reconcile it with modern science?

Contrasting Western and Buddhist Psychology:

In comparing Western and Buddhist ideas about consciousness and altered states of consciousness, the salient thing that strikes me, to oversimplify, is that the approaches to consciousness in Buddhism and Western psychology are almost orthogonal to each other: the main focus of interests has almost no overlap. The focus in Buddhism is not particularly on states of consciousness or phenomena of consciousness per se, but on how to use consciousness. Buddhism is interested in what to do with consciousness, and not only how we use consciousness but, even more so, how we misuse it and so end up living a life that is full of suffering. Ideas like attachment and mindfulness, which have to do with the way you use and misuse consciousness, are central

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concepts in Buddhism. In contrast, if you try to look up attachment or mindfulness in the index of Western psychology books, you will rarely find the words used. So Buddhism focuses on the use and misuse of consciousness, how things like attachment bring suffering, and how non-attachment can result in freedom from suffering.

Western psychology, on the other hand, grows out of a cultural context in which the emphasis is placed on dealing with the external world. Consciousness thus becomes secondary in Western culture. Consciousness is only secondarily interesting, as an instrument for dealing with the external world. Happiness is to be found in successful "adjustment" to the external world, in succeeding in the external world; so consciousness is pretty much taken for granted as long as we are succeeding. Our interest in consciousness increases when we are not doing very well in the external world, when we're failing, when we're not adjusted. There are exceptions, such as interest in consciousness per se, but utilitarianism is a primary emphasis within Western culture.

Therapy or other kinds of mental training can be looked upon as resocialization: if a person is not fitting in, that means he has not adjusted very well to our fine social world that handles the external, physical world. A therapist is someone who helps that person develop basic social skills he or she should have acquired earlier, and eliminates internal conflicts that block successful outer, social functioning.

I want to illustrate this difference in focus by an analogy. The traditional analogy I thought of using, to honor Yoga and Buddhist literature, would be that of a chariot and how it can be most profitably used; but I thought, "What do I know about chariots?" I'm not sure I've ever seen one! Besides, we are in California, where the automobile is "worshipped." I am therefore going to use an analogy of automobiles and drivers.

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Western psychology is interested in cars. Happiness is a bigger and better car and more freeways to go wherever one wants to go, more power, more maneuverability. For some people it is more gas mileage, but for most it is bigger, better, more comfortable cars, and more roads. We believe we deserve these things, and expect to get them. As a consequence of this kind of cultural orientation, we have an excellent science of cars. The external, physical sciences are marvelously developed. We have a psychology (primitive in comparison to the physical sciences) that is primarily a psychology of poor drivers. We don't like people to misuse their cars, get in our way, or cause us to have accidents. Psychopathology is equivalent to the failure to drive safely. We have to get poor drivers off the road by institutionalizing them or by giving them therapy to make them better drivers. Overall this means that the focus of our Western psychology is quite restricted.

Buddhism, in this over-simplified analogy, is interested primarily in the psychology of the driver. The cultural attitude frequently associated with it is expectation that the car will inevitably break down or be stolen. There will be gas shortages, and potholes in the road. There is no assurance that cars and roads are going to improve. If you try to be happy by enjoying or improving the car, you are going to get into trouble. Thus it is the attitude of the driver that leads to suffering or happiness. Happiness and satisfaction come in learning a kind of non-attachment. Then when a gas shortage occurs, it doesn't affect one's inner happiness. This focus leads to a very sophisticated psychology of drivers, but not to an expert knowledge of cars.

I think Western psychology is narrow in its emphasis. It is culturally restricted in many ways. I suspect that Buddhist psychology is also culturally bound, excellent in certain areas, restricted in other areas. My

hope is that knowledge from Buddhism and knowledge from Western psychology can be combined to produce an improvement in both. Both traditions have something to learn from the other, and both can end up being more effective and having more valid knowledge of reality by such an interchange.

Now let us extend this analogy of cars and drivers to altered states of consciousness. Our ordinary state of consciousness is like driving a car: altered states of consciousness have to do with driving boats, airplanes, tractors, spaceships, kamikaze planes (to represent psychopathology), and so forth. All of these can be useful activities; all of these can be costly and dangerous activities. Altered states of consciousness represent drastic changes in the way the mind (i.e., the car) is organized, but the psychology of the driver is still a vital consideration. The attitude of the driver, his psychology, interacts with the nature of the vehicle. If in sailing a boat a person approaches a mountain at the edge of the lake, and then becomes very unhappy and kicks the boat because it won't fly over the mountain, he has a psychological problem. He has created suffering. That person has to learn non-attachment, and/or switch to traveling in an airplane, depending on the situation. A complete psychology of the future would combine a knowledge of vehicles, qualities, and states of consciousness, the Western approach to psychology, with the sophisticated psychology about attitudes, attachment, mindfulness, and the like, that we get from Buddhism.

#### Ordinary Consciousness:

Let me get more specific now and share the outlines of my understanding of what altered states of consciousness are. To do that I will have to present my understanding of the nature of ordinary consciousness and then touch on the central question: what is sanity? A generally held idea that confuses our understanding of consciousness is what psychologists

call the naive view of consciousness--the implicit assumption that our ordinary consciousness is somehow "natural" and "given." I have represented that with a diagram of a naive view of perception in Figure 1.

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Insert Figure 1 about here  
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It is an implicit working assumption we make all the time that there are things in a real world out there and somehow, in a very straight-forward, natural, biological process, there are high fidelity representations of reality inside our heads, in our consciousness. We simply see the world as it is. By analogy, the same kind of assumption applies to our thought processes--that there is a natural way of thinking, a natural logic, and in our ordinary state of consciousness that is how our minds work.

When the matter is spelled out this way, one begins to suspect that this is far too simplified a view. But it is seldom spelled out, and this naive view is the implicit working assumption that we operate on most of the time.

Figure 2 extends this analogy to our implicit assumptions about social reality. The social application is that there is a simple, real physical world out there. Since everybody has this high fidelity, natural contact with it, we are all in contact with reality and each other, and therefore communicate well. We can extend that analogy to thought processes, so that we assume we all think in a logical, "natural," rational way. A major discovery that my study of altered states of consciousness

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Insert Figure 2 about here  
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has brought me is that it is not at all this way. Ordinary consciousness is not "natural." It is not given. It is a construction, and it is a construction that, in many ways, is rather arbitrary.

