IDEAL TYPES AND THE PROBLEM OF REIFICATION

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Abstract

Social scientists are usually aware that ideal types are merely constructs that pick out, indeed exaggerate preselected aspects of social reality. Nevertheless, there remains a tendency to treat them as if they referred to entities actually existing in the social world.

This paper attempts to demonstrate how the very attempt to avoid reification by denying existence to social things encourages a tendency to reify ideal types and other constructs which social science imposes on social reality. It argues that without a realistic ontology of the social, it is difficult to envision how social reality might "kick" at the constructs social science seeks to impose upon them and render them problematic. The constructs of social science select out of an undifferentiated universe of facts only those which they, themselves, have predetermined to be germane. Once so selected, the facts become linguistically and psychologically fused with the constructs that selected them.

All science attempts to simplify and typify the reality it seeks to represent. However, it is the notion of a reality independent of the constructs science attempts to impose on it that compels scientists to abandon or modify these constructs as inadequate representations.

Finally, the paper explores various concrete sources of orderliness in social reality that can serve as objective constraints on the hypotheses social science seeks to impose on them.

I. INTRODUCTION

Social scientists are usually well aware that ideal types are not representations of real word objects. They know that ideal types are merely constructs that pick out, indeed exaggerate preselected aspects of social reality. Max Weber, for example, whose writings have strongly influenced the way social scientists think about ideal types, insisted that ideal types are not descriptions of objects in the real world. They are only *instruments* which the social scientist *creates* to investigate the social world. It is intriguing that, nevertheless, a strong tendency remains in contemporary social science to treat ideal types (e.g., bureaucracy, totalitarianism, types of authority) as if they referred to entities that really exist in the social world. Ironically, the very efforts to avoid reification allow a new form of reification in through the back door.

This paper attempts to show how the very attempt to avoid reification by denying existence to social things results in the tendency to reify the ideal types and other constructs which social science imposes on social reality. It suggests how we might combat the natural psychological tendency to reify concepts by sharpening our notions about the furniture of the social world. It argues that sharpening our notions of the sources of orderliness in social reality makes clearer what constrains the hypotheses we seek to impose on it, and thus helps put a check on the tendency to reify.

All science, natural and social alike, strives to simplify and typify the reality it seeks to represent. The scientist always selects and constructs facts out of an infinite universe of signal and noise only those which he/she has determined to be signal, largely on *a priori* grounds. Once so selected or constructed, the facts become psychologically fused with the conceptual and theoretical constructs that determined their selection. Even natural scientists commonly confuse reality as constructed by the theoretical paradigms in which they work with reality as it really is. This helps explain the recurrent phenomenon of dogmatic resistance to new theories in the natural

sciences that look at reality in a different way. The natural sciences are by no means free of the problem of reification.

In the advanced natural or "hard" sciences, the naive, commonsense belief prevails that science actually attempts to describe and explain a reality existing independently of the constructs of science. It is this reality that sometimes compels scientists to abandon or modify the theories and other constructs which they hold dear. In the advanced natural sciences, such commonsense realism routinely wins out over all philosophical arguments against the existence of a real world. As a rule, in the practice of the natural sciences, "if it kicks, it's real." Natural scientists take this for granted no matter how aware they may be of the layers of theory and sensory processing between a real world object and sensing of the kicking it does.

Unlike natural scientists, social scientists tend to be uneasy with the notion of a social reality existing independently of science. The very idea of what might be meant by social reality remains unclear. Yet without a realistic ontology of the social, it is difficult to envision what might kicking at the hypotheses social scientists attempt to impose on it. In other words, without a clear conception of the "furniture" of the social world, it is hard to see how the social world can make problematic the constructs social scientists seek to impose it.

I. THE AMBIGUITY OF SOCIAL REALITY

What kinds of things do social scientists observe when they investigate social reality? And why is this question important? After all, neither natural scientists nor poets worry about such questions. Natural scientists, even in their most sophisticated work, rarely go beyond commonsense notions of reality. They treat the objects of nature as real in the sense that they possess such properties as mass, extension, heat, light, and velocity. Neither ordinary people living their everyday lives, nor natural scientists working at the frontiers of knowledge have much difficulty conceiving of the

furniture of the natural world. They remain realists despite all the difficulties philosophers have in proving the existence of a real world.

The reality of the subjective states of which poets write--such as love, fear, anger, is not difficult to grasp either. We all know the reality of these things through our own personal experience of them.

