# Kroeber, A.L. (1917): The Superorganic

A way of thought characteristic of our western civilization has been the formulation of complementary antitheses, a balancing of exclusive opposites. One of these pairs of ideas with which our world has been laboring for some two thousand years is expressed in the words body and soul.

Another couplet that has served its useful purpose, but which science is now often endeavoring to rid itself of, at least in certain aspects, is the distinction -of the physical from the mental.

A third discrimination is that of the vital from the social, or in other phraseology, of the organic and the cultural.

The implicit recognition of the difference between organic qualities and processes and social qualities and processes is of long standing. The formal distinction is however recent. In fact the full import of the significance of the antithesis may be said to be only dawning upon the world. For every occasion on which some human mind sharply separates organic and social forces, there are dozens of other times when the distinction between them is not thought of, or an actual confusion of the two ideas takes place.

One reason for this current confusion of the organic and the social is the predominance, in the present phase of the history of thought, of the idea of evolution. This idea, one of the earliest, simplest, and also vaguest ever attained by the human mind, has received its strongest ground and fortification in the domain of the organic; in other words, through biological science. At the same time, there is an evolution, or growth, or gradual development, apparent also in other realms than that of plant and animal life.

In the nature of things there is little danger of the carrying over of the Darwinian or post-Darwinian principles of the evolution of life into the realm of burning suns and lifeless nebulae. Human civilization or progress, on the other hand, which exists only in and through living members of the species, is so unmistakably similar to the evolution of plants and animals, that it has been inevitable that there should have been sweeping applications of the principles of organic development to the facts of cultural growth. This of course is reasoning by analogy, or arguing that because two things resemble each other in one point they will also be similar in others.

In the absence of knowledge, such assumptions are justifiable as assumptions. Too often, however, their effect is to predetermine mental attitude, with the result that when the evidence begins to accumulate which could prove or disprove the assumption based on analogy, this evidence is no longer viewed impartially and judiciously, but is merely distributed and disposed of in such a way as not to interfere with the established conviction into which the original tentative guess has long since turned.

No one has yet been found to assert that any human being is born with an inherent knowledge of the multiplication table; nor, on the other hand, to doubt that the children of a negro are born negroes through the operation of hereditary forces. Some qualities in every individual are however clearly debatable ground; and when the development of civilization as a whole and the evolution of life as a whole are compared, the distinction of the processes involved has too often been allowed to lapse.

The process of the development of civilization is clearly one of accumulation: the old is retained, in spite of the incoming of the new. In organic evolution, the introduction of new features is generally possible only through the loss or modification of existing organs or faculties.

In other words, the species is composed only of such individuals as contain the blood of particular ancestors. Heredity is thus the indispensable means of transmission. When, however, an invention is made, the entire human race is capable of profiting thereby. People who have not the slightest blood kinship to the first designers of aeroplanes can fly and are flying today.

In short, organic evolution is essentially and inevitably connected with hereditary processes; the social evolution which characterizes the progress of civilization, on the other hand, is not, or not necessarily, tied up with hereditary agencies.

It has long been the custom to say that the difference is that between body and mind; that animals have their physiques adapted to their circumstances, but that man's superior intelligence enables him to rise superior to such lowly needs. But this is not the significant point of the difference. It is true that without the much greater mental faculties of man, he could not achieve the attainments the lack of which keeps the brute chained to the limitations of his anatomy. But the greater human intelligence in itself does not cause the différences that exist. This psychic superiority is only the indispensable condition of what is peculiarly human: civilization.

Directly, it is the civilization in which every Eskimo, every Alaskan miner or arctic discoverer is reared, and not any greater inborn faculty, that leads him to build houses, ignite fire, and wear clothing. The distinction between animal and man which counts is not that of the physical and mental, which is one of relative degree, but that of the organic and social, which is one of kind. The beast has mentality, ana we have bodies; but in civilization man has something that no animal has.

We undoubtedly have certain activities of utterance, certain faculties and habits of sound production, that are truly parallel with those of animals; and we also have something more that is entirely different and without parallel among the animals. To deny that something purely animal underlies human speech, is fatuous; but it would be equally narrow to believe that because our speech springs from an animal foundation, and originated in this foundation, it therefore is nothing but animal mentality and utterances greatly magnified.

A house may be built on rock; without this base it might be impossible for it to have been erected; but no one will maintain that therefore the house is nothing but improved and glorified stone.

What were the ancestors of ourselves, of us steel-building Europeans and Americans, but hut-dwelling savages a few thousand years ago—a period so short that it may barely suffice for the formation of an occasional new species of organism?