The Construction of Consensus Consciousness:

Figure 3 illustrates a concept that anthropologists came up with a long time ago called the "spectrum of human potentials." By virtue of being born a human being, we have a multitude of potentials that could be developed. We could develop the potentials to walk and run, to eat, to speak: most people do that. We could develop something very exotic, like the potential to go into some altered states of consciousness we would loosely term "trance," where we would be "possessed" by a friendly "spirit" who would teach us songs and dances we could later share with people. We could learn something really exotic in some cultures such as, say, integral calculus! But, a particular culture is a group of people who, through historical development processes, do not know about the entire spectrum of things one could be, but only about certain of them, which they then choose to pick for development, to reinforce and bring out strongly. Every culture also knows about certain other potentials

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Insert Figure 3 about here

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which they do not like, which they actively inhibit. We could be taught to eat on all fours, for instance. We could have our food in bowls and get down on all fours and slobber it up. I do not see what is wrong with that on a cosmic scale, but we strongly discourage people from doing that. Another culture, of course, is a group of strange foreigners who have made a different selection out of the total spectrum of human potentials.

A culture, then, knows about some, but not all, human potentialities. Some of those it tries to actively develop and others it actively inhibits.

Our consciousness develops, is constructed, through a long, complex socialization process, a process that probably starts before birth. We now have evidence that the womb is a great place to hear things. The sounds you hear probably make it easier to learn one language than another, or set an emotional tone. But then there are years and years of conditioning, instruction, enculturation. Figure 4 briefly sketches the process of enculturation by which consciousness is constructed. Any culture makes certain arbitrary assumptions about what is good and what is bad. I emphasize semi-arbitrary--all cultures have to master certain things. They cannot walk around on their sides, for instance, because that is an inefficient method of locomotion. As another example, all cultures have to teach people not to walk over the edge of cliffs. This can be done by telling them about a mysterious, invisible force called "gravity," or by telling them that invisible demons live at the bottom of cliffs, demons who grab you when you are decelerating rapidly and wreck your bones. Either way, it keeps people from walking off cliffs!

As Figure 4 shows, enculturation takes place in a number of stages.

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In infancy parents are the primary agents of socialization. A person possesses many potentials at this time, but he is relatively disorganized. Pressure starts being applied. Certain sounds are reinforced, other sounds are encouraged. Smiles are reinforced, hitting mother is discouraged, and so forth. As he moves into childhood, teachers and peers start to become influences for enculturation. By this time some potentials are not readily

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available and might even be permanently lost, and some have been well developed and fixed. By the time he is fairly well along in childhood, he has achieved what is called a basic membership in consensus reality. The consensus of the culture as to what is proper and improper, how to see things properly, how things should not be seen, how a person should act and not act--all exist as a relatively automated structure within his own mind. That person no longer feels that he is making an effort to learn and follow social norms. This acquired pattern seems like the natural way to think, feel, and act. Even though there was a lot of work in development, it is now largely automated. Humans are creatures of habit.

As the child goes into adolescence, sexuality creates many pressures that can throw most people's belief systems out of kilter for a while. As parents and teachers know, they no longer have much effect in shaping the person, but peer pressure is very important at this stage. Some people may change drastically in adolescence, but usually after a few years they settle down again and finally reach adulthood. I was tempted to draw the potentials in Figure 4 as a square in adulthood, to show that potentials are largely fixed, but I do not want to get too symbolic! Peers in the culture, reflecting cultural beliefs, are internalized by this time. One may have some effect back on his culture, rather than just being a recipient. Then, so unfortunately in our culture, we have the idea that old people are dumb and senile, and they believe that and let their potentials deteriorate.

Thus there is a long socialization process in which a structure, a largely habitual, automated process is built up in the mind, a state that comes in time to be identified as ordinary consciousness. A more appropriate descriptive term for ordinary consciousness which I have introduced is consensus consciousness. That is, if you have been successfully socialized, the day-to-day, moment-to-moment operations of your mind strongly reflect



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the consensus of the culture you were born into. From the culture's point of view, that is a very efficient method of enculturation. Insofar as you have internalized social norms, society needs very few policemen; and we can have people doing largely productive social work instead of actively policing one another.

An important point I want to emphasize is the concept of cultural relativity. There can be quite different selections from the spectrum of human potentials. Thus every culture has certain strengths and weaknesses, biases which may or may not be transcendable. Some of them are surface habits and biases, others are so deep, so implicit, they are very hard to transcend. I emphasize also that this development of consensus consciousness is not just an intellectual process. It is an extremely emotional process, especially in the early stages. As an infant you are helpless, your survival and happiness depend on pleasing your parents, who want you to accept consensus reality. There is great pressure on you to conform. Your emotions are extremely strong and variable: bad is terrible, good is ecstatic. Most of the structure built through enculturation gets automated, and has strong unconscious emotional connections. Thus it is not just a matter that later in life you can simply intellectually examine your cultural biases and decide to transcend them. Many of them have very powerful, largely unconscious, emotional connections. They can be worked with through psychological growth methods and psychotherapeutic methods, but it is not an easy kind of thing to do.

Another way of saying this is each of us has, as it were, a cultural karma. By being members of our culture, we have inherited sets of habit patterns and biases that will affect us all our lives. We have an individual family karma, since the socialization process is not completely uniform in a culture, and, of course, there is some individual variation, given our genetic

uniqueness. I don't want to leave you with the impression that we are entirely shaped by our culture: some of it is our own "fault," and some of it is our opportunity.

The result of enculturation is that, in many ways, we do not live "in" the ordinary physical world. We all have a minimal acceptable degree of contact with the ordinary physical world, or we would not be here: we would long since have been run down by a truck while crossing the street. However, experientially we live mostly in a social world, a world of interactions with other people, where realities are not so clear-cut as the truck bearing down on us or not bearing down on us. Our reactions to this consensus reality world that we live in are much more complex than they would be to simple physical reality.

I showed you a model of naive perception earlier in Figure 1. Figure 5 is a simplified model of what we know now about what actually affects perception, starting in the physical world with total stimulus input on the left, ending up with the percept of that input on the right. Given the nature of the sense organs, there are limitations and biases in perception. There are further neurological limitations and biases because we come pre-wired "from the factory," as it were, to process information in certain ways. There is considerable enculturated patterning, where we were taught to selectively perceive. The fact that we can look at an automobile and instantly recognize it as an automobile, with no apparent mental effort, for example, means that we have been taught various things that are now automated and which, for that reason, simply seems natural. But there is a tremendous amount of bias engendered concerning this matter. Enculturated patterning, input processing, interacts with momentary needs or states of the mind. If a person is hungry and walking down the street, for instance, he notices restaurants more readily than hardware stores. He is not "simply" perceiving

the world that is there.

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These processes which shape perception are largely unconscious. They can be made conscious to some degree, but they are ordinarily unconscious and can often seriously distort one's perception of the reality which one inhabits. The end result of this construction process (sketched in Figure 6) is that consciousness constitutes a very complex system. Consciousness can be analyzed as a variety of psychological faculties interacting with each other. I usually use this diagram to explain my systems theory approach to altered states (Tart, 1975)<sup>1</sup>, but here I want to illustrate the complexity of consensus consciousness. I want to illustrate, for instance, that when information comes in from the outside world through external receptors, it goes through a complex, habituated series of processes that I lump together as Input Processing--the ways one has been taught to perceive. It finally reaches awareness, but it has been modified, it has been changed. A lot of the information has been dropped out, so that portions of reality are ignored. At this point a lot of things have been distorted in the process

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Insert Figure 6 about here

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of transforming them into socially acceptable forms. You draw from your memory for this, your subconscious mind is affected, emotions get involved.

