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ROMANCE IN ANTHROPOLOGY

THE humble—or not so humble—layman who enjoys a natural suspicion of most specialists—and especially of those specialists whose pronouncements have far-reaching general consequences for all human beings—may be greatly tempted to do some unseemly crowing over present confusion in the science of anthropology. It is not only that all the anthropological experts, or practically all of them, were fooled by the Piltdown hoax. This was amusing, but not serious. We might even say that every science, and surely a science that is very young, like the science of anthropology, is entitled to a reasonable amount of confusion. But not even a very young science can be permitted to indulge itself in foolishness, and this is what anthropology now seems guilty of. For example, the impressive volumes of the most famous authorities on human evolution contain expressions like the "Piltdown Race," and from this supposed division of ancient mankind proceed to large hypotheses concerning the evolution of the human species.

It now appears, not only from the embarrassments resulting from exposure of the Piltdown hoax, but from other sources as well, that far too much of modern anthropological theory has been built upon special pleading. The anxieties of the early Darwinists to "prove" the descent of man from some species of ape led them to facile assumptions, selective arguments, grand generalizations, and even a bit of pious distortion. In the nineteenth century, scientists such as Thomas Huxley obviously felt that a blow struck for the ape-origin theory of human evolution was a blow for Science and Truth. Huxley's rhetoric was impressive: "Whatever system of organs may be studied, the comparison of their modifications in the ape series leads to one and the same result—that the structural differences which separate man from the gorilla and chimpanzee are not as great as those which separate the gorilla from the lower apes." Darwin had said: "Man is derived from some member of the Simiidæ," and Huxley, his great champion, echoed the claim, even to distorting the posture of both apes and man in his anatomical drawing, to make apes look a little more like men, and men a little more like apes (see page 7 of Franz Weidenreich's *Apes, Giants, and Man,* University of Chicago Press, 1946).

More than thirty years ago, men who were not "crusader" type scientists, and who valued accuracy more than a polemical triumph over the theological opposition, began to wonder about these evolutionary dogmas. Henry Fairfield Osborn published his rejection of the ape-origin theory in 1927, in America, and Frederic Wood Jones, professor of comparative anatomy in the Royal College of Surgeons, challenged Huxley's claims as early as 1918. In 1947, Dr. Jones delivered two lectures which embraced, as he put it, "the two main contentions for the acceptance of which I have striven for thirty years." These contentions, increasingly supported by paleontological discovery during this period, are as follows:

> The first is that, considered solely from the point of view of structure, Man is an extremely primitive type, and the second that, though more primitive in basal structure than the living monkeys and apes, Man has his own remarkable structure specialisations that distinguish him from all other Mammals and appear to be his very ancient hallmarks.

The thing that is most interesting about the varying opinions of evolutionists concerning the origin of man is the apparent play of what might be called "ideological`' background in the formation of theories. Evolutionary theory in general, it will be remembered, developed in an atmosphere of controversy. Even before Evolution became a biological issue, geologists contended with each other, some arguing that the Hand of Nature, others that the Hand of God, played the major part in shaping the planet. Geologists who chose God's side in the controversy became known as the Catastrophists—those who held that great changes could and had come about suddenly, which meant,

with Divine assistance or management. The Gradualists, on the other hand, were content with Natural Processes to explain geological transformations, arguing, as their name implies, for longer periods of time in which Nature could accomplish her ends unaided. In general, the Darwinists took the gradualist side of the debate, and thus gained the moral support of the free-thinking inheritors of the ideals of the French Revolution, as well as what could be deduced from the geological record.

From the viewpoint of the relative calm of the present, it seems plain that the eagerness with which the early evolutionists embraced the gorilla or some anthropoid relative of the gorilla as representative of the ancestors of man, resulted more from a dislike of Jehovah than from a love of the hairy ape. The gorilla, for all his ferocious characteristics, would not interfere with the free practice o£ science, whereas Jehovah would. The gorilla was a child of Nature; Jehovah was the antithesis of Nature, who performed miracles in defiance of Natural Law.

The Darwinian Theory, therefore, besides opening the way to a multitude of avenues of scientific discovery and research, was obliged to fly the pennants of Libertarian Revolution and to maintain the uncompromising front which this responsibility entailed. Oddly enough, the Scopes Trial of 1925—in which a young public school teacher was prosecuted by the state of Tennessee for teaching evolution in contradiction to the Bible, and convicted—brought a new temper to the controversy over evolution. This is especially manifest in a series of essays by Henry Fairfield Osborn, published in 1926 under the title, *Evolution and Religion in Education.* Perhaps the earnestness of the religionists gave Dr. Osborn pause, leading him to think about the possibilities of reconciliation. And, so far as the religionists were concerned, the intellectual weakness of the great Bible champion, William Jennings Bryan, who prosecuted Scopes for the state of Tennessee, and who died during the trial, may have become so evident that liberal Christian thinkers began to view evolution as perhaps the means by which "creation" was arranged by the deity.

