

Philosophers are generally agreed that man cannot know nature as it is. They can only know it as they perceive it. Their perception of it in turn is related to yet little known ways of looking at things. But since they wish ~~to~~ to establish certain useful and satisfying relations with the world (i.e. bring order to it), ~~they~~ knowledge departs from "mere sensation" and becomes successful ways of handling the world. Thus we have the perceivers, the world as perceived differently and the objects of perception. A combination of the three produces science of science, such as this paper, must speculate about all three phenomena.

A science is successful as it is inclusive of all its observed phenomena. It is inclusive of all its observed phenomena as it relates meaningful all their aspects. Metaphysics is the philosophy of science, is science in its "interrelated" aspect and therefore precedes or succeeds the new interrelationships of the scientific fields.

Thus far, the history of science has indicated that science tends to become unified. "Greatest strides in scientific theory take place when the contradictions of one age become the 'system' of the next age. Thus physiological and biological materials became adjustable in the terms of the referents of the physical sciences, and in the last century 'social physics' was the goal of social science. Similarly, ^{astronomy} ~~the~~ referred phenomena of astronomy came to be related to a new reference of matter as energy.

A present preponderance of ~~the~~ Theory of the science of science maintains that all phenomena of the world, so far as they may be related at all, may be ultimately relatable each other, that is, all things may be ultimately describable and manipulable in the same terms.

This, I submit, is not necessarily ~~true~~ ^{so}. To say that science thus far has found a single system of relationships the greatest impetus to its success may be acceptable as history. The same belief, extended to the future, is of course, an hypothesis.

If we look at that statement as a hypothesis, certain implications reveal themselves. ~~That~~ Science as a single system is then not true; also it ~~is~~ has as a belief the dangers to science of all beliefs; also the possibility of its opposite - that is, science as double, triple, etc. system - is manifest; also more questions may be solved in the future by the development of two or more sciences, inherently unrelated, save by the processes of the philosophy of science. Further implications intrude: The establishment of more than one science will facilitate or decrease the rapidity of scientific advance in theory and practice; the comprehension of more than one scientific system may be difficult as the comprehension of an "infinite but bounded universe" or a "fourth dimension" to reality; with the door left open, a profusion of sciences may be proposed which will destroy the meaning of science's goals, which are to simplify

(3)

Control over the controllable.

With the second set of implications, which are the social effects or reactive effects of theory itself, we will not concern ourselves now. But we are interested in examining the first set of implications. The key question here is: what do we mean by two sciences which are inherently unrelated? Once this is answered, we may ask, "What do we gain by the use of inherently unrelated sciences," and ~~the~~ finally we may inquire: "What is the possibility of developing inherently unrelated sciences in an effective, productive manner?"

Now to the first question: "What do we mean by two sciences which are inherently unrelated?" The first assault on this matter requires that we first through a hoary and fiercely-possessed dogma of logic: that a fundamental distinction exists between a fact and a statement of preference, and that a science cannot develop without this vital tenet, a single science, that is. We agree, a single science cannot develop without this tenet, because a single science must have a single system of referents - i.e., it must build on fact statements the categories of observations and generalization. This is their first line of defense. They also insist that seeming contradictions to this tenet may be "reduced" logically; e.g. the statement "The man is good" is reducible to a preference statement plus a sense of factual derivativeness. They also allow that the perception of facts are frequently influenced by the visual or sensational field of the ~~fact~~ perceiver. In other words, both of the latter sets of observations

are considered as inclusive within the single system of
 referents and that, by implication, this is the most
 useful method of dealing with them. Thus they are
 really part of our second question and need not be
 treated here; leaving us only with the if ~~part~~ our
 first answer is affirmative, we can deal with them in
 form. So we are back to the necessity of ~~discussing~~
 abolishing the distinction between fact and preference if
 we wish to give any meaning to a "multiple sciences".

We will pursue this inquiry along these lines.
 Modern science abolished the rational in behavior,
 leaving us with the non-rational. We wish to abolish
 both. Will ~~we~~ therefore be left with nothing? Far
 from it. We will be left ~~with~~ to conjecture that
 fact and preference are the same if man is neither
 rational or non-rational - unless we wish to maintain
 the distinction in our own minds for purely logical
 purposes, something I would regard as useless for the
 present discussion at least. Let us rephrase the situation
 then: activity is inconceivable as fact and preference
 and is infinitely related to whatever goals the observer
 chooses to relate them to. "Fact & preference" presupposes
 rationality and $\therefore$ absolute; "non-rationality" presupposes
 rationality and $\therefore$ absolute; only infinite relativity
 signifies this new condition which I may tentatively
 call "objectivity".

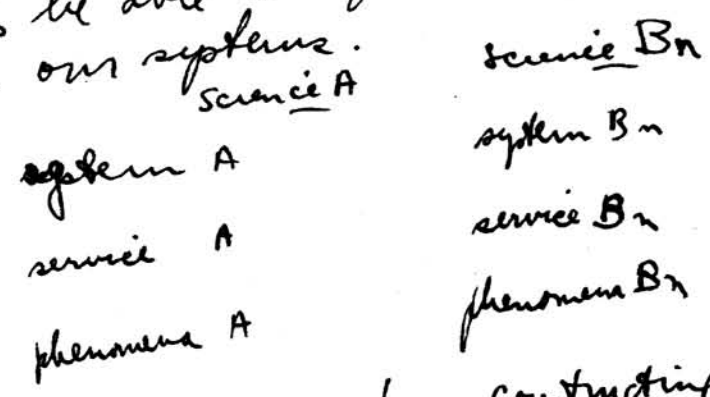
What do we achieve by this so-called
 "objectivity"? We achieve anarchy of all observational
 standpoints. Is this good? Not in itself. But
 we can move on. We can pose a new method of attack.
 Since all behavior is random from the standpoint of
 objectivity, the way to study behavior is