There is a very important process that I am calling Sense of Identity

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(1). Tart, C. T., States of Consciousness. (New York: Dutton, 1975a).

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on Figure 6, but which might also be called "self" or "identification." It is a process that makes certain mental processes "me," and thus especially important. When something becomes self, that changes the way that information is processed. We become attached. If you are looking out of an apartment window and see some kids vandalizing a car, you might have an intellectual discussion with others about how rotten teenagers are, how they have no respect for anything. Then suddenly you recognize that it is your car: that little sense of "me" gets added to the same information and instantly a lot of things change!

I should also add that although consensus consciousness is so fully automated, our ordinary consensus consciousness is not a static thing that's just there. It is a complex system, and you are working every moment to maintain your ordinary state of consciousness (or any altered state, for that matter). You are not ordinarily aware of the effort that goes into maintaining consciousness.

#### Consciousness as a Simulation:

A useful way of understanding consciousness is to think of it as an active simulation of the external reality situation. The easiest way to see its simulation activities is to think of a nocturnal dream. During such a dream, one is experientially in a world, doing things, experiencing things. The mind has simulated a world. In a similar way our minds simulate a world when we are awake. From raw sensory input, objects we know are created and set in a context of space and time. The world simulated in dreams does not receive sensory input. So those worlds can deviate drastically from the ordinary world simulations. Thus we talk about the "fantastic" qualities of dreams. But the same process simulates the ordinary,

waking world we live in; it is constrained in order that the world created can show a reasonable match to sensory input. Insofar as we live in a social world, a consensus reality world, the criteria of what is "real" are much more ambiguous; and culturally shared biases are reinforced to the extent that simulation may be "realistic" by consensus reality standards even if it is very poor in comparison with actual reality.

Figure 2 illustrated a naive (albeit powerful) view of people interacting. Figure 7 is a more realistic illustration. When two people interact two complex systems of consensus consciousness, each one of which is simulating reality, interact with each other. The result is that it is not simply two people perceiving reality, but a mutual construction which could be distorted. There is a mutual re-creation and reinforcement of consensus reality. It is like inducing an hypnotic state. Every time I act "normally" for someone else, I am implicitly reminding them of the standards to which their mind should adhere, and I am reinforcing them for doing it. As they respond appropriately, they reinforce me for behaving/thinking/feeling in accordance with consensus standards. That is what happens when two people interact: you can imagine how strange "reality" might get when lots and lots of people interact!

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Insert Figure 7 about here  
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Consciousness as Illusion:

I mentioned that consciousness as simulation can be good or bad, high or low fidelity. We recognize bad simulations of reality: we talk about people who are totally insane, and people who "march to the beat of a different drummer." They are walking around talking to people who are not

there, and paying no attention to what all the rest of us agree is reality. They are clearly living in a world of their own. There is, however, a continuum of degrees of accuracy in simulation. We could conceptualize the "high fidelity" end of simulation and say that a simulation that contains all the information that is present via the senses at any given time, without distorting any of it, is a maximum degree of reality contact. It is a maximal way of being in contact with the world around us. I think that is the "enlightenment" end of the simulation continuum. I'm convinced from my psychological studies, however, that most of us are somewhere in the middle. We distort reality a good deal. Our consciousness/simulation is inaccurate in a large variety of aspects, but because they are ways in which everybody else's simulation in our culture is off, we don't know we are out of touch, unenlightened, and we reinforce each other for believing those particular distortions. We share a kind of cultural insanity, a kind of cultural distortion, and reinforce each other for it. The result is that, to a certain degree, we live in a dream world.

Again, I emphasize to a certain degree. There must be some minimal contact with the physical world, so that people do not get run down by trucks. And if you are going to be allowed to walk around loose, you have to have a certain minimal amount of contact with and skill at handling other people's social illusions. Otherwise you make them too nervous and they lock you up. But above those minimal requirements, we can live to a considerable degree in a dream world, in illusion.

Now I believe that this is, at least partially, what is meant by the Buddhist idea of samsara, or the Hindu idea of maya. The world is not unreal but because of flaws in our consciousness, our degree of contact with the real world around us is very limited. We live in illusion. The consequence of poor contact with the world around us is that we get in trouble. If my simulation of reality insists that there is a door in the solid wall

behind me me, and I go to walk through it, I'm going to crash into the wall. That is suffering! If your simulations of what other people are thinking and feeling are not good simulations, are not good representations, you are going to creat trouble. You are going to do things people don't like, and it is going to add up.

Another way of illustrating how we live in illusion is to quote Korzybski's well-known statement, "The map is not the territory." The audience at the conference at which this paper was originally presented had a map showing which functions of the conference were in certain buildings. It showed them how to get around. The dining hall was at a certain location on the map. When I take a bite of that spot on the map, however, it doesn't seem nourishing! The map is not the territory. Korzybski, however, did not go far enough. He failed to emphasize the psychological observation that while the map may not be the territory, most people prefer the map to the territory. I found it was far simpler to get from the dormitories to Galileo Hall on this map than it was when I tried it in physical reality. There was nothing in the way on the map, but when I went outside, there were several inconvenient buildings placed in the way!

The map is not the territory, but we have tremendous attachments to maps. One of our great blessings as human beings, and one of our great curses, is that we can simulate reality. We can come up with concepts, with internal maps, and we love it. Some of those maps are so satisfying. For scientists there are mathematically elegant maps. For scientists and other people there are maps that make us feel good emotionally. So we don't like to run across the fact that some maps don't fit reality. Many people, when they discover a lack of fit between their map and reality, will further block out reality in order to save their beloved map. That's what we call psychopathology. But, when this psychopathology is widely shared within a culture,

no one may notice it!

I have always thought of the Buddha as someone who advocated living in the territory instead of getting attached to the map--a very sensible man. Let me apply this same admonition to everything I have been saying to you. I have been giving you a map. It is false! Everything I have said to you is a concept, an idea. When pushed far enough, the map is wrong. Yet it is useful. Like any map, it can get you oriented in a certain direction: you can then walk over and actually look at certain kinds of territory, discover something in reality. So, be warned that everything I have said and everything I will continue to say is only pointing: do not take it too literally. It is a way of taking some of our scientific knowledge of consciousness and putting it in a useful form, but the words can never equal the reality.