In any event, the Scopes Trial was the last major battle in the war between Science and Theology. Since then, other and more clamorous events took the stage, so that the importance of the evolution controversy itself gradually diminished in the minds of nearly all the contestants. Meanwhile, another wave of influence began to make itself felt. Alexis Carrel's *Man the Unknown* was a pioneer work of the new kind of scientific thinking. This book was a protest against the spreading effects in practical medicine and elsewhere of the "materialistic" implications of nineteenth-century biology and anthropology. The somewhat academic quarrel about Creation and Evolution was replaced by a sense of emergency arising from other quarters. Thoughtful men were now talking about the "pace" of modern life, and the "nervous tensions" it had produced. Statistics on alcoholism and mental disease caused specialists to raise their heads and look about apprehensively. Then, piled on top of the economic difficulties of the '30's came the agitations produced by the second world war. In a book published in 1941, *Man Stands Alone,* Julian Huxley, zoologist grandson of the famous T. H. Huxley of Darwin's time, summarized the transformations of opinion during the past five hundred years. Before the rise of modern science

> Man saw himself as a being set apart, with the rest of the animal kingdom created to serve his needs and pleasure, with no share in salvation, no position in eternity. In Western civilization, this swing of the pendulum reached its limit in developed Christian theology and in the philosophy of Descartes; both alike inserted a qualitative and unbridgeable barrier between all men and any animals.
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> With Darwin, the reverse swing was started. Man was once again regarded as an animal, but now in the light of science. . . . At the outset, the consequences of the changed outlook were not fully explored. The unconscious prejudices and attitudes of an earlier age survived, disguising many of the moral and philosophical implications of the new outlook. But gradually the pendulum reached the furthest point of its swing. What seemed the logical consequences of Darwinian postulates were faced: man is an animal like any other; accordingly, his views as to the special meaning of human life and human ideals need merit no more consideration in the light of eternity (or of evolution) than those of a

> bacillus or a tapeworm. Survival is the only criterion of evolutionary success: therefore, all existing organisms are of equal value. The idea of progress is a mere anthropomorphism. Man happens to be the dominant type at the moment, but he might be replaced by the ant or the rat. And so on.

Mr. Huxley now turns to the mood which we have suggested was first expressed by Dr. Carrel:

> Of late years, a new tendency has become apparent. It may be that this is due mainly to the mere increase of knowledge and the extension of scientific analysis. It may be that it has been determined by social and psychological causes. Disillusionment with *laisser faire* in the human economic sphere may well have spread to the planetary system of *laisser faire* that we call natural selection. With the crash of our religious, ethical, and political systems, man's desperate need for some scheme of values and ideals may have prompted a more critical re-examination of his biological position. The fact remains that the pendulum is again on the swing, the man-animal gap is again broadening.

Harper's for November has a good illustration of the further swing of this pendulum. "Was Darwin Wrong *about the Human Brain?*" is the title chosen by Loren C. Eiseley to dramatize the reopening of old questions about human evolution, now made possible, he suggests, by the discovery that the famous Piltdown cranium "has been proven to be a forgery, a hoax perpetrated by an unscrupulous but learned amateur."

Dr. Eiseley, an anthropologist at the University of Pennsylvania, regards this even as the loss of "one of the most powerful pieces of evidence documenting the Darwinian position upon human evolution." Without it, he feels free to turn to the alternative theory of Alfred Russel Wallace, co-discoverer with Darwin of the evolutionary principle, and who, unlike Darwin, contended that the development of the human brain occurred rather suddenly. As Eiseley says:

> Darwin saw in the rise of man with his unique, time-spanning brain, only the undirected play of such natural forces as had created the rest of the living world of plants and animals. Wallace, by contrast, in the case of man, totally abandoned this point of view and turned instead toward a theory of a divinely directed control of the evolutionary process.

A properly appointed "missing link," such as the Piltdown skull seemed to provide, was taken to be evidence for Darwin, and against Wallace. But with "Piltdown Man" shown to be a fraud, the way is now open for considering Wallace's contentions. This seems to be the gist of Dr. Eiseley's article. . . . Well . . . we don't plan to come out against a "spiritual influence" in human evolution, but Dr. Eiseley seems a little too eager in grasping this new opportunity to abandon what used to be regarded as "time-honored" processes of evolution. The difficulty, of course, in remaining a believer in the great antiquity of man is that there don't seem to be any genuine type fossils of ancient man around. It follows, speculatively, from this, that man must have "evolved" rather recently and rapidly to his present stage of development—in striking contrast to "natural" processes, since all parallels in organic evolution suggest that millions of years would be occupied in developing the human body, to say nothing of man's mental and moral capacities.

As for the absence of fossils, we have nothing to say. But before we are willing to settle for divine intervention, there are other facts that urgently sue for attention. Take for example the facts presented by Frederic Wood Jones.

