

Editorial

A basic human and religious question is: "Who am I?" In objective language: "What is a man?"

"Anthropology," the science of man, is a term we are familiar with as denoting the study of man's physical and cultural characteristics and history. As a modern science giving a naturalistic description and theory about mankind, anthropology is only about a century old. It is essentially an interdisciplinary applied science, applying geology, geography, genetics, biology, the psychosocial sciences, linguistics, archaeology, history, and other disciplines toward a comprehensive understanding of the phenomenon of man.

We are less familiar with what Webster describes under "anthropology, 2" as "religious teaching about the origin, nature, and destiny of man from the perspective of his relation to God." These theological anthropologies may deal with man's freedom, finitude, sin, anxiety, and deliverance. But for all those of us who as we mature start wondering who we are, where we are, what is our meaning, purpose, duty, destiny, and hope, we are searching for a religious anthropology.

Human infants and our animal cousins and forebears are of such natures that they do not ask such questions as "Who am I?" or "Why am I?" or "Where am I going?" Their nature, meaning, purposes, and goals are established by grace of inherited and unconsciously formed patterns of behaving so as to maintain a program of life. But during the past million years man evolved a brain that could operate with symbols representing his own nature and the nature of the world so that man could predict or envision future states of this system, of his potential destiny. With the help of the evolving symbols of language, we can understand how man's memory, and hence his capacity to predict future states, was enlarged from the narrow scope of personal experience to the larger scope of the events of the lifetime of a society and culture. As Korzybsky has reminded us, man is a time-binding animal.

With this extended capacity to remember and to predict, we can understand how man gradually became more and more aware of the possibilities of making choices so as to avoid the dire consequences which memory revealed as sometimes proceeding from the untutored natural and "instinctive" responses to situations in the world. The

automatic and largely genetically prescribed response patterns of animal life gradually were overlaid in our ancestors by a new way of setting the norms and patterns for the art of living. *Homo sapiens* more and more hesitated prior to responding, hesitated to contemplate, to remember that there is more than one way to respond to a predicament, and that some ways have had or may have better consequences than others. This expansion of memory, this enrichment of the capacity to imagine various possible futures gave man the capacity or freedom to choose. He became aware of multiple possibilities and of his capacity to select the one that seemed best.

This enrichment of individual man's memory with the symbolically and linguistically transmitted memories of his family and tribe was the beginning of a new kind of evolution in the world, cultural evolution, which, as Sir Julian Huxley years ago pointed out, is much more rapid than evolution by changing the genotype or genetic store of biological information—the stored wisdom that informs the basic structural and behavioral patterns of all biological organisms. The information stored in the brains of people in a society in the form of cultural traditions (communicable by languages and other symbols) could be revised (mutated) for many matters within a split second after new evidence reaches the eyes or ears of the people involved. It is even possible to change the attitudes of millions of people very rapidly.

An inevitable consequence of man's acquiring the capacity for making his own choices to guide his evolution and destiny is anxiety. It is impossible to have a mechanism such as a sensitive human brain—with its heritage of personal and cultural memories available for instant recall to the field of awareness and projectible by either an unconscious or conscious logic into a vision of the future—without risking fears of the future: anxiety. Perchance to dream nightmares—aye, there's the rub!

Some of us have suggested that this natural-science anthropological interpretation of man's anxieties, guilts, and fears is the natural science equivalent for the doctrine of original sin in the Christian theologian's anthropology. Once man has eaten fruit from the tree of knowledge of good and evil, he is inescapably conscious of the errors and terrors that result from the inadequacy of his choices. The only way he can avoid being aware of it is to go back to the very dim-witted state of his ancestors, whose limited brains could not sufficiently organize memories and project future consequences so that they could neither

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make conscious choices nor experience the forebodings of anxiety and guilt to any considerable extent.

Fortunately, in some ways at least, many people are still largely this way today. They fear not for the morrow, even though they or their fellow citizens have already made choices and are doing things that others see are disastrous—polluting the waters, consuming nonrenewable resources, overpopulating an already overcrowded planet, creating tensions leading to dangers of nuclear holocausts, or mistreating spouses and children leading to dangers of disrupted families and societies, and so on. Some who are at least partly aware of such dire dangers are led to try to reduce their brain's capacities to remember and to project by such chemicals as alcohol. Even without alcohol or drugs, sensitive brains are built to find internal ways to shield themselves from being overwhelmed by facing present and future horrors. The mechanisms of schizophrenia, internal (genetically and neurologically operated) cutting of certain associations in the brain, prevent certain realities from registering fearful prospects. It is no accident that prefrontal lobotomies were taken up as a surgical way to relief from overanxiety. But the cure turns out to be in the end debilitating, since without the capacity to mull over, to forecast, and to make choices we are no longer fully human. In some ways, I say, our animal cousins, who are not yet able to leave the anxiety-free Garden of Eden, or our even more distant cousins, the lilies of the field, are fortunate—for they are not anxious about tomorrow (even though we now know that they do toil and spin).

Let us examine why we are—by our capacities to be consciously active in choices to determine our destiny—inexorably tainted with “original sin” (with limitations on making right choices) and hence liable to feelings of anxiety and guilt. To put it briefly, we may state it in language of one brand of theological anthropology: when God created man, man was made in part a cocreator. *Homo sapiens* began consciously to make destiny-determining choices. These provided changes (mutations) of behavior that were necessary for evolution, for the advancement of life. Since such choices require a memory and a prediction, and since man has to be aware of consequences, he necessarily must have a vision of the goods and the evils anticipated as a result of his choices. Now, if all his choices were in fact completely right, such that only good things would result, there would be no problem. Men would be saints or gods.

But, as biblical and scientific anthropology would agree, completely

sinless or errorless choices are impossible for men. A scientific anthropology can today make quite clear why this is so. Human projections of future consequences and hence human choices are based on a very finite or limited amount of information or wisdom. Hence, man's choices are very imperfect choices. He can make choices that at best seem good at the moment. Man's brain operates with a rough symbolic map of his own nature and goals, and of the world about him (boundary conditions), and also operates with an oversimplified logic or law of how to predict future states of that system from the data in his current symbolic map. But it is well known why such an oversimplified predicting machine or computer will inexorably fail to predict very much very far into the future. Man's internal symbolic (neurological) map of himself and his world can at best represent only an infinitesimal portion of the totality of the factors that operate to determine human destiny. Man is not a god who knows all. Likewise, man's logic (his computational formulas—both conscious and unconscious) is at best only a rough approximation of what actually is happening. Recent mathematics and physics (and their applications to understanding how our brains as well as our fabricated computers perceive and predict) clearly demonstrate the validity of the doctrine of "original sin," at least if that doctrine denotes man's inherent limitations to make right predictions and hence right choices.

A moment's reflection will serve to remind us that man's aspiring unto godlike choices and determinations is in reality simply a transposal of the random-mutation-and-natural-selection processes of evolution onto a new level of rapidity. All the necessary errors and suffering of essentially random trials are still an intrinsic part of this new level of operation. The long-range consequences of man's choices, when not predictable (and that is usually the case), are, by definition, random. Man is still a creature who does his best to provide multiple variations for natural selection.

We cannot enter here into a scientific or religious anthropology of hope and redemption—that is for another time. But, lest there be readers who would be discouraged by the combined realism of both a scientific and religious anthropology on man's intrinsic finitude and sinfulness, let me assure readers of *Zygon* that I believe we have valid scientific as well as religious doctrines concerning salvation and hope. Our future religious anthropology or doctrine of man will owe much to academic anthropology.

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