

Science and the Sources of Value

Abstract:

While values may be conditioned by known psychological techniques, such values are mechanical, relative, and may yield readily under stress. Mankind's deepest values have sprung from the direct experiences of the founders of various religions, experiences occurring in discrete altered states of consciousness (d-ASCs). However the subsequent adaptation of these experiences to cultures and religions-as-social-institutions makes them relatively ineffective unless there are technologies for experiential reaffirmation of such values.

Values formed from d-ASC experiences are extremely powerful, yet our scientific understanding of d-ASCs is still very fragmented and poor. To acquire an adequate understanding of d-ASCs and the "mystical" and value experiences resulting from them requires a large expansion of conventional research, but, even more importantly, it requires the development of state-specific sciences, the practice of scientific method by investigators who are experiencing the d-ASCs themselves. The development of such sciences will provide the groundwork of an adequate understanding that in turn can lead to practical implementation by creating deep value experiences such as the unity of life and an ecological ethic, values which will be powerful because they are based on deep personal experience rather than being shoulds that are taught externally. Practical problems of such implementation are also discussed.

Introduction

In this brief paper I shall discuss the nature of basic values, particularly those we consider "spiritual" or "religious" values, and argue both that the search for spiritual values is compatible with the essence of scientific method and that scientific method can be of great value in the pursuit of spiritual values. The approach I shall take is one I am beginning to call *transpersonal behaviorism*, a psychological approach that on the one hand recognizes the spiritual nature and potentialities of man while on the other hand balancing this with a realistic view of the conditioned, socialized, psychopathological nature of most of our behavior, a view that modern, psychological investigations of a behavioristic orientation has forced on us. That is, we do have great spiritual potentials that can be developed, but the psy-

chopathology of everyday life that we start from is very real and will not go away simply by deciding that we are "on the spiritual path."

Values and Experience

While in many ways values are taught to us in the enculturation process, it is also true that we personally accept and reject various values of the culture, and so have some responsibility in what our final values are. Our personal experience strongly affects our values. To illustrate, consider several common experiences. Most of us most of the time experience our consciousness as localized or located within our physical body (primarily our head, for Westerners); we experience ourselves as separate from the rest of life. Further, the world around us frequently does not make sense, events go opposite to the way we would like them to turn out, so we feel the need to control or conquer the world. Additionally, others around us seem selfish, and often harm and endanger us

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in order to gain things for themselves. Thus personal experience makes it easy to develop a prime value of "me first," where it is of the utmost importance to assure your own physical survival and ego gratification, to control the world around you, to distinguish your values from others' values.

Contrariwise, we have been told, primarily through our religious traditions, that all life is interconnected, that the universe is running according to a comprehensive divine plan, and that we have a place in it. But few manage to live by these values, as they do not fit most people's *direct, personal experience*. In general, many religious values are simply not very strong motivators for most people because they do not resonate with and get support from people's actual experience.

Where do these basic spiritual values come from? If we look back, we find that spiritual values arose because the founders of various religions had what are loosely termed "mystical experiences." Mystical experience is not a very useful term in today's scientific climate, and I would prefer to say that the founders of various religions entered into one or more discrete altered states of consciousness (d-ASCs) at various times (1, 5), and while in these d-ASCs had profoundly moving experiences which gave rise to the values and morality they later taught to others. But the spiritual values we were taught in our religious training are very watered down derivatives of the experiences of the various spiritual founders.

Deep values begin then with a religion's founder's mystical experience in a d-ASC. Space precludes discussion of the nature of d-ASCs here, but I have treated this at length in a recent publication (5). Suffice it to say that it is now clear that our ordinary state of consciousness is not a "natural" or "given" condition, but a semi-arbitrary *construction* brought about through the enculturation process. Through various techniques, the structures of our ordinary consciousness can sometimes be temporarily but radically rearranged into what I call a d-ASC, a different way of (1) perceiving reality, and (2) different "logics" for understanding and interacting with it. Some of the experiences in d-ASCs can be of immense emotional power and carry a conviction of great insight and truth with them; the intense seeking of such experiences through meditative techniques and psychedelic drugs today is a demonstration of this. These experiences can affect an individual's life profoundly, sometimes temporarily, sometimes for the rest of his or her life.