If these two kinds of reality, the physical and the subjective, are compared with the kinds of things social scientists study, the outlines of a problem begin to emerge. What kind of reality, for example, are such things as languages, bureaucracies, universities, traditions, social systems, elites, and governments, power, influence, control, authority? To be sure, few radically question the reality of social things and phenomena any more than they doubt the reality of natural objects or of feelings. We go about our lives talking about social things and phenomena as if they really existed. We do not often puzzle about the nature of these things. We think and talk about social objects, phenomena, and processes all the time, usually without running into trouble. Also, many social scientists manage to conduct their research without always running into trouble. They do not spend much time worrying about the nature of social reality. As in the natural sciences and in poetry, a commonsense understanding of social reality is often all they need.

Nevertheless, it is undeniable that conceptual problems plague both the social sciences and commonsense understanding of social reality in ways that are mostly foreign to the natural sciences. In contrast to the norm in the natural sciences, many social scientists constantly feel compelled to inquire into what their concepts really mean. They are much more often preoccupied with arguments about conceptual frameworks and in finding ways of rescuing concepts and frameworks that are bursting at the seams. The rise of research committees devoted to conceptual and terminological analysis in sociology and political science is symptomatic of a much more general tendency.

Such conscious preoccupation with concepts and frameworks is only the tip of the iceberg. Social science is fraught with problems related to its efforts to represent reality. Mainstream, that is positivistic, social science, for example, in its preoccupation with objectivity, is very restrictive about the kinds of evidence it allows in. Yet critics are quick to point out that positivistic social science gives severely impoverished, often distorted representations of what is really out there. Another persistent strain of criticism suggests that too much of social science merely reinterprets reality in different ways instead of really explaining or deepening knowledge of it. Indeed, theory and framework change in social science often seems to have more in common with changes in clothing fashions than with the growth of knowledge in the natural sciences.

All this is symptomatic of profound problems with serious practical implications. Our notions about the furniture of the social world, that is, our ontologies of social things and phenomena, may often be quite serviceable. Nevertheless, they are often highly problematic in ways that social scientists are usually unaware of. When social scientists set out to study things like governments, markets, or power, they must have some idea of what to look at. Whether consciously or unconsciously, they inevitably make assumptions about the nature of the things or processes they are investigating. Such assumptions unavoidably play a crucial role in determining what kinds of information might be germane, and what kinds of data might be generated. Yet frequently, when we examine our conceptions of social reality, we discover how vague and confused commonsense ontology of the social can be.

If confusion is often the result of efforts to get a hold on social reality, another result is the persistent tendency toward reification of concepts in social science. By reification, I mean confusion of the concepts we use to probe reality with reality itself. It is the tendency to think of concepts like the political system, elite, social class, interest group, bureaucracy, capitalism, power, influence, and authority as referring to real things in a real world existing independently of observation and interpretation. Such a

belief, namely, that concepts have referents, implies that they exist objectively like stones, trees, and thunderstorms.

Many writers have cautioned against confusing words and concepts with real world things. Benjamin Lee Whorf, for example, draws attention to our tendency to take our ways of thinking about the world "out there" for a neutral labelling of natural things. Hence, we mistake concepts about things for the things in themselves ~~(1956:152,238)~~.[1] Alfred North Whitehead calls this "accidental error of mistaking the abstract for the concrete ... the Fallacy of Misplaced Concreteness" ~~(1953:64-74)~~.[2] Quine refers to "object-posting" modes of thought ~~(1959:155)~~.[3] And, S. I. Hayakawa writes: "The first of the principles governing symbols is this: The symbol is <u>not</u> the thing symbolized; the word is <u>not</u> the thing; the map is <u>not</u> the territory it stands for ~~(1978:25)~~.[4] Nevertheless, despite all cautioning of this kind, and despite widespread awareness in principle of the problem of reification, we continue to mistake concepts about things for the things in themselves ~~(Handler, 1984:55)~~.[5]

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[1] Whorf, Benjamin Lee, <u>Language, Thought and Reality</u> (New York: Wiley, 1956), pp.152, 238.

[2] Whitehead, Alfred North, <u>Science and the Modern World</u> (Cambridge at the University Press, 1953), pp. 64-74.

[3] Quine, W.V., "Meaning and translation," in <u>On Translation</u>, edited by Reuben Brower (Cambridge: Harvard University Press, 1959), pp. 148-72.

[4] Hayakawa, S. I., <u>Language, Thought, and Action</u>, Fourth Edition (New York: Harcourt, Brace & World, 1978), p.25.

