

METASOCIOLOGICAL BASE FOR A LAW OF SOCIAL BEHAVIOR

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STATEMENTS AND REALITY

A distinction must be made between the world that is and any statement made about it. Similarly, a distinction must be made between any experience one might have and any statement about that experience. Statements may be right or wrong representations of the world and our experience. Statements may be true or false. But the world, and our experience as part of that world, simply is.

A changing world capable of being experienced, known, understood, and communicated to others much like myself exists. Its shareability must be a part of the nature of that world.

In an ultimate sense, *truth* may never be known. To judge a statement true requires an independent knowledge of what it is we try to make statements about. Since, to judge the truth value of a statement, that independent knowledge will be stated in a similar form, we will end up judging one statement against another, and be no closer to ultimate truth. We end up in a situation where we accept some statements and reject others. Would that those we accept be reasonably close to truth.

Part of our difficulty lies in the strain towards objectivity in our scientific and scholarly utterances. Behavioral scientists make much of this effort without a clear understanding of the epistemological problems. Consider the nature of our sentence structure. A typical sentence contains a subject and a predicate. The predicate, if it involves a noun, contains an object. Things are regarded as objects if they tie in with verbs or prepositions. The subject simply is, while the object is an object because of a relation implied in the sentence.

Nothing exists as an object. Whatever exists does so subjectively. It simply is. (*Isn't it?*) The objective status of anything depends on the relation of the thing and that to which it relates. Grass exists, regardless of its relation to any other thing, and regardless of what we may say about it. To a goat, it may be food; to a frog, it may be shelter; to a man, it may be a lawn.

If *truth* is an admissible concept, objective truth depends on the statements made.

Subjective truth is that state of affairs whose truth is independent of any statement made about it. Thus, the traditional usage of *objectivity* and *subjectivity* have little merit in science. A reasonable substitution would be *public* for *objective* and *private* for *subjective* in social science. We would recognize that the current meaning of *objectivity* is to suggest that which is shared by a recognizable public, while personal preferences are private. Notice that one's private beliefs have a subjective existence and may well be objectified by a scientist.

ULTIMATE REALITY

Here we must digress to consider a posture regarding ultimate reality. What is the *real*, which explains everything, but is in itself explained by nothing? What is the subjective essence of *being*, universally and totally true?

Western thinkers have offered a choice of two positions. The two possibilities were that the ultimate stuff was either *idea* or *matter*. Schools of thought called *idealism* and *realism* emerged, and we may be told to join one or the other. Something like *realism* dominates contemporary scientific thought.

To understand idealism, we must recognize a relation but not an isomorphism between *idea* and *words*. Words are vehicles we use to represent ideas, but ideas have subjective existence whether put in verbal form or not. Physical attributes of ideas are *accidental* and are not truly necessary for the idea. Thus, a chair does not depend on the physical material of which it is made, and the idea of a chair will continue long after and independent of any one instance of the idea.

To the realist, the idea of anything is epiphenomenal. Ultimate stuff is physical matter. Ideas exist only as thoughts which are physical emanations of the human brain, and without the brain, there are no ideas. In the example of *chair*, the idea is imputed to the physical object, and it is the object which is *accidental*. An Indian arrowhead has a temporary physical shape, but whether it is a tie-clasp ornament or

part of a lethal weapon is independent of the physical stuff that makes it up.

Greek philosophers considered this. Some in the realist school proposed that all matter could be divided and redivided down to an indivisible unit which they called *atom*, the *indivisible*. All stuff was made up of some form of this primitive unit. "Precisely!" idealists might say. "That is the nature of what we experience through our senses. But behind even that little bit of stuff is *idea*. The idea of atom exists independent of and prior to any instance of it."