Let us consider three kinds of experiences that sometimes happen in d-ASCs, relevant to the everyday experiences we discussed above of feeling separate from other people, feeling a need to control and conquer the world, and feeling a need to protect yourself and put your own interest first.

One of these experiences can be called the *unity experience*, where there is a direct experience of being connected with or at one with all other life (and/or the universe as a whole). I stress that this is a *direct* experience, not simply an intellectual concept, and so carries great power. An intrinsic value consequence of this is a feeling of love and beneficence toward other humans and other creatures, a love ethos based on experience, not on being told that one *should* love others.

A second experience frequently occurring is a feeling of the inherent harmony or rightness of the universe, a transcendence of apparent conflicts and dichotomies and a feeling that the universe is in harmony or running according to some divine plan. A natural value consequence of this is what we might call an "ecology ethic," a desire to understand and work with the natural flow of a universe that is basically all right, rather than a need to "conquer" a hostile or disorderly universe.

A third experience occurring in some d-ASCs is what has been called an out-of-the-body experience (OOBE), a feeling of perceiving the world from some location other than where one's physical body is, while simultaneously feeling that one's consciousness is functioning in an apparently normal and rational manner. The OOBE can be as or more "real" than ordinary experience. The experiencer often runs through a series of logical arguments to "prove" that his ongoing OOBE is impossible, but it keeps right on happening. Our orthodox, scientific belief is that OOBEs must be interpreted as some kind of aberration rather than being literally true. Although there is now some good experimental evidence, such as my psychophysiological studies of OOBEs (1, 2, 7), to suggest we take a literal interpretation as a useful hypothesis, our concern here is not with the explanation of the experience, but with the fact that it almost invariably convinces the experiencer that his consciousness will survive physical death because his consciousness is separate from his body. This results in a profound change in values, for the ego does not need to be so tremendously protected when this life is seen as one episode in a longer series.

The founder of a religion, then, has various mystical experiences, perhaps of the three sorts mentioned above. Like any human being, he usually does not rest content with the pure experience, but, in various ways, conceptualizes it. I have shown this and subsequent developments in overview in Figure 1. The second step of the value formation process is a translation process, where, taking into account the time, the place, and the people, the culture he is attempting to communicate to, the founder teaches various things about the truth he feels he has experienced. There is then a further translation and adaptation to the needs of the time by the founder's followers, a process that may go on for generations. I have shown a third step of long term social adaptation to indicate that for most of us the founders of the spiritual traditions who gave rise to many basic social values are many, many generations removed from our lifetime.

It is important to note that the translation by the religion's founder, the immediate translation and adaptation by his followers, and the long term social adaptation are all done by people who have been subjected to various degrees of social conditioning. This is the behavioristic part of the transpersonal behaviorism view. Each of us has been taught to perceive, to think, and to behave in certain conditioned ways, and, just as importantly, to automatically *not* perceive, think, and behave in certain ways. As a system for understanding and transmission of information, each of us is flawed. However, we seldom sense our limitations and flaws because

Please Note: This is a corrected version of Figure 1, page 27.