[5] Handler, Richard, "On Sociocultural Discontinuity: Nationalism and Cultural Objectification in Quebec," <u>Current Anthropology</u> Vol.25, No.1 (February 1984), p.55.

Several of the founders of modern social science were aware of this problem and of its importance. However, none was successful in solving it. In Karl Marx's view, part of ideology is the tendency to believe that superstructural elements have a reality and permanence that is actually illusory. As John McMurtry puts it, Marx saw the categories or ideas of ideological thinking as "not only 'emancipated from the world" by virtue of their indeterminateness, but just as importantly are 'transformed from predicates into subjects' from general properties ascribed descriptively to the self-subsistent movers of the world ~~(McMurtry, 1978:136)~~.[6] Consciousness raising supposedly exposes such reified categories as the mere ideology that they really are. "Where speculation ends--in real life--there real positive science begins: ... Empty talk about consciousness ceases, and real knowledge has to take its place" ~~(Marx and Engels, 1947:15)~~.[7]

Other thinkers later on noticed that, Marx's unmasking of the reification of categories, notwithstanding, his own categories--e.g., class, proletariat, capitalism--lend themselves to reification ~~(See, e.g., Weber, 1949:103; Mannheim, 1964:67-9, 124,248-9; Hughes, 1958:77,81-82, 87-89,93)~~.[8] For example, although it can be shown that the

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[6] McMurtry, John, The Structure of Marx's World View (Princeton, NJ: Princeton University Press, 1976), p.136.

[7] Marx, Karl and Friedrich Engels, The German Ideology (New York: International Publishers, 1947).

[8] See, for example, Weber, Max, The Methodology of the Social Sciences, translated and edited by Edward A. Shils and Henry A. Finch, with a foreword by Edward A. Shils (New York: The Free Press of Glencoe, 1949), p. 72; Mannheim, Karl, Ideology and Utopia: An Introduction to the Sociology of Knowledge (New York: Harcourt, Brace and Company, 1964), pp. 67-9, 124, 248-9; Hughes, H. Stuart, Consciousness and Society: The Reorientation of

notion of class is incoherent ~~(Jarvie, 1972:91-127)~~,9 Marxists, continue to speak about classes (and other key Marxist concepts) as if they were real things existing independently of interpretation.

Max Weber had a more sophisticated understanding of the problem of reification than did Marx. Indeed, his ideal-typical method represents a reaction to the tendency in 19th century social thought to treat such entities as nations as classes as irreducible wholes actually existing in the real world. The social world, Weber insisted, is infinitely rich in atomic details that are in constant flux. The social entities that characterize so much of 19th century social theory, he insisted, do not exist in the same way trees and stones do. They result from imposition of the social scientist's perspective upon the infinite richness and constant flux of social reality ~~(in Weber, 1949:111; 1975:55-80)~~.10 Ideal types, Weber insisted, are not descriptions of objects existing in the real world.

European Social Thought 1890-1930 (New York: Vintage Books, 1958), pp. 77, 81-82, 87-89, 93.

[9] Ian C. Jarvie, Concepts and Society (London: Routledge & Kegan Paul, 1972), pp. 91-127.

[10] Weber, Methodology, p. 111; Roscher and Knies: The Logical Problems of Historical Economics, translated with an introduction by Guy Oakes (New York: The Free Press, 1975), pp. 55-80.

They are, rather, instruments which the social scientist creates for purposes of investigating the social world ~~(Weber, 1949:90).~~[11]

Yet like Marx's attempts, Weber's very efforts to avoid reification allow a new form of reification to creep in the back door. Social scientists may think they that they understand Weber's methodological recommendations very well. Nevertheless, they still incline to treat ideal types like bureaucracy, totalitarianism, types of authority, etc., as if they referred to entities that really exist independently of interpretation.

Social scientists are trained to be sensitive to the fact that ideal types are artificial constructs that pick out, indeed exaggerate certain aspects of social reality. This does not, however, put a stop to the inexorable tendency to reify them. The warning that ideal types are merely constructs, that they do not correspond to real things in a real world is apparently not adequate. The disposition to reify is too deeply-rooted in human psychology simply to evaporate by being exposed. Therefore, before proceeding further in our examination of the reifying tendency in Weber's ideal typical method, I propose to take a closer look at sources of the general inclination to confuse the constructs we use in making sense of reality with reality itself.