#### What is Sanity?

This paper is concerned with questions of sanity. Given what I have said so far, there are two definitions of sanity. One is a culturally relative definition in which sanity is believing and reflecting, via your actions, the illusions that everyone else in your culture shares. You get social support for this sort of sanity: this is what most people are satisfied with. When life is rocky, when you suffer, it is not that there is anything wrong with your mind; it is somebody else's fault, it is those damn Republicrats in Washington who have been messing up the country. You look for solutions outside yourself. You project onto the world. You further distort your perception of things. But you have lots of company, lots of social reinforcement. Since we all like to belong, this kind of sanity, unfortunately, goes a long way. Alternatively, you blame yourself for not being normal, even though, from a more realistic point of view, the "normal" might be very sick.



There is a more absolute view of sanity implicit in what I have said, namely that the more you minimize your degree of distortion of what you are actually perceiving of the reality around you and of your own internal processes, the more sane you are getting. At the high end of the sanity continuum, the enlightenment end as opposed to the "endarkenment" end, you are maximally using the potentials that a human being can have. This is a trans-cultural definition of sanity.

Altered States:

Let me start applying these ideas to altered states. Altered states, to use the car analogy, are like switching from a car into an airplane or a boat, or some other vehicle. As another analogy, it is as if the car comes with a lot of extra parts, so you take away some of the currently used parts that give it its "car-ness," add some other parts, and transform it into another kind of vehicle. Now it does different kinds of things. It has different properties.

Talking about a state of consciousness refers to the fact that our minds are organized. There are recognizable patterns to its functioning. Let me ask this question: "Do you, dear reader, seriously believe that right now you are just dreaming that you are awake and reading this, and you are going to wake up in bed in a few minutes?" When I ask this at lectures, no one raises their hand. How do you know you are not dreaming? The way most people know is that they do a quick, Gestalt scan of the pattern in which their mind is operating and recognize that this is the pattern called waking. Not that consciousness is static: there is an enormous range of variation, but it is all following a kind of pattern that is called their ordinary state of consciousness, and it does not feel like the pattern that is called dreaming. There are other ways to make this test too, but that is the basic way--noticing a certain kind of pattern. After all, what is a car but a

certain functional pattern of parts, a state of the parts? If I put some tires in one spot, and a hood in another spot, and an engine in another spot, and a steering wheel in a fourth spot, we do not have a car. The parts are not related in the way that makes them a car. So when we talk about a state of consciousness, we are talking about certain basic human abilities that are organized in a certain pattern, and we can grasp the feel of that pattern. An altered state consists of changing the pattern. I've represented this idea diagrammatically in Figure 8. If you look at just those heavy lines in the Figure, not the little light lines, you will see I have put a lot of different shapes here to represent different kinds of human functions that are connected in a pattern. This is a kind of vaguely rectangular pattern, with stimuli coming in at one end. Now by looking at the light lines and ignoring the heavy lines, you will see another pattern stands out, representing the fact that the mind can be reorganized into a different kind of pattern. When a person is having a nocturnal dream, for example, he or she is not just more or less awake--there is a different style; there is a different kind of pattern to mental functioning. So an altered state of consciousness represents a recognizable and important change in the pattern of functioning of the mind.

Note that I am using "state" in a specialized sense. There is a more common use in which "state" simply means whatever is on your mind at the moment; but if you use it that way, the number of states of consciousness is infinite and the term has no descriptive value, it is synonymous with what is on your mind. When I use "state" and "altered state" I am talking about the drastic kinds of reorganizations of consciousness that might be found in dreaming, in hypnosis, as a result of meditation practices, as a result of psychedelic drugs, and as a result of extreme emotional states--drastic changes in which a lot of functions change. In some altered states

one may, for example, perceive in a new kind of pattern; one may see qualities of things not ordinarily seen; one may think in a different kind of logic; one may act in a different kind of way. New possibilities open up.

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The Appeal of Altered States:

Altered states of consciousness are extremely appealing to many people in our culture for many reasons. When a person becomes unhappy in our culture, when the road of life is full of bumps, the tendency is to blame other people. Of course it is partially true--there are a lot of nasty people out there who do make life difficult. But, if one really reflects, he begins to realize that a lot of the unhappiness each of us has in life comes out of our own consciousness. One is then faced with the problem of how to change one's own psychology? One route is to begin working on the ordinary state of consciousness and keep working, and working, and working, and working: that is the way a lot of people do it. It may take forever, and it may not even work. Now, along comes somebody who says, "Look, you can go into a new state of consciousness, Okoyogi Metatami (or something like that), and you can be enlightened tomorrow." We see weekend enlightenment intensives advertised in the paper! This has a lot of appeal for our culture, where we are hooked on quick results. So you get hypnotized, you smoke marijuana, you go to group growth processes that induce strong emotional states; and, at first, it looks as if it is successful. Suddenly you are different. Your mind works in a different kind of way. You see truths you never saw before. Some problems seem to disappear.

Some of this effect is due to the changed nature of the altered state, some is simply a contrast effect. At last you have gotten away from the

place, the state of consensus consciousness, that all your suffering is associated with and it is like taking a vacation. The contrast makes it look very good. I think things are a little more complicated than that, however. You may have noticed I have not used the term "higher" states of consciousness. One reason is that, as a scientist, I don't like to mix my value judgments with my descriptive statements. "Altered states" are intended to be descriptive terms--they are different, they are altered. Just as importantly, the question of whether some altered state is "higher" or "lower," whether it is more or less valuable, is not a simple question. More or less valuable for what? To illustrate, let's compare marijuana intoxication and ordinary consensus consciousness. Which one is superior for balancing your checkbook? Which is superior for visiting an art museum? The highness or value of any state of consciousness, consensus or altered, depends on the context that you want to use it in, and on the implicit and explicit values you have about what you want. A particular state of consciousness may be higher for some purposes, clearly lower for other purposes.

Let's look at some Buddhist ideas about altered states to further illustrate this, by drawing from Daniel Goleman's <sup>2</sup> (Tart, 1975b, Pp. 203-229) ordering of them. If you look at the stages of insight meditation or the Jhana stages in concentrative meditation, you find an ordering based on an explicit, long term goal--the elimination of suffering. If you did not have that particular goal in mind, would the ordering of those states of consciousness (as those stages seem to be) remain the same? Would one state necessarily be more valuable than another? I cannot answer those questions, but I can raise them as interesting things to think about. As I said earlier, I am not an expert on Buddhist psychology. But I want to register my

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(2). Tart, C. T. (Ed.), Transpersonal Psychologies. New York: Harper & Row, 1975b, Pp. 203-229.

impression that a Buddhist understanding of altered states of consciousness is limited. It is limited because there is a very strong goal-orientation toward achieving freedom from suffering through a certain route. This means that some aspects of the whole spectrum of human potentials, some ways in which consciousness can be organized, have received far more attention because they are considered to be instrumental and useful for achieving the goal, but others have not received very much attention since they are considered irrelevant to that goal.