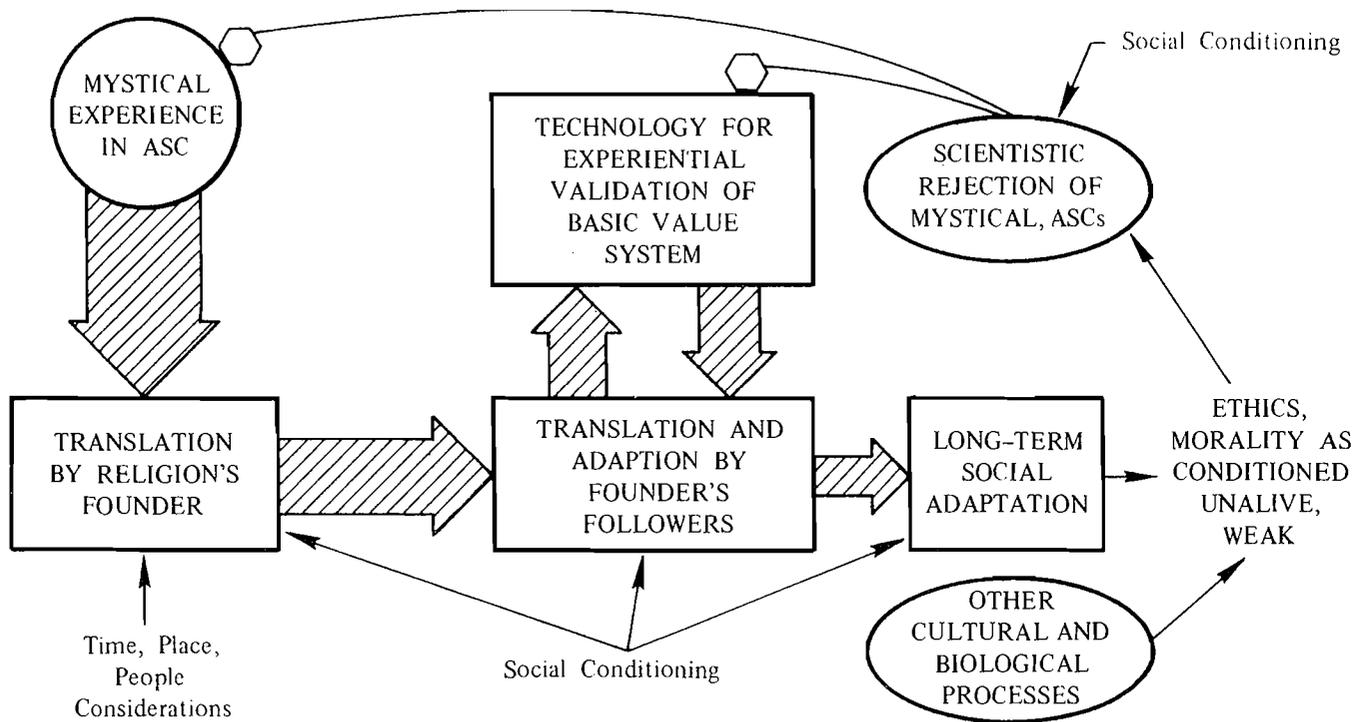


Figure 1: Historical and psychological development of basic religious values.