SCIENTIFIC REALISM

The dispute continues, though most scientists accept realism and discount the argument. After all, we have demonstrated experimentally that the Greeks were wrong. The atom has been split. We got bits of energy, expressible in algebraic or verbal mode. As Einstein asserted before the atom was split,

$$e = m c^2$$

where "e" is energy in electron volts, "m" is mass in grams, and "c" is the velocity of light in centimeters per second. A single gram of matter, of any kind, completely converted into energy, would produce 900 billion billion electron volts, since the speed of light is 30 billion centimeters per second. The statement has been demonstrated to be approximately correct, but it says nothing about ultimate reality, and it begs important questions. It defines nothing except to state the mathematical product of two values. The speed of light value is derived from two concepts—time and distance, both packed into the word *speed*. The *of light* part is a limiting reference. It suggests that light has an intrinsic relation to energy. Now energy may have subjective existence, but do time and distance exist subjectively in and of themselves? I think not. Time is not a thing, but an aspect of action. If light is to go somewhere, the *going* is what takes time. We have objectified astronomical time and use it as a standard. But any activity has its own time for completion. The disparity between the time taken to complete an enjoyable action and a painful action flows from an attempt to compare the subjective time requirements with an astronomical standard. In any event, time does not have the same existential property that energy may have. Algebraic efforts to imply negative time constitute a symbolic game, because if the rever-

sal of time were possible, it would take time to happen.

Distance does not have subjective existence either. It does not exist as though it waits for particles to line up at correct intervals. It seems that as energy stuff relates in various combinations, distance is a part of the relation. Distance is not intrinsically physical, and social distance is just as objectively realizable.

But the real problem with Einstein's equation goes beyond begging the question of time and distance. It also begs the question of ultimate reality. The metaphysical issue cannot be ignored. But we cannot look to physics nor to contemporary philosophy of science for the answer. The philosophy of science is mainly an apology for nuclear physics and its social apparatus. Nuclear physics rests on an assumption which enables those scholars to ignore the issue. That assumption is easily shown to be false.

The common image of the atom is a mini-solar system as developed by Bohr, to relate Einstein's work and radioactivity. While nuclear theory holds that this atom has been split, and research continues to determine an elaborate system of subatomic and subnuclear particles, the atom, as the Greeks defined it, has not yet been found, let alone split. It will be found only when truly indivisible particles are identified.

The word *atom* has been preempted, and we must use some other term. The concept we seek does not deal with the atom of nuclear physics, but with the character of what the ultimate stuff may be. Further, its potential for combination must account for the totality of the universe, including human experience. It must have the property of accounting for all existential being, from the atom to the physical world to humanity in institutional array.

While the ultimate reality must include energy and physical properties of existence, it is not merely energy. It must have the possibility of apparent change. More than that, it must be knowable. It must permit generalization beyond discrete instances. Thus, it cannot be dead matter. It is active in itself and not passive nor dependent on outside forces, though it must be capable of interaction.

Though it is the stuff of which energy is made, it is also the stuff of which *idea* is made. The ultimate bit is neither just mate-

rial energy nor just idea, but simultaneously something from which both are derived. Whether it is perceived as energy in a physical sense, or as an idea in a matter of perspective, and of our relation to it. I, thus, avoid the duality of *matter* and *idea*. The idea of any material thing is contained in the stuff of ultimate reality. Any duality flows from the human mind and from our penchant for objectivity, and not from the subjectively real properties of the ultimate. This assertion illustrates the difference between reality and statements about it.

IDERGY

We need a word to connote these properties. By combining the terms *idea* and *energy*, we can develop the term *idergy* which signifies knowable bits of stuff that combine in particular relations. Each combination generates its own idea, and time is that which is required for the fulfillment of the idea. As any combination interacts with any other, the potential for an exchange of information and energy exists. It is vital to understand that combinations of idergy have subjective integrity independent of any statement made about them. As *idea* they lend themselves to verbal assertions; as *energy* they behave in an observable form, or as observable consequences of their behavior.