We make no pretense of knowing a premaxillary from a tibia, or wouldn't without reading Dr. Jones' book, but the principle he expounds is clear and reasonable, and he, a man of unchallenged veracity, so far as we know, reports that "no scientific evidence in rebuttal of the claims" he has made about human versus ape anatomy has ever been produced. To be brief, Dr. Jones assembles evidence to show that the human skeleton is an older, more "primitive" form than that of the anthropoid apes. If there was a primeval "common ancestor" from which both apes and man have sprung, it was probably more like a man than an ape, since the anatomical specializations which mark the anthropoid apes are such that they are a *departure* from the human type, and not a stage on the way to reaching it. It is difficult to quote from a technical book without involving the reader in a maze of

specialized arguments, but there are a few passages in Jones which will give the flavor of his method. On the differences in cranial anatomy, he says:

> It cannot be too strongly insisted that the contours of the prominent human nose are produced by the maxillæ, whereas the flat simian nose is constituted by the premaxillæ. Considering the profound changes that have been produced in the human face and jaws by Man's unique type of development of the maxilla and premaxilla, it is difficult to avoid criticism of those who, wishing to minimise all fundamental differences between Man and Anthropoid Ape, ignore them or dismiss them as unimportant. . . .The fallacy of Huxley's claim that Chinese boatman, Bengal weavers and Caraja thieves employed their big toes like the Gorilla, with "some sort of opposability," is so patent to any human anatomist that today it needs no refutation. But despite complete unanimity among anatomists as to the falseness of Huxley's claims, his arguments are still employed by those whose aim it is to minimise the basal anatomical specialisations of Man that sunder him as a type from all other members of the Primates.

There is this general statement:

> That Man shows certain structural specialisations that are absolute human distinctions is not to be doubted; and even the brief survey we have made of them is sufficient to show the fallacy of Huxley's anaesthetic dictum that the structural differences between Man and the Gorilla or Chimpanzee are less than those that distinguish these Anthropoids from the lower Primates. It becomes, therefore, a matter of some interest and importance to attempt to determine the probable manner in which these human structural distinctions were acquired. In conducting any such inquiry it should be obvious that, if any general principles are to be recognised in the manner in which such specialisations are acquired in other living forms, these principles should be adhered to in the case of Man. It has unfortunately become the fashion among those who advocate the Anthropoid Ape origin of Man to dwell upon the ease with which, with a little alteration here and there, any structure in the anatomy of the ape could be so transformed as to be identical with the corresponding part in Man. Were Man to be the potter and the Ape the clay in his hands there is every likelihood that by adding a little here and taking away something there he could turn an average Anthropoid Ape into the very fair semblance of some sort of Man. But Nature, not Man, is the potter that moulds the clay, and additions are made and subtractions are effected not according to whim but along lines determined by the general principles governing the structural changes governing all living things. . . . If the Primate forms immediately ancestral to the human stock are ever to be revealed, they will be utterly unlike the slouching, hairy, "ape men" of which some have dreamed and of which they have made casts and pictures during their waking hours; and they will be found in geological strata antedating the heyday of the great apes.

Without attempting to marshal the arguments of Dr. Osborn, suggesting somewhat similar conclusions, we quote from a paper of his in *Science* for May 27, 1927:

> The most welcome gift from Anthropology to humanity will be the banishment of the myth and bogie of ape-man ancestry and the substitution of a long line of ancestors of our own at the dividing point which separates the terrestrial from the arboreal lines of the primates.
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> It is true that Darwin used the expression, "Man is derived from some member of the Simiidæ," and that the term "ape-man" is deeply engraved in our consciousness, but I claim that it is misleading. The gorilla, chimpanzee and gibbon give us our conception of the ape. I hold that very few of the ape characters were possessed by man in his early stages; that they are all characters belonging to an extremely ancient arboreal stage perhaps as ancient as Eocene time. Comparative anatomists find likenesses between apes and man by blood tests, osteology and morphology; these characters are strikingly pro-human, and anatomists have dwelt on them to the exclusion of others not human. Between man and the ape—not only the hands and feet of the ape, but the ape as a whole, including its psychology—you will find more differences than resemblances. In brief, man has a bipedal, dexterous, wide-roaming psychology; the ape has a quadrupedal, brachiating, tree-living psychology. . . .
>
> Dollo has stated the law of irreversibility of evolution. The brachiating hand of the ape was used as a hook—apes do not grasp a branch with the fingers and thumb but hook the whole hand over the branch, as trapeze workers do today—and the thumb was therefore a grave danger. If man had gone through a prolonged period of brachiating in the branches of trees he would have lost his thumb.

These discussions by Jones and Osborn have been in print for many years—nearly thirty years in one case, and thirty-eight in the other—yet they have been practically ignored. Today, the swing to another view of human origins seems to be proceeding without much attention to them, also. The Piltdown is a fake, so let us have a divine origin!