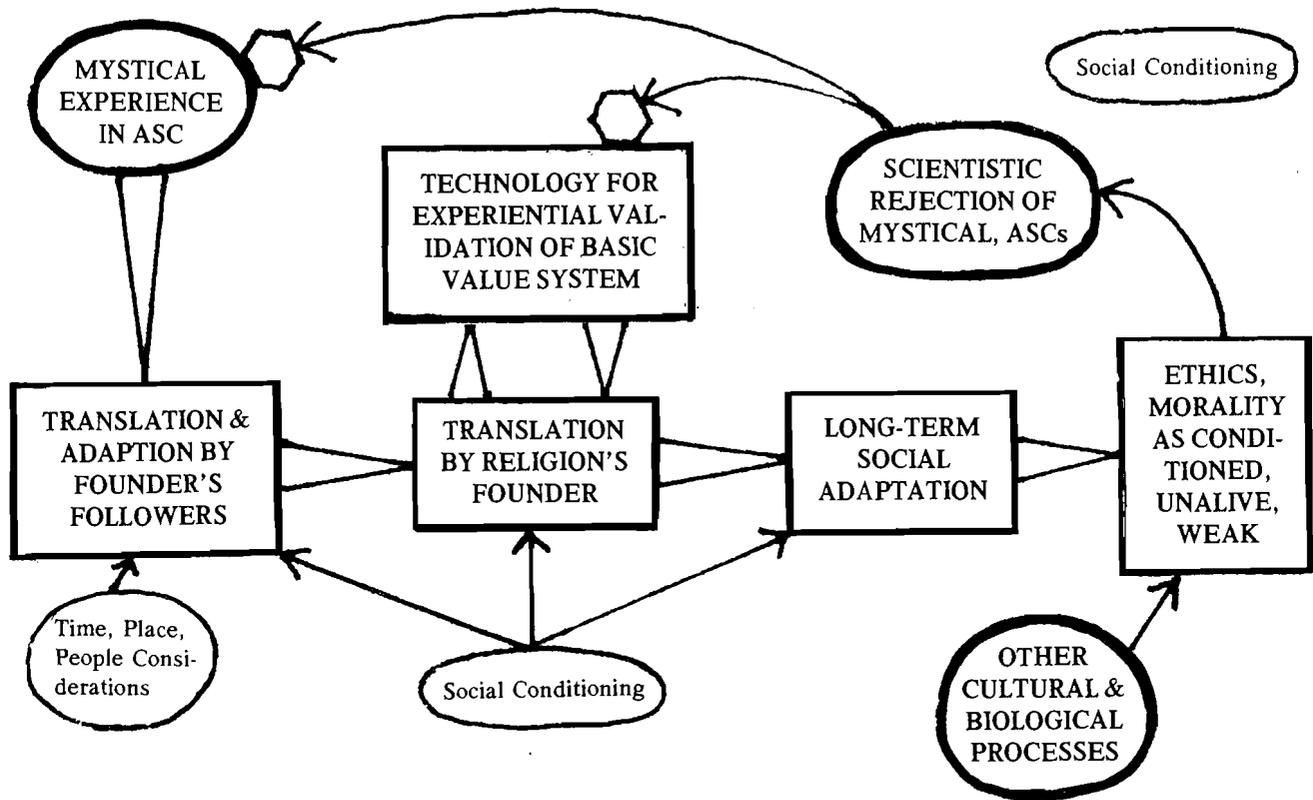


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part of the enculturation process in any culture is to make its members feel that they are intelligent, noble, etc., not limited and flawed. The founder had his prejudices, and all his followers did too, but, by and large, these are (to members of the culture) hidden prejudices. Thus, regardless of whatever inherent validity or usefulness the original experiences of the religion's founder had, the end product we see much later on has been subjected to a great deal of distortion in ways that we are now beginning to understand through the investigations of psychology, social psychology, sociology, anthropology, etc.

I emphasized at the beginning of this paper that values must resonate with one's personal experience if they are to be dominant under stress. For any spiritual values to remain really vital, the traditions started by the founder and his immediate followers must not only pass on the conceptual and value system based on the original d-ASC experience, but, as much as possible, they must pass on a technology for *experiential validation* of the basic value system, methods whereby people can, to at least some degree, have experiences like that of the religion's founder. Thus we may have specialized techniques like prayer, meditation, ecstatic dancing, spiritual teaching, etc., as well as the experiential consequences which should follow in a general way from living the system's values, which are designed to put *life* into the spiritual teaching and its values. We shall not consider the question at this point as to whether this technology provides a "scientific" validation of the spiritual insights, but merely note that it provides experiential and emotional life for the teachings.

The Current Value Situation

At the extreme right of Figure 1, I have shown our present situation, namely that we have an ethic, a morality that for most of us is not really alive as it was for the original founder and his followers. Rather we have the long term social adaptation of various spiritual values injected into our culture a long time ago, and modified by other cultural and biological processes, such as biological survival needs, needs for social order and predictability, etc. In our Western culture today, the values most of us have are *concepts* that were taught to us, do's and don'ts that we were told to do or not to do. Insofar as the socialization process was effective, these values were conditioned in us, they were tied in with experiences of reward and punishment in our early childhood that gives them a certain emotional power. But these are behavioristically shaped values, these are mechanical values imposed on us by others. I am not speaking of "man" in the abstract now, I am speaking of you and me, and I believe that the personal recognition that this is the case for each one of us is crucial for the adequate development of a useful scientific approach to values, unpleasant as it may be. To put it in extreme form, our "noble" reasons for being interested in these kinds of areas may be quite mechanical, we really had no choice, given the way our personalities were shaped. Falsifying this statement, being genuinely concerned for others as a result of our own experiences, rather than from what we have been conditioned to believe is good, is a central personal and scientific concern.

