

Reality from the Inside

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"Every time that the powers of the soul come into contact with created things, they receive the created images and likenesses from the created thing and absorb them. In this way arises the soul's knowledge of created things. Created things cannot come closer to the soul than this, and the soul can only approach created things by the voluntary reception of images. And it is through the presence of the image that the soul approaches the created world, for the image is a thing that the soul creates with her own powers. Does the soul want to know the nature of a stone--a horse--a man? She forms an image."

--Meister Eckhart

The medieval German mystic Meister Eckhart lived hundreds of years before the science of neurology was born. But it seems he had intuitively grasped one of the fundamental principles of the discipline: what we think of as reality is only a rendition of reality, created by the brain.

Our modern understanding of the brain's perceptual powers bears him out. Nothing enters consciousness whole. There is no direct, absolute experience with reality. All of the things that the mind perceives--all thoughts, feelings, hunches, memories, insights, desires and revelations--have been assembled piece by piece by the processing powers of the brain from the swirl of neural blips, sensory perceptions, and scattered cognitions dwelling in its structures and neural pathways.

The idea that our experience of reality-- all our experiences, for that matter--are only "second-hand" depictions of what may or may not be objectively real, raises some profound questions about the most basic truths of human existence and the neurological nature of spiritual experience. For example, our experiment with Tibetan meditators and Franciscan nuns showed that the events they considered spiritual were, in fact, the result of observable neurological activity. In a reductionist sense, this could support the argument that religious experience is only imagined neurologically; that God is physically "all in your mind." But an understanding of the way in which the brain and mind assemble and experience reality suggests a very different view.

Imagine, for instance, that you are the subject of a brain imaging study. As part of this study, you have been asked to eat a generous slice of homemade apple pie. As you enjoy the pie, the brain scans capture images of the neurological activity in the various processing areas of the brain where input from your senses is being turned into the specific neural perceptions that add up to the experience of eating the pie: olfactory areas register the delightful aroma of apples and cinnamon, visual areas perceive the sight of the golden brown crust, centers of touch perceive the complex mix of crunchy and gooey textures, and the rich, sweet, satisfying flavors are processed in the areas responsible for taste. The SPECT brain scan would show all this activity

in the same way that it revealed the brain activity of the Buddhists and the nuns, as blotches of bright colors on the scanner's computer screen. In a literal sense, the experience of eating the pie is all in your mind, but that doesn't mean the pie is not real, or that it is not delicious.

In this installment, we will consider the issue about what science can tell us about reality and about the world as we perceive it. The crucial issue here is that while brain imaging studies can help us to understand these experiences and how we come to know them, it does not necessarily give us information about what has caused them. This is a critical issue in terms of how we interpret our scientific findings. It also raises the issue as to how we can "know" what is really real.

One of the most ancient problems of philosophy is, "How do we know that the external world corresponds, at least partially, to what we experience in our mind?" The question of what is "really real" has been considered, with various answers, since the time of the Greek philosophers. The three most common criteria given for judging what is real are:

1. The subjective clear and vivid sense of reality.
2. The duration of reality through time.
3. Agreement of others as to what is real.

In point of fact, we believe that all three of these criteria determining what is real can be reduced to # 1 above -- the vivid sense of reality. For example, the sense of duration through time depends on the mind's ability to perceive time and causality. An alteration of function of the part of the brain responsible for our perception of time, for any reason, results in a significant distortion of the perception of time in a number of ways. As we have seen during AUB, there is no sense of time or duration while the person is in that state. Essentially, time vanishes for the subject in AUB. It becomes obvious that time and duration are not absolutes, and derive their perceived qualities from the mind's function. Hence it begs the question to derive the realness of baseline reality from one of time which is itself structured by the sense of time generated by the brain.

The third criterion of the realness, the cross subject (or other person) validation, again arises from begging the question. It has been said that, "reality is a collective hunch". Is reality a collective hunch or is it an individual hunch? The "people" who agree or disagree about things being real are themselves only images or representations within the perceptual field created by the mind.

These analyses could continue ad infinitum. Suffice it to say that we are satisfied that each and every criterion of the reality of entities collapses into the first, i.e. the vivid sense of reality. This is a very important point for much follows from it. The vivid sense of reality has been called many things by philosophers over the years. The stoics called it the phantasia catalyptica. Certain contemporary German philosophers call it Anwesenheit.. Whatever one wishes to call it, it is the compelling presence or sense of realness that makes us think that something is real.