Chemically and physically, there is but little difference between a lump of pulp and a sheet of paper. Chemically and physically, it is of the slightest consequence to trouble about such minute difference. But chemically and physically there is still less difference between the treasury note stamped with 'one' and that stamped with 'one thousand'; and yet less between the check with an honored signature and that written with the same pen, the same ink, the same strokes even, by a forger. The difference that counts between the valid and the counterfeit check, is not the broader or the narrow line, the continuous curve of a letter in place of the broken one, but the purely social one that one signer has a valid account in the bank and the other has not; which fact is surely extrinsic to the paper and even to the ink upon it.

Exactly parallel to this is the relation of the instinctive and traditional, the organic and the social.

Man as the clothing animal, the fire using animal, the tool-using or tool-making animal, the speaking animal, are all summations that contain some approximation. But for the conception of the discrimination that is at once most complete and most compact, we must go back, as for the first precise expression of so many of the ideas with which we operate, to the uniquely marvelous mind that impelled Aristotle. "Man is a political animal."

The word political has changed in import. We use instead the Latin term social. This, both philosopher and philologist tell us, is what the great Greek would have said were he speaking in English today. Man is a social animal, then; a social organism.

He has organic constitution; but he has also civilization. To ignore one element is as short-sighted as to overlook the other; to convert one into the other, if each has its reality, is negation.

The attempt today to treat the social as organic, to understand civilization as heredity, is as essentially narrow minded as the alleged mediaeval inclination to withdraw man from the realm of nature and from the ken of the scientist because he was believed to possess an immaterial soul.

And yet, it must be maintained that not a single piece of evidence has yet been produced to support the assumption that the differences which one nation shows from another—llet alone the superiority of one people to another—are racially inherent, that is organically founded. It does not matter how distinguished the minds are that have held such differences to be hereditary—they have only taken their conviction for granted.

It is of a kind with the contention that might be made that this planet is after all the fixed central point of the cosmic system because everyone can see for himself that the sun and stars move and that our earth stands still. The champions of the Copernican doctrine had this in their favor: they dealt with phenomena to which exactitude was readily applicable, about which verifiable or disprovable predictions could be made, which an explanation either fitted or did not fit. In the domain of human history this is not possible, or has not yet been found possible; so that an equal neatness of demonstration, a definitiveness of proof, a close tallying of theory with the facts to the exclusion of all rival theories, is not to be hoped for at present.

But there is almost as fundamental a shifting of mental and emotional point of view, as absolute a turning upside down of attitude involved when the current thought of today is asked to view civilization as a wholly non-organic affair, as when the Copernican doctrine challenged the prior conviction of the world.

... the "soul of a race." As a scientific concept or tool, a race soul is as intangible and useless as any phrase of mediaeval philosophy, and on a par with Le Bon's ready declaration that the individual is to the race as the cell is to the body. If instead of soul of the race, the distinguished Frenchman had said spirit of civilization, or tendency or character of culture, his pronouncements would have commanded less appeal, because seeming vaguer; but he would not have had to rest his entire thought upon a supernatural idea antagonistic to the body of science to which he was trying to attach his work; and if non-mechanistic, his efforts at explanation would at least have earned the respect of historians.

When he says that "cross breeding destroys an ancient civilization" he affirms only what many a biologist would be ready to maintain. When he adds: "because it destroys the soul of the people that possesses it," he gives a reason that must inspire any true scientist with a shudder. But if we change "cross breeding," that is, the mixture of sharply differentiated organic types, into "sudden contact or conflict of ideals," that is, mixture of sharply differentiated social types, the profound effect of such an event is indisputable.

Again, Le Bon asserts that the effect of environment is great on new races, on races forming through cross breeding of peoples of contrary heredities; and that in ancient races solidly established by heredity the effect of environment is nearly nil. It is obvious that in an old and firm civilization the actively changing effect of geographical environment must be small because the civilization has long since had ample opportunity to utilize the environment for its needs; but that on the other hand when the civilization is new—whether because of its transportation, because of its proceeding fusion from several elements, or from mere internal development—the renewing of relationship between itself and the surrounding physical geography must go on at a rapid rate. Here again good history is turned into bad science by a confusion that seems almost deliberately perverse.

Of all the comminglings of the cultural with the vital, that which has crystallized under the name of the eugenics movement is the most widely, known and of directest appeal. As a constructive program for national progress, eugenics is a confusion of the purposes to breed better men and to give men better ideals; an organic device to attain the social; a biological short cut to a moral end.