Science and Mystical Experience

Figure 1 also sketches the place of current day science in this value transmission process. In many ways, scientists are products of their cultures: thus the conditioned ethics and morality that is the mode of our culture today form the basis of most scientists' personal value systems, and thus of science as a whole. These values come not only from spiritual values of religious founders but from the long term adaptations of other cultural and biological processes shaping our current values. These have included a struggle against and rejection of orthodox religion in our culture, and the construction of the physicalistic explanatory systems of the world which dismisses the d-ASC experiences that originally lay behind our basic values as "irrational," "psychotic," "nonsensical," or, the least perjorative, as simply being "non-scientific" and so not to be looked at. I have labeled this process "scientific" rejection of d-ASC experience and of the technology for experiential validation of the values arising from such experiences. I deliberately say scientific rather than scientific for I believe this rejection has been more a phenomenon of cultural forces rather than anything inherent in scientific methodology *per se*.

This leaves us in quite a predicament. Many of our highest cultural values came out of experiences in d-ASCs, but were subjected to great dilution and distortion in the long term social adaptation processes, such that most of us have rather weak, unalive values that were taught us or conditioned in us, rather than having real experiential bases. Thus they easily fall before the press of other needs. Orthodox science, as developed so far, has compounded the plight by rejecting the experiences in d-ASCs that gave rise to these deep values in the first place. Thus the personal or professional concern of scientists for values is in many ways flawed by being based on unalive, mechanical values. What are we to do?

Alternatives

Given the situation, there are three major alternatives as to what we can do.

First, we can basically continue in the scientific rejection of d-ASCs and "mystical experiences" and hope that some sort of "rational" humanism will give us a final set of values that everyone will "rationally" accept. I shall not say much about this as I don't think it's a feasible alternative, even though many scientists will attempt to take it. While pretending to be rational, it cloaks a lot of hidden assumptions and cultural conditionings which are of the same sort that have put the world in the mess it is in now, so it won't really work in the long run. Further, it ignores the fact that more and more of our brightest people, young and old, are turning to meditation, psychedelic drugs, and other ways of directly experiencing d-ASCs and the mystical, and as long as the "official" scientific attitude denigrates these experiences all we do is contribute to this polarization which is already such a destructive force in our culture.

Second, on a personal level you can pick one of the world's spiritual systems, decide you're going to believe in it and give it a try, and try to inhibit your doubts and

scientific training so you can go at it wholeheartedly. This has a very real advantage of possibly putting you in a working relationship with a technology for producing d-ASC experiences that may produce very profound effects. Given the historical distortions of spiritual teachings, however, the effects may no longer be desirable. Insofar as some spiritually evolved human beings may be alive today and working with us near the beginning of the process sketched in Figure 1, however, much may be gained personally from this.

Unfortunately, we *are* educated, Western scientists, and we cannot very readily inhibit our scientific training, or try to completely isolate our scientific training from the rest of our life. I believe that any kind of tactic which involves rigid separation of different parts of one's life and knowledge is inherently pathological. Nor does this second alternative necessarily contribute to the problem of lessening the polarization between science and the spiritual that is already so much with us. There is much to be said for finding a spiritual person or system and accepting them or it as a teacher and making a wholehearted effort at it, and it might even be a necessary part of the eventual training of scientists who have to function in this area, but as a long term solution I do not think we can polarize science and the spiritual so rigidly.

This brings us to the third alternative, the one I favor, namely to give priority to developing a genuine, comprehensive scientific understanding of the nature of d-ASCs and the kind of phenomena that happen in them. Our present level of knowledge in this area is very chaotic and contains much nonsense masquerading as data. While I have attempted elsewhere (5) to come up with a conceptual framework that would start integrating this data, we are still a long, long way from comprehensive knowledge. Yet we badly need it. How can we really decide whether it is useful to develop and refine the technology to promote something like the unitive experience when we don't really know much at all about the kind of states it takes place in or anything in detail about its consequences?

The scientific study of d-ASCs has to proceed along two lines. One is a continuation of the kind of research we are starting to do now, where an investigator in an ordinary (for his culture) state of consciousness (consensus consciousness) makes observations of the behavior and reports of people in d-ASCs, theorizes about them, tests his theories, etc. The other effort is the development of what I have called *state-specific sciences* (3, 5, 6). Much of the most interesting and important data about d-ASCs consists of what we might call state-specific knowledge, knowledge which can only be adequately experienced and understood *while one is in that d-ASC*, where one's perceptions, logics, memory functionings, etc. are "tuned" in a unique way to understand certain things. As a common illustration, high levels of sexual excitement constitute a d-ASC. If you try to understand in your ordinary state right now *exactly* what an orgasm is all about, and then recall the question the next time you are highly sexually aroused and experiencing an orgasm, you will have an immediate demonstration of the nature of state-specific knowledge.