Intelligent Use of Consciousness:

Let us consider an aspect of altered states to which I think Buddhism has much to contribute, the question of intelligently using a state of consciousness. Returning to our analogy of any state of consciousness, altered or consensus, as a vehicle, we still must come back to the psychology of the driver. If you take a wonderful, powerful vehicle and put a lousy driver in it, it will probably be wrecked in no time at all. If you take an old clunker, put it in the hands of an excellent driver, you can get some place in it. The fundamental motivation and attitude of the person creates results that are partially independent of the state of consciousness the person is in. You can be attached or non-attached to various degrees in hypnosis, or in an ordinary state, or in some emotional state, for instance. The degree of your attachment strongly affects what you can do with that state, and what the consequences of your actions are.

Consider the dimension of mindfulness, so important in Buddhism, your degree of self-consciousness of what you are doing. You can be lost in the particular things happening, or you can be very aware of exactly what you are feeling and doing. In various altered states you may be very mindful, or you may be very mindless. Considering how attachment and mindfulness

affect things, the fact that you are in some altered state of consciousness does not necessarily mean that you have achieved anything or lost anything. That is a separate question, but I do not think it is a totally separate question. The inherent qualities of various states of consciousness do interact with the attitude of the "driver." Rather than making blanket generalizations about "higher" and "lower" states of consciousness, we need a sophisticated approach. The same altered state could be lower, indeed disastrous, for an unintelligent, unmindful, attached person using it in unsuitable or inappropriate circumstances, while an intelligent, mindful, unattached person might use it quite skillfully to accomplish certain ends in the right circumstance.

Questions for the Future:

Let me conclude by talking about my long term goals. I think the alleviation of suffering is a primary goal, but I do not think it is enough. Most suffering is psychologically self-induced, and can be eliminated. But I am also curious. The human mind is extremely interesting! There are a lot of things to find out and new human potentials to develop. Given that, I have a number of long term goals for the development of a complete science of the human mind.

One of these goals is a thorough exploration of what states of consciousness are actually possible for people. Buddhist psychology has concentrated on a few kinds of states and not looked at many others. The same limitation is true for Western psychology. We do not know the full range of ways in which the mind can be reorganized.

As we gain knowledge and analyze it, we are going to come up with theories, maps, and concepts about the fundamental nature of the human mind. That is going to lead to a very interesting scientific task: we will be able to hypothesize states of consciousness that ought to be possible, and then see

if they can happen. We will find that human beings do not experience some of them even though, intellectually, we can put things together that way. Those are going to be some of the most interesting results of all, because it will tell us what the nature of being human is. The fact that we call ourselves human means that we have characteristics, we have limits, and finding out what those limits are is going to be very interesting and important. I am certain the possibilities are much greater than we imagine.

Then I think we need an enormous amount of research on what states of consciousness are best for certain tasks, certain life situations, and what states are not good for those kinds of things. We may some day be able to tell someone, "When you come for this meeting be in altered state number 171, but for God's sake don't come in altered state number 27, you will be driven psychotic in that particular state!" Then there are a lot of questions about the intelligent, mindful use of particular states: not only do we need to determine what situations various states are good for, but also how the "driver" is to be trained. How do you work on your attitude, motivation, skillfulness, so you can use any particular altered state with maximum skill and a minimum of stupidity?

Finally, some questions arise from altered states themselves, rather than from consensus consciousness. I mentioned earlier that, in some altered states, you seem to have new ways of perceiving reality. Some of these ways may actually be more illusory than real, but some of them may be more in tune with reality than ordinary, consensus consciousness perception. Further, people often report what seem to be new ways of thinking, new logics. Some of those may be pseudo-logics: there is nothing consistent or sensible about them. It is just an unfounded feeling of meaning. But some of these may be new logics, where the assumptions and rules are different, which allow new kinds of understandings of things that are not possible

in an ordinary state of consensus consciousness. Several years ago I proposed the establishment of state-specific sciences to explore these possibilities<sup>3</sup>(Tart, 1972). People would train themselves to enter specified altered states of consciousness and then apply basic scientific method (observation, theorizing, testing, prediction, and communicating with each other) to develop state-specific knowledge of these states. That is still a dream. The idea is still too far advanced for our culture because the predominant bias in Western culture is that our ordinary state of consciousness is the highest: it is a rational and natural state and all altered states are pathological. That is a very powerful bias. But we can evolve toward state-specific science, learning things that are state-specific. There is knowledge that can only be understood in certain states of consciousness. It will not translate into ordinary consciousness. Everybody here can probably ride a bicycle. Can anybody explain adequately how you ride a bicycle? Yet you know how. That is state-specific knowledge. It is a kind of knowledge encoded in a certain kind of bodily state, but it does not translate into the verbal predominance of our ordinary state. Some of the most valued knowledge, loosely called "spiritual understanding," is state-specific. So there are some very exciting future possibilities for us.

I want to end up by telling you a story. Once upon a time, in a place that was not so very far away from here, I was giving a lecture at a college on consciousness. At a certain point I reached in my jacket pockets and held up a screwdriver in one hand and an adjustable wrench in the other. Holding the screwdriver up higher, I asked, "How many people think the screwdriver is the superior tool?" About half the audience raised their hands; I held up the wrench and asked, "Now how many people think this adjustable

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(3) Tart, C. T., "States of consciousness and state-specific sciences," Science, 1972, 176, 1203-1210.



wrench is the superior tool?" The other half of the audience raised their hands; but then hands started to falter. People began to get the light. Superior to what? You can't say a wrench is superior to a screwdriver, or a screwdriver is superior to a wrench in any kind of absolute sense. It depends on what you want to do with it. Unfortunately, we are tool worshippers. We get a few tools given to us in life, in the course of enculturation, and we become tremendously attached to them. We worship them. That is attachment, and that is a great limitation. What is a craftsman? A craftsman is someone who comes in with a whole chest full of tools, picks up an appropriate tool at one part of the job and uses it, then puts it down and picks up the next appropriate tool.

A master craftsman uses the tool appropriate to the job skillfully, with mindfulness of the changing requirements of the job, and without attachment to his previous tools. For this analogy our minds are tools. There are a lot more tools our minds can become for dealing with various aspects of life and reality than we ordinarily imagine. If we can learn not to attach ourselves to particular tools but to find appropriate ones, to pick them up and put them down without attachment, and to practice skillful use, our possibilities as human beings will be very great.

I began with Maslow's statement, "If the only tool you have is a hammer, you tend to treat everything as if it were a nail." We have lots of tools, and reality contains many other things than nails. Let us learn how to use our tools.