Eugenics, so far as it is more than an endeavor at social hygiene in a new field, is a fallacy. It is a mirage like the philosopher's stone, the elixir of life, the ring of Solomon, or the material efficacy of prayer; and to those who are led by its learned modernity to receive it earnestly, it is a destructive snare.

All biology necessarily has this entire reference to the individual. A social mind is as meaningless a nonentity as a social body. There can be only one kind of organicness: the organic on another plane would no longer be organic. The Darwinian doctrine relates, it is true, to the race; but the race, except as an abstraction, is only a collection of individuals; and the bases of this doctrine, heredity, variation, and competition, deal with the relation of individual to individual, from individual, and against individual.

But a thousand individuals do not make a society. They are the potential basis of a society; but they do not themselves cause it; and they are also the basis of a thousand other potential societies.

In a brilliant essay written, under Pearsonian influence, on heredity in twins, Thorndike arrives anew, and by a convincing use of statistical evidence, at the conclusion that so far as the individual is concerned. heredity is everything and environment nothing; that the success of our path in life is essentially determined at birth; that the problem of whether each one of us shall outstrip his fellows or lag behind them, is settled when the parental germ cells unite, and already long closed when the child emerges from-the womb, all our careers run under the light of the sun being nothing but an unwinding, longer or shorter according to accident beyond our control, of the thread rolled on the spool before the beginning of our existence.

If this is true, it follows that all so-called inventors of appliances or discoverers of thoughts of note were unusually able men, endowed from before birth with superior faculties, which the psychologist can hope to analyze and define, the physiologist to correlate with functions of organs, and the genetic biologist to investigate in their hereditary origins until he attains not only system and law but verifiable power of prediction. And, on the other hand, the content of the invention or discovery springs in no way from the make-up of the great man, or that of his ancestors, but is a product purely of the civilization into which he with millions of others is born as a meaningless and regularly recurring event.

The discovery of oxygen is credited to both Priestley and Scheele; its liquefaction to Cailletet as well as to Pictet, whose results were attained in the same month of 1877 and announced in one session. Kant as well as La Place can lay claim to the promulgation of the nebular hypothesis. Neptune was predicted by Adams and by Leverrier; the computation of the one, and the publication of that of the other, had precedence by a few months.

For the invention of the steamboat, glory is claimed by their countrymen or partisans for Fulton, Jouffroy, Rumsey, Stevens, Symmington, and others; of the telegraph, for Steinheil and Morse; in photography Talbot was the rival of Daguerre and Niepce. The doubly flanged rail devised by Stevens was reinvented by Vignolet. Aluminum was first practically reduced by the processes of Hall, Héroult, and Cowles. Leibnitz in 1684 as well as Newton in 1687 formulated calculus. Anaesthetics, both ether and nitrous oxide, were discovered in 1845 and 1846, by no less than four men of one nationality. So independent were their achievements, so similar even in details and so closely contemporaneous, that polemics, lawsuits, and political agitation ensued for years, and there was not one of the four but whose career was embittered, if not ruined, by the animosities arising from the indistinguishability of the priority. Even the south pole, never before trodden by the foot of human beings, was at last reached twice in one summer.

Some reservations must be admitted to this principle. It is far from established, rather the contrary, that extraordinary ability, however equal in intensity, is identical in direction. It is highly unlikely that Beethoven put in Newton's cradle would have worked out calculus, or the latter have given the symphony its final form. We can and evidently must admit congenital faculties that are fairly specialized. Everything shows that the elementary mental faculties, such as memory, interest, and abstraction, are by nature very uneven in individuals of equivalent ability but distinctive bent; and this in spite of cultivation.

Here, then, we have to come to our conclusion; and here we rest. The mind and the body are but facets of the same organic material or activity; the social substance—or unsubstantial fabric, if one prefers the phrase,—the existence that we call civilization, transcends them utterly for all its being forever rooted in life. The processes of civilizational activity are almost unknown to us. The self-sufficient factors that govern their workings are unresolved. The forces and principles of mechanistic science can indeed analyze our civilization; but in so doing they destroy its essence, and leave us without understanding of the very thing which we seek. The historian as yet can do little but picture. He traces and he connects what seems far removed; he balances; he integrates; but he does not really explain, nor does he transmute phenomena into something else. His method is not science; but neither can the scientist deal with historical material and leave it civilization, nor anything resembling civilization, nor convert it wholly into concepts of life and leave nothing else to be done. What we all are able to do is to realize this gap, to be impressed by its abyss with reverence and humility, and to go our paths on its respective sides without self-deluding attempts to bridge the eternal chasm, or empty boasts that its span is achieved.