The notion that all matter in interaction with any other bits of matter constitutes an information and energy exchange system has important connotations. The interaction between oxygen and iron produces rust. Thus, iron and oxygen know how to interact to obtain this result. If we can know how oxygen and iron combine to produce rust, there is no reason to say that such knowledge is not a part of the rust-producing process, unless we want to make human knowing a mysterious force that operates outside the scope of the world we claim to know.

Similarly, our eyes know how to see. The body knows how to consume nutrients and to grow. It knows how to become ill under certain conditions, and how to mend itself. Similarly, copper knows how to conduct electricity. If the subjective character of idergy admits *idea* as a constituent element, then knowledge is not hard to apprehend or to accept.

This knowledge is subjectively true, but scientific knowledge is objectively based. Here we note the difference between the

existent world and our statement of it. To distinguish between *beliefs* and *knowledge*, *objective knowledge* consists of those statements about the world whose acceptance depends on adherence to accepted rules governing their admissibility. *Beliefs* are statements we accept with no governing rules on which they rest. A *myth* is a somewhat organized set of beliefs accepted as true without test and on no basis of procedural rules. A theory would be a somewhat organized set of statements, some of which are subjected to test and accepted on the basis of governing rules. A theory is organized objective knowledge.

RULES OF IDERGY

I can offer three general rules of idergy. They are generalizations of the laws of thermodynamics, substituting the concept *idergy* for the concept *energy*. The advantage of the new term is that it fits biological life, including humanity and social organizations. Since matter can be regarded as information-energy exchange systems, biological organisms can be similarly regarded, as can social organizations. The utility of the *idergy* concept appears here. Just as physical action follows laws, so does all else. The law of social behavior is an example. The generalization of Newton's laws into general rules avoids the confusion about laws as inference tickets, and propositions which set inferential boundaries. The generalization is straightforward, and the implication is reasonably intuitive.

Rule I. The form of energy may be changed. One person's values may generate enthusiasm which results in monumental effort by others. Values and thoughts may be energizing. The intake of food and minerals, which are sources of energy, can result in intellectual or creative imagination. Idergy can neither be created nor destroyed by humans. Whether the expanding universe implies a continuous creation of new idergy has subjective rather than objective truth. It is an issue on which silence is appropriate.

Rule II. In the interactive process, some idergy is lost to the system. Whether it be in the form of an attempted perpetual motion machine, where energy is dissipated through heat, or the loss of enthusiasm by some social partisan, or getting hungry after work, some idergy is lost in the act of information-energy exchange. The principle of entropy applies to the social as well

as to the physical world.

Rule III. Since there is an inherent logic to the idea implied by idergistic combinations, that logic will be fulfilled by an outside force. The principle of entropy will require a recognition that the interaction may run down. But that is part of the logic of an interchange system which does not provide for continuous insertion of new forms of idergy, sometimes recognizable as energy, and sometimes as idea. Whether a rocket hurtles through space, or nations confront each other, or a young person heads for prison, once a logic is underway, it will be fulfilled unless intercepted by an outside force, or entropy halts the process.

The basic stuff of existence is a sort of restless energy, combining into interactive units, each instance having its own logical integrity, as an idea struggling for fulfillment. Though such a process is true of all actions and processes, biological and social instances are of immediate interest. Any biological being is an idergic combination with a logic-seeking fulfillment which will occur unless intercepted by an outside force, or halted by entropy. Fulfillment is the first law of nature; survival is its second. Similarly, a person, interacting with another person, can be regarded as instances of energy-information exchange systems such that any human relation has its own logical integrity and will be fulfilled unless intercepted by an outside force or the social equivalent of entropy halts it.

ORGANISMIC BEHAVIOR

We can look to any life form for an interesting consequence of this point of view, and it is most apparent in mobile organisms. Initially, we note that organismic behavior occurs in a field, which is a special case of a situation. By this restriction, we intend to limit the domain of the universe required to understand any one individual. The individual, whether an amoeba in the water, a lion on the veldt, or a scientist in a laboratory, is an active unit, capable of responding to stimuli, and seeking immediate completion of an idea implied by its behavior. It meets a subjectively real world. There is a substantive aspect to its behavior. It distinguished between the whole of the field and the interesting parts of the field. In interaction with an interesting part, it must have some knowledge of it, make some judgment of it, and immediately relate itself to this object of its

interest.