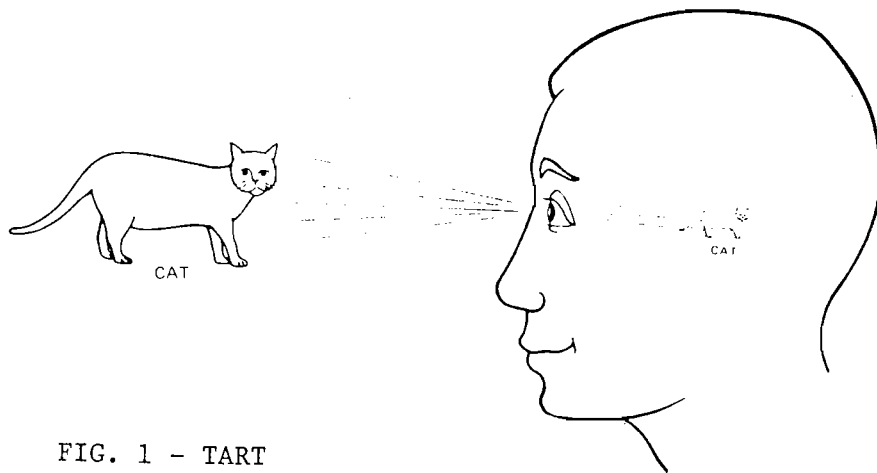


FIG. 1 - TART

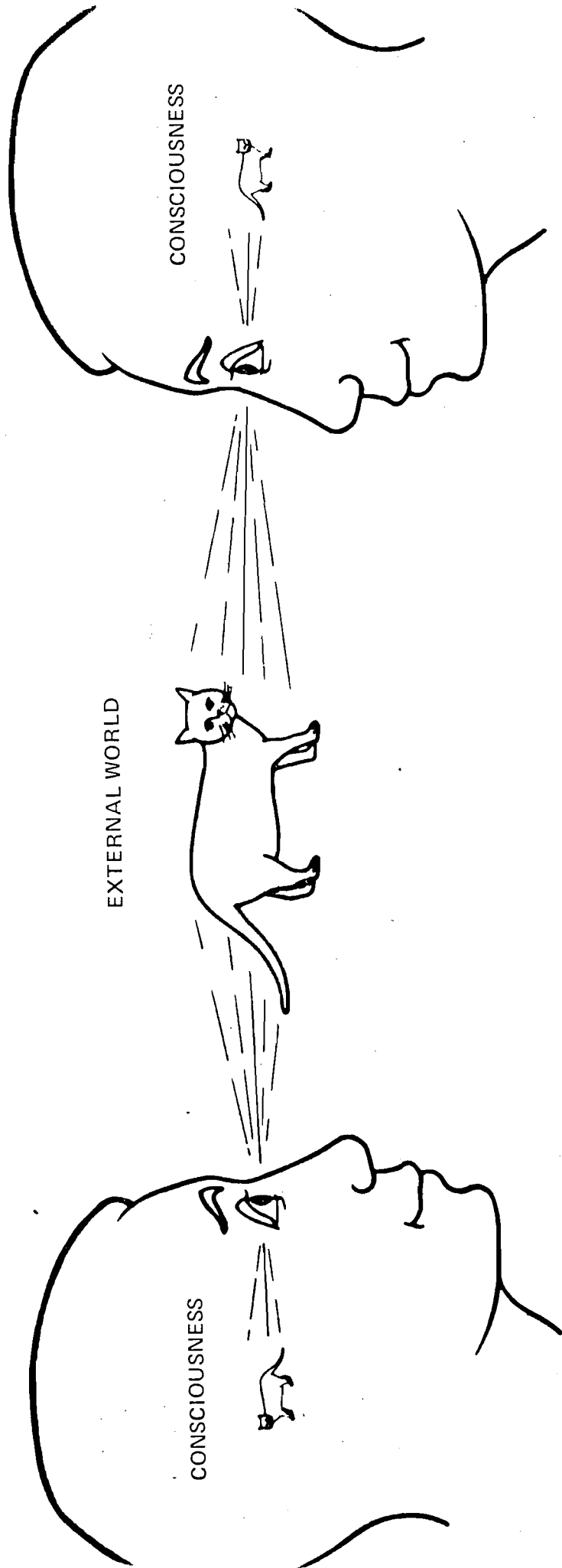


FIG. 2 - TART

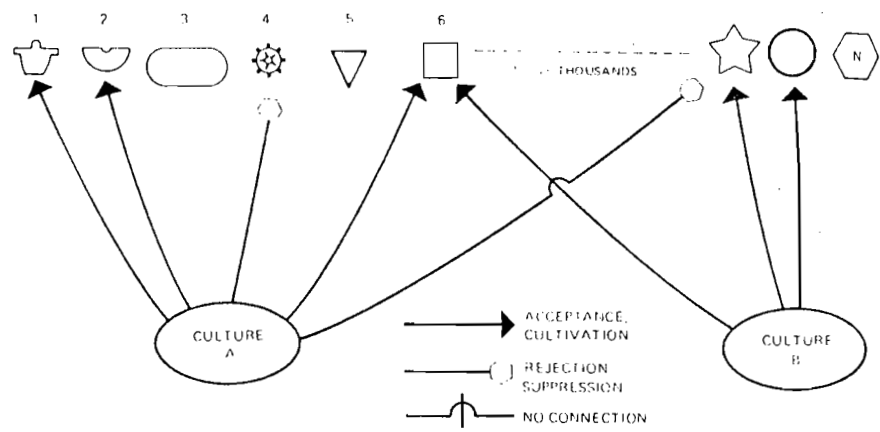