Dr. Jones also speaks of the Biogenetic Law, under which, in general, ontogeny is supposed to recapitulate phylogeny—or, in plainer words, the development of the individual reflects the evolution of the species. Here, again, the evidence is on the side of the priority of the human type. Jones says:

> Now, it is perfectly true that there is no definite time scale by which a happening in the ontogenetic development of the individual may be assigned to any particular period in the phylogenetic story of its race. Nevertheless, we do know it as a general truth that, in a broad sense, characters manifested in the earlier phases of development are those that have been long established in the race, and that the more recent acquirements are apt to appear as late finishing touches in the development of the embryo. In the ontogenetic development of the human foot the attainment of the very special features that distinguish Man from all the other Primates and constitute his specific characters is effected in the embryo during its growth from some 14 to 20 mm. or during the seventh week of its intrauterine life. It would therefore appear to be illogical, on general principles, to postulate them as being only very recent acquirements in the evolutionary study of man. . . . Should we agree that the early ontogenetic acquirement of these very conspicuous human characters implies a very early emergence of the human from the primitive Primate stock, our agreement would be in complete harmony with everything that a study of comparative anatomy reveals and with the comparatively little that the study of palaeontology can, at present, tell us.

It is interesting to delve a bit into nineteenth-century anthropology, and to find that there were men of standing and influence who then contended for the same general ideas that Jones, and in some measure, Osborn, have stood for in the twentieth century. Jean de Quatrefages said in *The Unity of the Human Species* in 1861:

> It is evident, especially after the most fundamental principles of Darwinism, that an organized being cannot be a descendant of another whose development is in an inverse order to his own. . . . Consequently, in accordance with these principles, man cannot be considered as the descendant of any simian type whatever. . . . In the ape the temporo-spheroidal convolutions, which form the middle lobe, make their appearance and are completed before the anterior convolutions which form the frontal lobe. In man, the frontal convolutions are, on the contrary, the first to appear, and those of the middle lobe are formed later.

Other nineteenth-century writers who contributed to this view included Lucae, who contended that the ape, as he matures, grows more bestial, while man becomes more human; and Gratiolet, who pointed out that in man the intellect develops with age, while the ape grows duller, the brain giving way to the massive enlargement of the jaw apparatus.

It now appears that these views may regain popularity. As Eiseley remarks, after looking back over the course of evolutionary theory: "We have been so busy tracing the tangible aspects of evolution in the *forms of animals* that our heads, the little globes which hold the midnight sky and the shining invisible universes of thought, have been taken about as much for granted as the growth of a yellow pumpkin in the fall." The explanation of man's mental and moral qualities, however, remains a mystery. The question now seems to be: If we can find no fossils of ancient man to give evidence of an extraordinary stretch of time that we think should have been occupied in developing these high qualities, must we perforce fall back upon a "divinely directed control"? Or is there, perhaps, an entirely different explanation?

REVIEW
MALTHUSIAN MISUNDERSTANDING

AN English reader, Director of Studies at the Henry George School of Social Science in Westminster, writes:

> It is with much sadness that I have to record my disappointment at finding in your excellent journal support for the Malthusian theory (MANAS, July 27, review of *The Sun, the Sea and Tomorrow).* While you do not specifically support this theory, I feel that your review leaves no doubt in your readers' minds that you are sympathetic, to put it mildly, to Malthusian ideas. [Reference is here made to our comparison of food shortages with growth of population.] "Convincing statistics," "a number of specialists," "alarming increase in the world's population," "teams of experts," does not appear to leave much room for argument.
>
> My time and your space forbids any exposure of the Malthusian fallacy that population tends to out-run subsistence. I will merely content myself with what I consider to be the real issue involved: The amount of food produced in the world today is governed not by the *need* for it, but by the *effective demand* for it—it is as simple as that!
>
> A moment's reflection should remind you of the enormous territories given over to the production of cotton, tobacco, tea, etc., which could be immediately turned over to food if it paid to produce food rather than these things. If a multi-millionaire from another part of the world came over and ordered millions of tons of food that was not already produced, I am sure there would be many anxious and willing to fulfil his orders—*i.e.*, that food would soon be produced for this customer, without regard to Malthus and any of the modern "experts."
>
> Indeed, in America today, there is embarrassing over-production of butter, wheat and other foodstuffs, produced, not because people need it, but because the Government artificially creates a demand.
>
> I do earnestly recommend you to consider this question more closely. Your readers deserve better guidance than you appear to have given them in this matter.