by relating it to itself and defining the self as an infinite number of relationships. This essentially is what Plato and Aristotle did, the former through "idealism" the latter through "evolution". But neither went from "itself" to "itself as infinity". The results are important. "Infinity" allows us to choose. We choose to say then that, holding true and non-true as meaningless, like relationships are "true" to each other, and like relationships, if they be dense enough in numbers and intensity, are sciences. Their combinations and relationships to other relationships are infinite and therefore sciences are infinite. They are aspects of a continuum of infinity, itself inexpressible as a continuum because of its infinite aspects. Sciences are experiences of relationships so like as renders their meaning interrelatable. ~~One~~ One science would relate all relationships - multiple sciences would be a succession of ~~related~~ clusters of relationships. Inherently unrelated sciences are sciences without ~~any~~ necessary unity for describing the universal. Infinite relationships means of course, infinite sciences.

Are we then to find no sciences relatable? No. We call sciences ~~unrelatable~~ relatable which renders services to the same phenomenon. Are we to study them as they are "relatable", is they "renders services" or in terms of the "phenomena". It should say as they are related. Firstly, because the phenomena are so different and many, traditional social sciences has suffered from a preoccupation with data-stay, to say for those who has always thought them too little empirical. Secondly, because the rendering of

services involve a "functionalist" approach which may become absolutistic and reformist - again an historical methodological and conceptual curse of science. So we hold to relativity as the key to the study of sciences.

We mean by relativity, our capacity to produce more than one account of reality, which will account also for the perceiver and his motives and which will therefore be more useful than a science which accounts for reality in one term only. With more than one science, if our surmise is true - that is, with whatever number of sciences as are required to relate simply the factors up and down the ladder of service and generality, we shall better be able to cope with our phenomena, our services, and our systems.



What will be the basis for constructing our new science? And if we get more than one, how to compare them with the beautiful unity of physics? If our first question is adequately answered, we need not answer the second, of course. Beauty is not the end of science. But the unity of physics is only in terms of its utility and not absolute, as we have already said. One interpretation of the universe holds only until a better one is constructed - This is true of the "real" world just as much as in mathematics where Poincaré and others showed the way. So physics may impress us, but not forbid us from the creation of two or more sciences.

As a matter of fact, numberless philosophers have produced system after system of "truths". And William James has given us his pluralistic universe. And indeed, the strongest school of democratic theory today holds that truths are many and therefore no one shall be imposed on the community.

This last holds ~~the~~ a hint of our method of constructing sciences. Having abolished non-rationality, fact and preference, and a single science, we would propose that we develop as many systems of science as there are fundamental modes of viewing the universe. ~~These~~ These may be two, three or more. Let us assume there are three clusters of phenomenal relationships which habitually occur to three different kinds of men. Let us assume (here a great amount of study is required) that the three types mixed jointly cannot see the same thing the same way. Obviously, then, the task of the scientist is to construct the full "believable" system for each set of men and then to relate the three to each other in constructing a *modus operandi*.

Certain elements of this construct have already been taken into account. We have a theory of ideal types (Max Weber), a sociology of knowledge (Marshall Vaidinger, etc.), a theory of residues (Pareto), theories of relativity in both social and physical sciences. Except for elements of the last, however, we have no systematic presupposition and analysis of the total theory of multiple sciences.

4 Social Science cannot be

8

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individual, physiological nature. Our view of the social world is immutably natural.
These may be as numerous as

the Basic Personality Types who do not accept an authoritative world view.
The contradictions of mixed basic personality types who do not accept an authoritative world view, an authoritative resolution of contradictions, or subscribe to a basic preference vs. contradictions in preferences.

~~A single democratic (i.e. unforced) soc. sci. is impossible.~~

Since these are probably the case
A soc. science (if a single view of the universe, agreed to and completely systematized by a group of soc. scientists) cannot be anything but futile.
The only practical social science under such conditions would be one which a) evolved as many systems of science as there exist basic world views, b) evolved as many systems of science as are needed to ~~satisfy~~ ^{satisfy} the ~~complete~~ total number of contradictory systems involved in our second category above who do not submit to the required "remedies"
This is almost an unconceivable task
or c) ~~not~~ systematizing, but finding ~~an~~ areas

→ i. e. it may result from different societies and cultures,

of frequent or common "apparent" agreement
 on specific wants, would do the pedestrian
 work of satisfying them. This last would
 however have great difficulties & dangers,
 since the scientist would really be
 engaging in preferences, i.e., preferring the
 common ostensible agreements, to the
 uncommon or disagreements (cf. e.g. the
 pollsters, who inevitably assist a 19th
 century theory of mass democracy). This
 is only, however, trouble-shooting, or
 practical science - it is highly morally
 involved will always be ~~regarded as~~
 socially sensitive.

(unforced) social science is
 impossible.

- Hence a single "democratic" (i.e. unforced) soc. sci. is possible.
- A forced (authoritarian) soc. sci. is possible.
 - A prescribed world view like the voluntary physical world view.
 - A working out of all human relationships.
 - The enforcement of the system on all humans.
 - The making of aberrational views a mistake; then
 - This may occur ~~through~~ the state;
 - through groups;
 - scientists who are
 - knowingly allied w/ state
 - or unwittingly backing the " " "
 - or schools of scientists,
 - like certain rationalists (esp. behaviorists)
 - or psychologists