FIG. 3 - TART

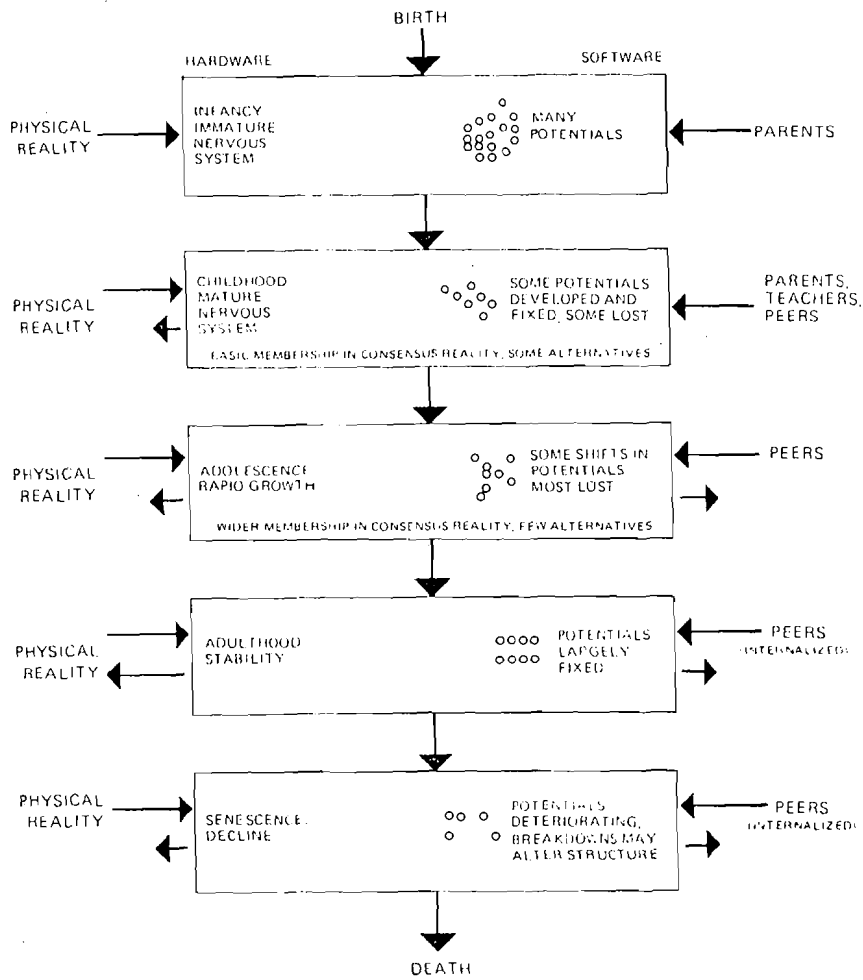


FIG. 4 - TART

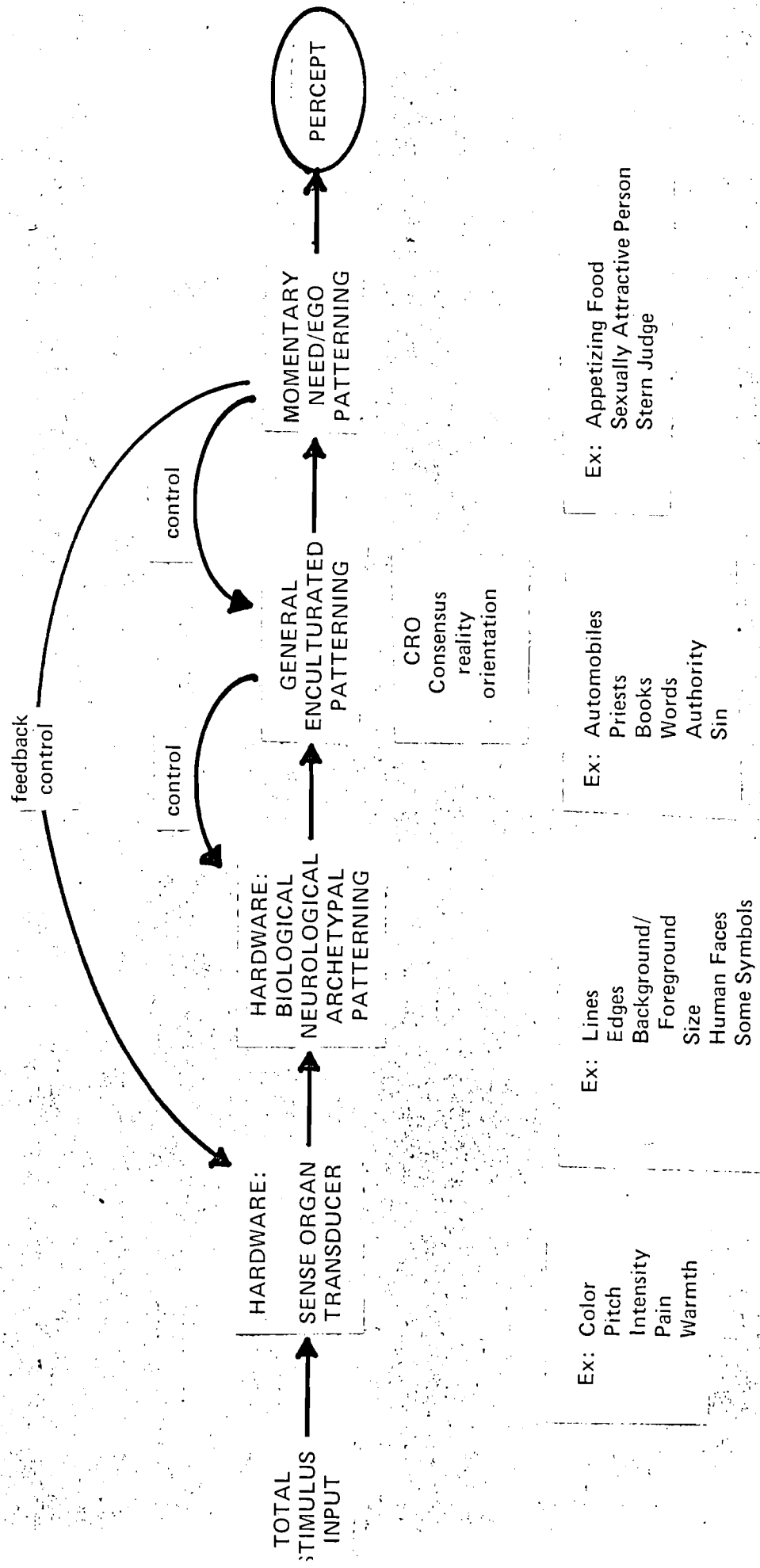


FIG. 5 - TART