It had not occurred to us that our reference to the inadequacy of food production in "presently developed agricultural areas"—as reported by the United Nations Food and Agricultural Organization—would constitute a Malthusian prediction. Neither we, nor, we think, F. G. Walton Smith and Henry Chapin, authors of *The San, the Sea and Tomorrow,* meant to be prophets of doom in this regard, so that we are glad to correct any misapprehension. However, in defense of the emphasis on the "convincing statistics" which indicate that our present use of the land will not forever nourish the 70,000 new persons added to the roll-call each day, we will simply remark that the figure of 70,000 is accurate, theories or no theories, and gives pause for sober thought. Our interest in *The Sun, the Sea and Tomorrow* grew from the fact that here, in a no-axe-to-grind source, the benefits of a change in diet were explained, since a full harvest of the sea's potential would free a number of "presently developed agricultural areas" for immediate production of grains and cereals.

As per our original quotation, it is clear that Smith and Chapin have fully qualified their statement about the impossibility of producing enough food with current methods by adding the proviso—"under the price arrangements that also inevitably [in present fact] govern production." This is where the Henry George land-reform argument would enter, and quite logically, too. However, while we of MANAS would support the theory of land reform advocated by Georgists—and that quite unreservedly—such a change is something we see no way of effecting in the immediate future. It might be argued that dramatic famines in impoverished areas may bring an indifferent populace closer to appreciating the need for revising the "capitalistic" theory of land ownership, but this argument, again, would simply be theory. Meanwhile, anyone *can* do something right now about shifting his dietary preferences to contribute to a solution of existing problems.

It may be that an æsthetic preference of one of the editors crept in at this point during our review of Smith and Chapin, since the excessive consumption of meat, and the means of its production seem, to him, unnecessarily gross. Perhaps the conviction that millions of people, particularly in the United States, use much more meat than is necessary, or even desirable for health, caused us to push overly hard with the statistics. We intended, however,

neither a Malthusian nor a vegetarian argument, but chiefly a psychological exploration. We said in the review of July 27:

> It is the thesis of *The Sun, the Sea and Tomorrow* that it is mathematically possible to explore the "last frontier" and draw from it the needs of future decades. This will require not only tremendous technical accomplishments, and development of a new kind of fish husbandry to make the yield of marine life more accessible to man, but also demands, quite obviously, that men and women accustomed to meat-eating become willing to change or temper their habits. What a strange way for austerity to come to the western world! But there is no doubt that readers of Dr. Smith's and Mr. Chapin's volume will at the very least have moments of unease while forking up expensive steaks. We don't know what the vegetarians will have to say about the advocacy of eating fish, but since the harvesting of fish would not require the artificial and sometimes cruel handling of livestock, they might regard it as a step in the right direction.

Our correspondent objects to the term "over-population," and he is probably right in protesting designation of the rapidly growing population curve as "alarming." However, though amazing population growth need not necessarily be regarded as a cause for alarm, recognition of its economic and social implications might lead to better land distribution and use. Therefore it seems to us that population increase can hardly be stressed too often, for its present rate is something unheard-of or undreamed-of by statisticians of the past—even Malthus. An article in the British magazine *Encounter* (September), "Thirty-Six Million Babies," indicates what may be expected if this trend continues. It appears that while it was once assumed that the population of the United States would stabilize at about 175 million, and then perhaps decline, "it seems certain now that there will be more than 200 million Americans by 1975." Important effects are already inevitable:

> No matter what happens to the birth-rate, 36 million babies have been born during the past decade. Barring a national calamity on the scale of an atomic war, the vast majority of these will grow to maturity. As these move up into adult life, they will disrupt, one after the other, institutions built to accommodate more modest numbers.

As these notes of reply to our correspondent were being prepared, we came across a clipping from *Time* (Sept. 26) which strongly supports his position, indicating that a habit of suspecting Malthusian-sounding predictions is a good one to cultivate. *Time* reports:

> In the lean years after World War II, a new generation of Malthusians sprouted. Between 1938 and 1946, world food production declined by 5% whereas the population increased by 10%, and it was upon these figures that William Vogt *(Road to Survival*, TIME, Nov. 8, 1948) and Fairfield Osborn *(Our Plundered Planet)* based predictions of mass starvation. Last week, however, the world learned that the neo-Malthusians were wrong: mankind, more numerous than ever before, had more to eat than ever before. (Less the people of the Communist empire, of whom reliable statistics are not available.) The rate of increase of the production of food now exceeds the rate of increase of the free world population.
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> The news came out of a 236-page report from the U.N.'s Food and Agricultural Organization. The non-Communist world, reported FAO, is now producing 25% more food than it did in 1946-47. The non-Communist world is producing about 20% more rice, milk and cotton than it did before the war; it is catching 20% more fish; it is producing about 30% more wheat, meat and fats; about 50% more sugar. It has 2% more food available per capita, than it had before the war. FAO warned that there were many regions, e.g., back-country Latin America, where millions still did not get a square meal. On the other hand, some countries were now piling up surplus stocks of sugar, cotton and wheat. And it was in Western Europe, wrecked by war and brooded over by the neo-Malthusians, but solaced by its industry and by U.S. aid, that "the most spectacular advances were made."