If we are forced to conclude that reality is ultimately reducible to the vivid sense of reality, then what are we to make of states that appear to the individual as more real than baseline

reality, even when they are recalled from within baseline reality. If we take baseline reality as our point of reference, it appears that there are some states the reality of which appears to be inferior to baseline reality and some states the reality of which appears to be superior to that of baseline reality when these states are recalled in baseline reality. And this is the crucial point. We are not talking about various alternate phases of consciousness appearing real while one is experiencing them. We are talking about certain alternate phases of consciousness appearing more real than baseline reality when recalled from baseline reality. Thus, we almost always refer to dreams as "not as real" as baseline reality when we awake. Our everyday reality is much clearer and more real than dreams. The same is true of psychotic hallucinations after they are cured by medications. A person having emerged from such a psychotic state will recall it as psychotic often commenting "I was crazy then," or "Of course the voices or visions were not real."

The same cannot be said, however, of other alternate phases of consciousness which appear to be "more real" than baseline reality and are vividly described as such by experiencers after they return to baseline reality. This is true of a number of the states that we have described earlier in this book. It is certainly true of the experience of AUB. It is also true of Cosmic Consciousness, certain trance states, and the core near death experience. So real do these experiences appear when recalled in baseline reality that they have the ability to alter the way the experiencers live their lives. Studies have actually been performed on this topic with near death experiencers. Those who have had the core experience clearly behave more altruistically, more kindly, and with greater compassion towards other human beings than they showed before the experience. Furthermore, there is a marked tendency for near death experiencers not to fear death. And these changes do not persist for just a short period of time after the NDE, but seem to persist for years. Perhaps they will show themselves to persist throughout the experiencers' lives. Enough time has not passed for us to make that statement, but it appears that that is the direction in which the evidence is pointing.

Again, if it is true that all of the proposed criteria by which reality is judged to be real can be reduced, in the last analysis, to the vivid sense of reality, then we have no choice but to conclude that in some sense, these states are, in fact, more real than the baseline reality of our everyday lives. And the word "real" here is not used in a poetic or metaphorical sense. It is used in the same sense as in the utterance "this rock or this table is real."

The question of what is really real becomes much more complicated than it already seems when we use our understanding of the human mind and brain to help explain how we experience reality. If we agree that the brain is what we use to perceive reality, then we are left with the difficult task of somehow getting outside of our mind in order to prove what we perceive to be reality. After all, our brain is also part of the perceived reality and thus we need to somehow go beyond our brain so that we can approach the question of what is really real from an objective vantage point. Unfortunately, this is not so easy.

Many of the meditative philosophies use this concept to explain why their approach is important for reaching a greater reality. They argue that baseline reality is an illusion and that the true reality requires an excursion of the mind into a state beyond normal experience. We have already described in this chapter that each of these states are Primary Knowing States, but

all of them are still states of the mind and brain.

Although it seems that the Primary Knowing States, indeed, all of the states along the Unitary Continuum, may have their basis in neuroanatomy, neurophysiology, and the flux of neurotransmitters, it is equally true that baseline reality, which both the average person and the average scientist construe to be really real, is based on exactly the same parameters. Thus, one can never get at what is "really out there" without its being processed, one way or another, through the brain.

Many find it deeply disturbing that the experience of God, the sense of the absolute, the sense of mystery and beauty in the universe, the most profoundly moving experiences of which humans are capable, might be reducible to issues of neural tuning or even to specific patterns of neural blips on an oscilloscope. However, such an interpretation misses a few rather important points. First of all, our experience of baseline reality (e.g. of chairs, tables, love, hate), indeed of our whole physical and psychological environment can also be reduced to neural blips and fluxes of brain chemistry. So what criteria can we use to evaluate whether God, other hyperlucid unitary experiences, or our everyday world is more "real"? Can we use our subjective sense of the absolute certainty of the objective reality of our everyday world to establish that that world is "really real"?

We would maintain that there is no way to determine whether the various profound unitary states or baseline reality is more "real", i.e. which represents the ultimate objective reality without first making gratuitous and unsubstantiated assumptions. Clearly, baseline reality has some significant claim to being ultimate reality. However, AUB can be so compelling that it is difficult to overlook its sense of realness. This being the case, it is a foolish reductionism indeed that states that because profound unitary states can be understood in terms of neuropsychological processes, they are derivative from baseline reality. Indeed, the reverse argument could be made just as well. Neuropsychology can give no answer as to which state is more real, baseline reality or profound unitary states. We are reduced to saying that each is real in its own way and for its own adaptive ends. We will explore this issue more in the next chapter. For now, we must conceive of the brain as a machine which operates upon whatever it is that fundamental reality may be and produces at the very least two basic versions. One version is what we have called baseline reality and the other version is that of Absolute Unitary Being. Both perceptions are accompanied by a profound subjective certainty of their objective reality. Whatever is prior to the experience of absolute unity and the baseline reality of everyday life is in principle unknowable, since that which is in any way known must be translated, and in this sense transformed, by the brain.