The individual encounters a substantively real part of its field, judges it, and relates to it. In the relational activity, it must objectify the thing it interacts with, and the interaction between the judgment and the relational posture is critical. The thing encountered is judged as being 1) indifferent to its intent, 2) supportive of it, or 3) a threat to it. All three of these alternatives are value judgments. In an ultimate philosophical sense, there is no subjective neutrality. We may posture an attempted objective neutrality, by being indifferent to the outcome of the other, but even the scientist in the laboratory must determine whether the stimuli he encounters are or are not data, and whether the data is credible.

We have illustrated systems in which energy-information is exchanged. But some of the energy may be taken as a restraining force, or as negative and dangerous information. Whether the information is chemically transmitted, or is a matter of physical or kinetic action, or is cerebrally processed, the idea is capable of generating energy consumption and must be of the same stuff which makes up energy.

BEHAVIOR MOTIVATION AND RESTRAINT

Either from an external source or an internal source, two sets of forces can be noted. One set tends to impel behavior and the other to prevent or restrain behavior. These forces are idergic. They may be objectively realized as energy or idea. The amount of behavior is described as a function of these two forces:

$$B = M/R$$

where B denotes behavior, M the propelling or motivating forces, and R the restraining forces. Thus, the law is: *Behavior varies directly with propelling forces, and inversely to those of restraint.* It is of the form of Ohm's law, in which behavior is like electrical current, M is like voltage, and R is like resistance. The law holds for all recognizable forms of energy. It is shown that this law is adequate to formulate Zipf's law of least effort, and Stouffer's law of intervening opportunity, and Francis' model for birth-order data (Francis 1971). Regardless of the temporal sequence, the theory is logically prior to the data (Francis 1957). Any research verifying this form validates the argument. That the social behavior conforms to a law-like statement isomorphic to the

well-known Ohm's law is empirical confirmation of the asserted properties of idergy. Electrical current and human behavior are instances of the same thing.

The matter does not rest there. Though time is not subjectively real, but rather, a condition for the fulfillment of an idea, problems exist regarding its objective status. Sociologists, among other scientists, seek to understand process, and it is process which has a subjective reality. A process takes time, whether it is the life cycle of an organism or an on-going social transaction. And a process is the fulfillment of an idea.

Processes occur in the matrix of history. In the case of social history, human affairs are marked by persistence, evidence of slow change, and instances of eventful change (Teggart 1941). Since these changes are objectively realizable, differences may be as much methodologically as subjectively real. Operational specification may be bound to moments in history. What constitutes any of the terms in the idergy equation will vary from one era to another. Even the manifestation of the behavior interest may change from time to time. Theoretical perspective rather than subjective reality may determine what is observed. Under some conditions, something akin to a materialist dialectic may appear verifiable. Under other circumstances, something like the Hegelian dialectic may appear verifiable. The structural form of the idergy equation simultaneously accounts for the flow of electrical energy and human behavior. This does not negate the view of a person as a thinking organism. In fact, it rests precisely on that view. It confirms the humanist view of mankind.

This argument requires us to view a human as an active creature, and not merely as a passive blank slate, or as a responder to stimuli. *Idea* is as real as *energy*. The person has a logical integrity singly, and in her/his various social relations, the ideational aspect, subjectively understood, is as central to the view of the person as are physical or biological attributes. The thinking person is not a mysterious departure from the dead stuff studied in science laboratories. Since *idea* and *energy* are aspects of one underlying concept, thinking, feeling, understanding, and the other mental processes have a subjective reality independent of any objective statement made about them. The limiting

view of a merely objective science must be replaced by a view which respects the human individual as an active bundle of the stuff of which dreams and stars are made.

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