Though the present accounting by FAO seems to make Vogt and Osborn poor and pessimistic prophets, we are of the opinion that their work helped to dramatize the need. And Smith and Chapin's book may have a role in widening the sources of food. The success of a concentrated program, as recounted by *Time*, does not mean that the god of subsistence is in his heaven and that all is permanently right in the world; but this the Georgists already know.

COMMENTARY
THE "SPIRITUAL" MAY BE "NATURAL"

THIS week's lead article seems a little hard on Alfred Russel Wallace, whose views on human evolution, while flavored with the miraculous, at least recognize the unique intelligence manifested by human beings. The point of the lead article seems to be that postulating a "spiritual influence" in evolution ought not to require the conclusion that the "spiritual" is necessarily the sudden or the miraculous.

Why shouldn't the "spiritual" also be completely *natural?* This is a view we share with Thomas H. Huxley, the great Darwinist and Evolutionist of the last century, who said, in *Science and Christian Tradition:*

> For myself, I am bound to say that the term "Nature" covers the totality of that which is. The world of psychical phenomena appears to me to be as much part of Nature as the world of physical phenomena; and I am unable to perceive any justification for cutting the Universe into two halves, one natural and one supernatural.

Simple habit, rather than disciplined thought, is responsible for the idea that a "spiritual" factor in evolution must behave in some manner which departs from our experience of natural processes. This assumption is "natural" enough, since there is very little in the cultural tradition of the West to point to another conclusion. "God" has almost always been a "wild" factor when included in any conceivable hypothesis concerning the nature of things, so that the scientists have insisted that they, as La Place put it, "manage without God." If Western thought had ever made a place for "spiritual influence" which does not depend upon an omnipotent being called "God," there would never have been any necessity for Huxley's careful explanation that the "Natural" need not be bounded by the physical, but must include the psychical as well.

The whole issue turns, perhaps, on what the word "spiritual" is made to mean. Its best synonym, so far as we are concerned, is the rather over-used word "creative." A creative force or intelligence is the highest potency we can think of, and man, considered as man, and not in terms of the qualities and attributes he obviously shares with other forms of life—the animals, for example—is pre-eminently a creative being.

This may not be of much practical help in dealing with the mysteries of human evolution, but the first question which must be answered, in any event, is: What sort of being is doing the evolving?

CHILDREN
. . . and Ourselves

THE UNIVERSITY—STUDENT MOTIVATION

PEOPLE go to college for widely varied reasons, as everyone knows. It should be of interest, however, to examine some of the more characteristic types of motivation, as affording a key to attitudes in our culture in general.

Social life looms large as an attraction, the heritage of a time when higher education was obtainable chiefly by those with wealthy parents. But since everyone is wealthy in America today—the European opinion to this effect having considerable justification—and since the cult of frantic enjoyment in youth is still in full swing, we can well understand why professors with less than monumental patience give but a modicum of serious attention to their vocation and glide along in a manner not dissimilar to that of the "socially-oriented student." However, even at that fount of social life, the fraternity, troublous issues are now compelling thought. The occasional discrimination clauses and practices of most "nationals" are being challenged by courts of law in a widespread campaign to enforce practice of the ethics of democracy. A number of chapters of national fraternities, moreover, have courageously broken their affiliation, the local members thus demonstrating concern with something more than "college fun." A recent article in the *Saturday Review*, "Fraternities: Evil Force on the Campus," indicates that the spreading failure of the national fraternities to perpetuate discrimination may have constructive effects on the campus.

Of course, the "socially-minded" can hardly be said to possess a motivation relating to the university at all, since membership in a pleasant country club would do them just as well, if not better. There *are* those who have an intense desire to obtain an education at college—to learn, and to feel that one is, at least, a success in learning. Even this group, however, may be variously subdivided. A paper prepared for the 1955 All-University Faculty Conference of the University of California throws considerable light on student attitudes:

There are those who are wholeheartedly devoted to the activities and duties of the classroom, but a good deal of their effort goes into public relations maneuvers, to obtain a grade, rather than into the attempt to master subject matter. For these students the University seems to be a kind of great Sphinx that is posing some recondite riddle, whose subtlety extends far beyond and above the simple announced purpose of the University, namely, to provide opportunities for education. But they imagine that there is an answer to the riddle and that the answer can be found if one has enough experience with the workings of the University and if one collects enough gossip from the vast common store bin into which students pour their facts and fancies about ways and means of beating the system. This student tends to think of a class in terms of "spheres of influence," and his most characteristic response to the subject matter offered is not, "What does this mean?" but, "What do you want of me?" He thinks of himself as "We" and of the professor and the administration as "They"; in his own imagination he is somewhat the protagonist of Kafka's *The Trial*, who is being tried in some all-powerful higher court on a charge whose exact nature has never been specified and by a judge whom he cannot see. He feels guilty, as all accused persons do, and yet he is never sure of what he is guilty. In the imagination of the faculty, to go to the other extreme, this type of student resembles what the sociologist David Riesman calls "the inside-dopester," a recognizable genus in contemporary society which believes that although it can do nothing about institutions it can at least understand them and is, therefore, always attempting to get behind the bureaucratic facade and at the "inside" workings of things.