To develop state-specific sciences we must train scientists to function stably in particular d-ASCs and

then apply scientific method to their own and others' experiences in those d-ASCs. They must make observations, theorize about them, make predictions and test them, and communicate all these processes with colleagues who also can function in that d-ASC so they can test, validate, invalidate, and expand the original investigator's observations and theories. It is going to be a long and difficult process, requiring us to deal with things like intense emotional states that scientists have deliberately avoided, but the very fact that there will be so many difficulties in developing adequate scientific understanding of d-ASCs is the reverse side of the coin that makes the experiences in d-ASCs such incredibly powerful givers of values.

I believe the historical identification of scientific method with a philosophical preference for physicalism, an assumption that the ultimate and valued explanatory entities are physical in nature, has kept us from making a serious effort to apply the magnificent tool of scientific method to psychological experience in general and d-ASC experience in particular. Admittedly it is much easier to reach social agreement on whether a meter in one's apparatus reads 50 milliamperes or 55 milliamperes than to agree on whether my sense of identity feels more localized in some part of my body than your's does, but the fact that physical research has been easier does not really allow us to then call physical explanations the ultimate explanations and ignore psychological experience.

As I understand basic scientific method, it starts from a certain kind of humility, where you recognize that, in isolation, you may be flawed as an observer and thinker. But, by committing yourself not only to try to constantly improve your observational powers and conceptualizing processes *but also to communicate the details of observations and conceptualizations to colleagues*, who (sometimes) have different flaws, different blind spots, we create a social system, science, whereby we compensate for each other's errors and expand each other's abilities.

Given this basic understanding of science, detailed elsewhere (3, 5, 6), it does not matter in principle whether our basic data are external physical observations or internal experiences. In our ordinary state or in a d-ASC, we can observe and try to improve our methods of observation, we can theorize, conceptualize about the meanings of our observations and test the consequences of them, and we can communicate the process to our colleagues. If we do this under the temporary but radical restructuring of our perceptions and cognitive processes that we call a particular d-ASC, then we are practicing a state-specific science.

Thus we can develop a scientific understanding of various d-ASCs from the "inside," as it were, and of the kinds of experiences in these states that lead to our deepest values.

Practical Application

The above recommendations are very good in the abstract: it never hurts to call for more research and fuller understanding. But we are not operating in a vacuum but in a world that is rapidly deteriorating and where civilization may collapse, not simply through economic factors but because of a lack of shared values that would enable us to put cooperation ahead of separatist, individualistic values. We have a real practical question then of how do we use the knowledge we will gain about d-ASCs to guide people into various d-ASC experiences that induce the values that lead to cooperation.

It is very easy to quickly come up with a grand scheme that says we need various kinds of training centers for every N number of people, and that at these training centers people would receive basic psychotherapy to eliminate the major neurotic flaws in their personality and then be taught to achieve, through the technology we would develop, various d-ASCs that would promote the unitive experience and other kinds of valuable value experiences. But innumerable questions remain before something like this becomes practical. How much in depth knowledge of d-ASCs and the long term effects of experiences in them do we have to have before we begin such application, versus the very real pressure that if a sufficient number of people do not have these kinds of values above all else, there may be no world left to continue our investigations in? Remember, too, that we already have state-specific technologies (6), techniques for inducing various d-ASCs and manipulating people's experiences in order to validate a particular belief system. How do we prevent this grand scheme from turning into one more set of techniques for manipulating people into values that someone else thinks are good for them? How do we get world leaders to have these kinds of experiences? How do we get people to support world leaders who wish to promote these experiences? And, on a more immediate level for us, how do we overcome our own, thoroughly conditioned biases, much less those of our colleagues, that say there is only one normal, "rational" state, and all d-ASCs are dangerous and insane?

I leave you with these questions.

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