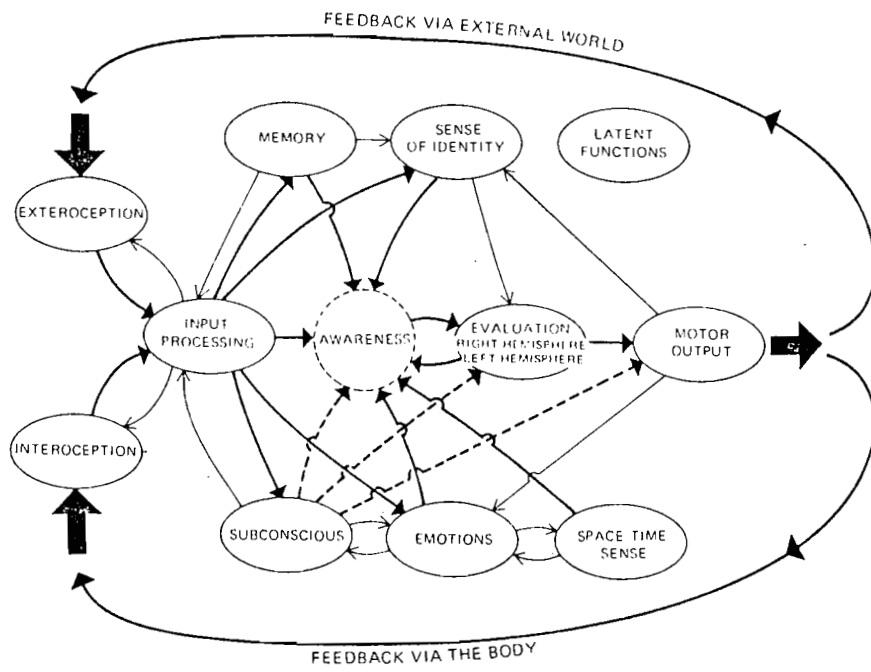


FIG. 6 - TART

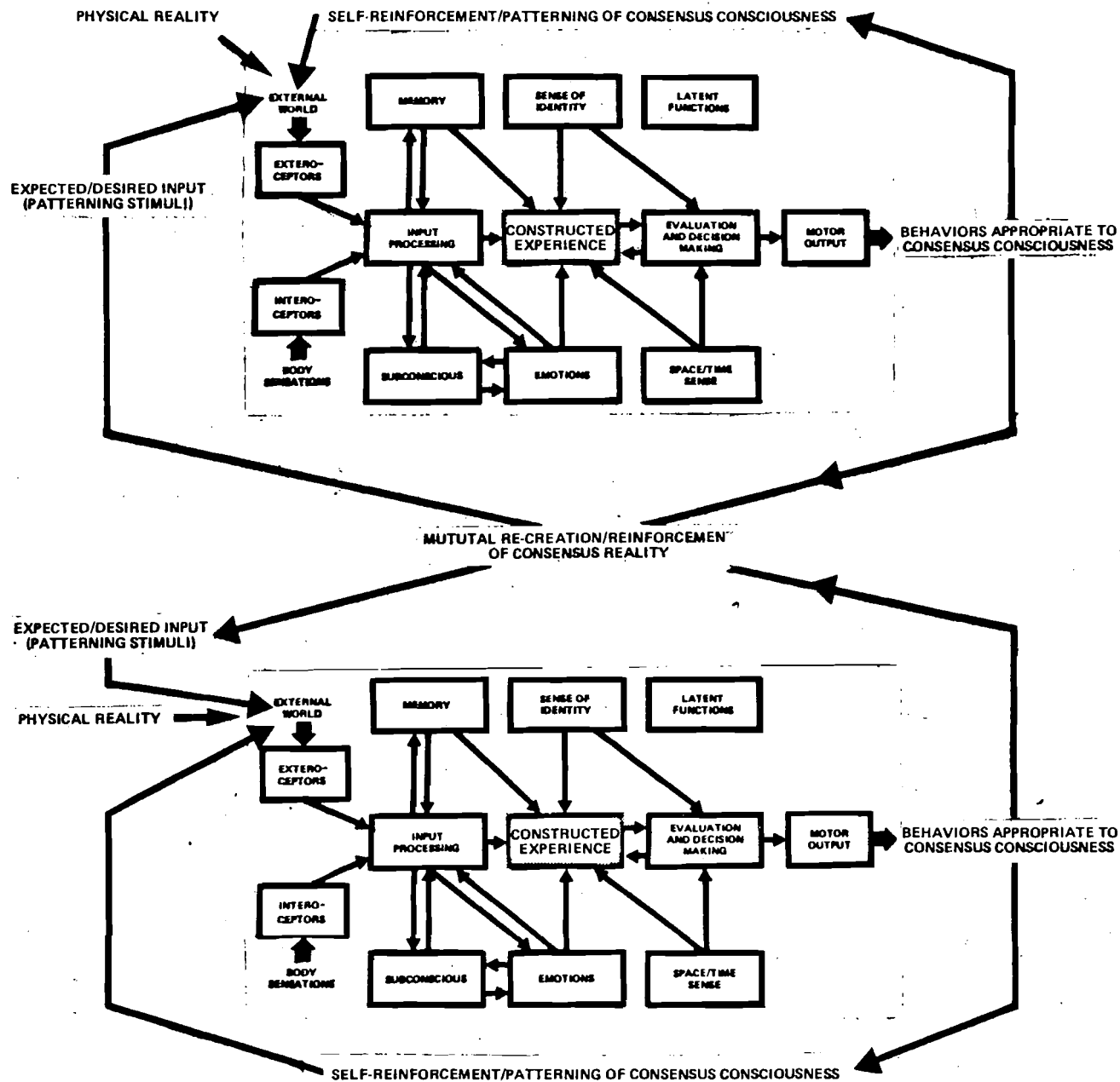


FIG 7 - TMLT



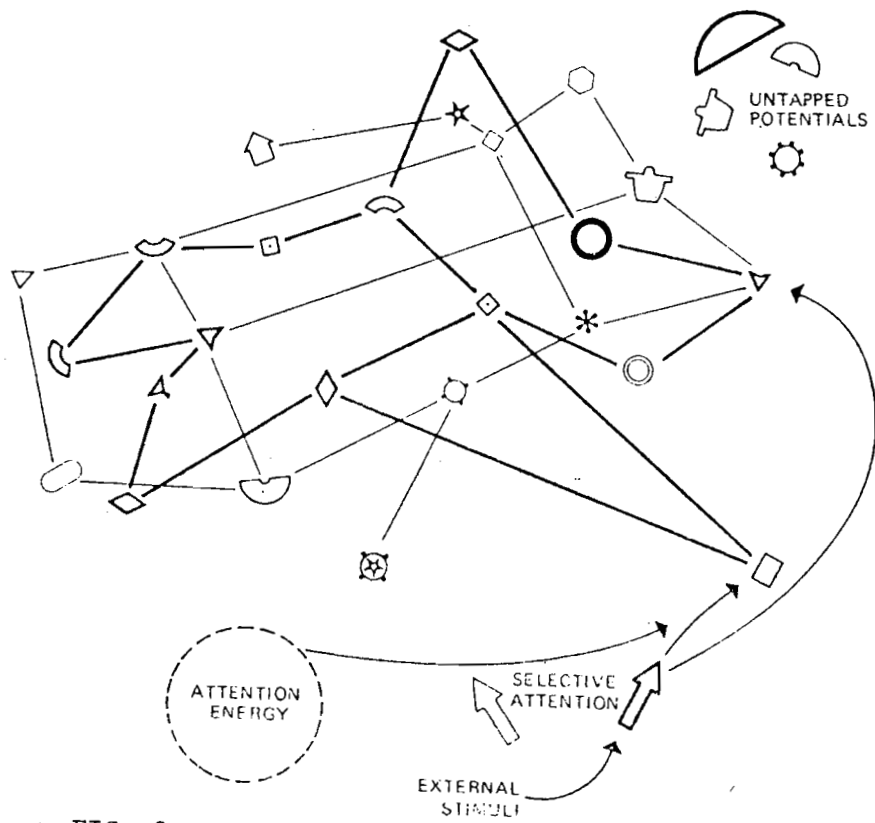


FIG. 8 - TART