It is for this student that there has come into being, willy-nilly, an elaborate secondary and sub-rosa educational institution just outside the university's official boundaries; pre-examination seminars; tutorial laboratory sections; ghost writers, and so on. Such unofficial institutions as these will, presumably, tell the prisoner exactly what the charge is and will likewise provide an answer to the riddle that the Sphinx is posing.

On the campus itself this student is likely to think of his major activity as consisting of the proper propitiation of authority: saying the right thing at the right time; smiling at appropriate moments; asking questions not in order to obtain an answer but in order to ask a question. Generally, he seems to think, and often with good reason, of the university as a vast

conspiracy in whose intricate mazes he must tread softly.

Most discouraging of all, the report advises, is "a large group of students who seem to have no motivation at all and whose prevailing mood is sheer apathy. They will exercise, to be sure, a minimum diligence, but even the grading system, which seems to be the water-wheel working the university in many quarters, does not really operate in this area. This student will quietly accept a 'C', or even a 'D' if it does not depress dangerously the overall gradepoint average, and not be disturbed or perturbed at all. This indifference to the actual grade is, of course, in many ways admirable, but it is accompanied, unfortunately, by an indifference to everything else as well, including the subject matter and any kind of idea whatsoever. This student seems to have withdrawn into a profound anonymity, the cardinal principle of which is non-commitment of any kind. He is, it seems, completely untouched by the "cult of success" that motivates the "inside-dopsters."

Last, but not least, the report continues, we must consider the few students "whose motives are, so to speak, 'pure,' and who are at the University either because they have an active or potential intellectual curiosity and wish to learn what they can of things in general or who have a passion for a special subject, such as a science or an art or a political idea or a period in history. These students, to be sure, are scarce, but they happen along, and the remarkable thing is not that there are so few of them but rather that there are any at all."

The conclusion of this faculty conference report—a document worth owning, by the way—sets forth the following recommendations "as steps toward achieving the kind of educational atmosphere within which the desired student motivations can be expected to develop and grow":

1. There should be increasing effort toward the identification, selection and encouragement of highly gifted students such as by the more liberal use of scholarships, by higher entrance requirements, by greater concern with the educational motivations of those applying, etc.

2. Significantly greater attention should be paid to an effective initial orientation of the entering student to the educational and intellectual facilities and resources of the University, and more stress placed on intimate faculty advising of students while at the University.

3. There should be substantial expansion of dormitory facilities, to provide for a far greater proportion of the student-body that communal living which is an essential part of the educational scheme.

4. New curriculum experimentation should be vigorously pursued, with attention to such possibilities as reduction in number of courses taken by the student at one time, and methods for encouragement of truly independent study.

5. Study should be made of the feasibility of establishing experimental colleges with the University, to help offset in some measure the growing isolation of the individual student as the size of the University rapidly expands.

6. There should be renewed emphasis upon the importance of the teaching function, and especially there should be sought more concrete ways of recognizing and rewarding superior teaching; among other things, attempts should be made to bring teaching and research into closer functional relationship.

7. These basic problems of student motivation should be the subject of continuous empirical study.

In the view of the authors of this report, it is tremendously challenging to attempt the integration of a genuine spirit of learning with beneficial communal life on the campus. Perhaps the proposal of a number of small colleges within each university may serve this end. After all, the most rewarding community is "an interest group" whose members are drawn together by natural affinity and who, therefore, build friendships based upon something more important than either loneliness or an urge for social climbing.

FRONTIERS
Communications

IN the discussion (MANAS, Sept. 28) of Fred Rodell's *Progressive* article on the Supreme Court, it was said that the Supreme Court could doubtless stand some criticism, but that Mr. Rodell's remarks amounted to an attack on human nature, rather than useful analysis of the Supreme Court. We now have a letter from a reader in which the historical role of the Supreme Court is examined:

> I couldn't resist a short note concerning your comment on Rodell's article on the Supreme Court. To begin with I will grant that it was what is known in the trade as a "hatchet job." However, I will contend that the Court *never had, nor should have,* the power to declare acts of Congress unconstitutional. Why? Look at England, the British commonwealth, France, and some of the smaller northern European countries: in *none* of those countries is there this absurd setup that we have here. An act by the constituent assembly there cannot be outlawed by the courts—and their record of civil liberties and the toleration of unpopular minorities is admittedly far superior to ours. The record in these countries of social legislation—old age pensions, unemployment, etc.—far antedates our own. They did not have the minimum wage laws outlawed by the judiciary as we did here for so many years. Nor did it have to take eighteen years—from 1895 to 1913—to get a federal income tax enacted through the cumbersome process of a constitutional amendment, except for the reactionary predilections of a Supreme Court.
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> In the field of civil liberties, the Court's record *on the whole* is a sorry one. This country of ours has always had a strong aversion to unpopular minorities and from the earliest times many attempts have been made by those in power to curb and outlaw criticism. When cases have reached the Court it has usually found ways and means to uphold the Government's police power. Its refusal (on narrow legal ground) to rectify any of the abuses that state courts have committed—like Sacco and Vanzetti, the Haymarket rioters, Tom Mooney, etc.—merely shows that for the most part the alleged good done by the Court is vastly overrated. Particularly is this so, in my opinion, when you consider the mischief wrought by the Court in construing a corporation as a person under the Fourteenth Amendment, thereby virtually making our huge corporate structures in this country impossible to regulate by any of the people's elected representatives.
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> To sum up—if the Court is so necessary to the welfare of all Americans, why do the English, French, etc., get along without interstate commerce clauses, bills of rights, first, fifth, and tenth amendments, and have a greater degree of individuality, a greater tolerance of minorities of all kinds? Is our elected Congress composed of such monsters that without a Supreme Court we would have a reign of terror with McCarthy leading the way?
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> I say, make Congress supreme in the matter of law enactment. If this country can't govern itself without distrusting its elected representatives, then we should be ashamed of ourselves.

This is the sort of statement concerning which we feel no disposition to argue. The only point that seems worth making is that legislatures can be carried away by emotional storms and may be led to do foolish things under political pressure. It is not so much a matter of "trusting" the elected representatives as it is a matter of safeguarding their behavior by "checks and balances." The presidential veto is one safeguard, the Supreme Court another. There may be better ones, and the whole question is at least arguable, although, it seems to us, an argument on this subject ought to be armed by an exhaustive knowledge of history both here and abroad. We do not have that kind of knowledge, and freely confess to following what amount to "hunches," so far as opinions on these issues are concerned.

As for the record of the Court on welfare legislation, we urge a careful reading of Albert Jay Nock's, *Our Enemy, the State.* Nock is at least free of any suspicion of "reaction," so that what he says may be taken as the informed opinions of a thoughtful man, without ulterior motives. Herbert Spencer's *Man and the State* might also be pertinent, on the historical side of the liberal movement, although Spencer is anathema to most liberals. Finally, we confess that our correspondent may be right; he obviously has

given more attention to the actions of the Court than we have. We just don't know, although our "hunch" in the matter is probably plain enough by now. The fact is, we have never set up as "political thinkers," and our article on Rodell was not conceived as political criticism.

A reader who noted our somewhat rhetorical "surprise" at finding that Benjamin P. Sandler's book, *Diet Prevents Polio* (see MANAS for Oct. 12), was practically unknown from the view point of national publicity, has sent us tearsheets of a series of editorials in the *Journal of the American Medical Association* (April 26 - May 17, 1947) which disclose the fact that nutrition is not being taught as a separate subject in medical schools. Our reader suggests that the neglect of nutrition is at least one reason why doctors remain in ignorance of the importance of the findings of men like Sandler. So that there will be no misunderstanding on what the *AMA Journal* said (in 1947; there may have been a change for the better, since), we quote from the opening and closing paragraphs of the first article in the series:

> Most physicians are now well aware of the importance of nutrition and believe it should be given greater attention in the teaching of medicine. Since the curriculum is full, however, the proposal does not demand establishment of a new division or the segregation of nutrition in a single department. . . .
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> The Council on Foods and Nutrition emphasizes the importance of a knowledge of nutrition in scientific medicine. The problem, as the Council sees it, is to induce teachers of medicine to weave a heavier design of this relatively new subject into the already tight fabric of daily teaching.

The editorials continue through four issues, making what seem excellent suggestions for the incorporation of teaching about nutrition in the various departments of a medical education. One can sympathize with the study load of the medical student and understand the reluctance of curriculum planners to add to what he is expected to learn and remember, but what we do not like is the manifest disfavor shown to those who have the courage or the misfortune to move in advance of the slow, institutional progress of organized medicine.

On this general subject, we are completely laymen, but the importance of Dr. Sandler's book lies precisely in the fact that any layman can understand it and put its counsels into practice. The excuse for neglecting his work—sometimes heard in orthodox circles—that it represents "only one experiment," and must therefore be regarded with deep suspicion, is ridiculous even from a "lay" point of view.

Now and then it may be proper for a trained physician to pull rank on a patient, to draw himself up and say, with all the authority of his seven years of college training and subsequent experience, that he *knows*, and the patient doesn't. Now and then it may be proper for a Medical Association to lay claim to authority in medical matters on the ground that the public must be protected from the enthusiasms of visionaries and the panaceas of quacks.

But if either private physician or a medical men's organization makes too great a habit of pompous authority, the time is sure to come when the public will lose faith in "scientific medicine."