II. REALITY IN ITSELF VERSUS REALITY FOR US

Such problems are not unique to the social sciences. At least since Kant, it has been widely recognized that, even in the realm of natural science, there is no pre-ordained, non-distorting correspondence between thought and reality. It is well-known that the facts and laws of nature do not contain their own order and meaning that impose themselves upon the human mind. Rather, it is the human mind that tries, with varying degrees of success to impose order and meaning upon nature. "If," as Henry

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[11] Weber, Methodology, p.90.

Aiken puts it, "the reason in things is the same as the reason which we acknowledge as the standard of valid thinking about any object, this is only because we ourselves have preordained what conditions any object must meet if it is to be counted by us as 'real' ~~(1956:15)~~."12

What if we set aside the philosophical arguments for idealism? What if we acknowledge, for practical purposes, the *existence* of a reality independent of perception and interpretation? Still, we have to acknowledge that the human mind never *knows* such reality independently of selection, perception, and interpretation. Cognition is not simply a process of uncovering or unveiling a reality that is out there, existing independently of selection, interpretation and construction. We do not experience reality directly, but only through the mediation of our sensory apparatus and intellect. Only those aspects of external reality (things-in-themselves), that can in some way link up to the human sensory apparatus ever become part of *reality for us* (things for us). Selection, perception and interpretation add something to this *reality for us* that was not present in uninterpreted reality-as-it-is.

So, external reality may, indeed, objectively possess all kinds of properties that cannot be linked to the human sensory apparatus. Nevertheless, we only perceive and interpret those which can be so linked. Thus, only through perception and interpretation do they enter into the construction of *reality for us13*

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[12] Aiken, Henry D., The Age of Ideology (New York: New American Library, 1956), p.15.

[13] This is not to admit the truth of the empiricist doctrine of "nihil trans sensum" (There is nothing in knowledge that did not initially enter through the senses). Knowledge about the

Much neural processing takes place between receipt of a stimulus and the awareness of a sensation. When the stimuli from the external world that produce sight, sound, touch, and smell enter the central nervous system via the appropriate sense organ they are subjected to a process of filtering. Such filtering takes place even in the simplest kinds of perception. There must be some kind of selection of signals, especially if the signals are complex. Among the factors that determine what to select are: the nature of the incoming stimuli, the likelihood of their occurrence, and conditions within the individual, such as expectancy and his needs. After this selection has taken place, the signals reach the cerebral cortex and the related areas in the mid brain, and we experience certain sensations ~~(cf. Lovell, 1966:11)~~.[14] The sensations of two

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external world may grow, for example, through speculative imagination. If, however, it is claimed that a statement is actually <u>true</u> of the external world, it must in some way be linked to signals issuing from the external world which are perceptible to the human sensory apparatus.

[14] K. Lovell, <u>The Growth of Basic Mathematical and Scientific Concepts in Children</u> (London: University of London Press, 1966), p.11. To be sure, the range of the human sensory apparatus is considerably extended by scientific theories that transform signals emanating from the real world from noise into meaningful knowledge. Its range is also extended by instruments like microscopes, telescopes, x-ray machines, metal detectors, and radar the theories that link these extended-sensory devices to sensory data they produce does it make sense to say that such

individuals experiencing the same stimuli need not be identical. The same stimulus can produce very different sensations. Also, different stimuli can produce the same sensations. The route from stimulus to sensation is partly conditioned by education. Individuals raised in different societies behave on some occasions as though they saw different things ~~(Kuhn, 1970:192-3)~~.15 Michael Polanyi stresses the crucial role that tacit knowledge plays when scientists interpret raw sense experience. By tacit knowledge, Polanyi means the knowledge scientists acquire through practice and cannot articulate ~~(1967, ch.1)~~.16 Finally, the sensations we experience become empirical data only through intellectual digestion and verbalization ~~(Settle, 1973:250~~.17

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things as traces in cloud chambers, dark spots on x-ray photographs, and the noises emitted by metal detectors refer to external reality. The properties and limits of such sense-extending instruments thus also represent an intrinsic source of bias in human knowledge.

[15] Kuhn, Thomas S., The Structure of Scientific Revolutions (Chicago: University of Chicago Press, 1970), pp. 192-3.

[16] See, for example, Michael Polanyi, The Tacit Dimension (New York: Doubleday Anchor Books, 1967), ch. 1.

[17] Tom Settle, "Human Freedom and 1568 Versions of Determinism and Indeterminism", in M. Bunge (ed.), The Methodological Unity

As Karl Popper has stressed, the search for knowledge does not start from perceptions, or observations, or the collection of data or facts. It begins with problems ~~(1976a:88; 1972:258)~~.[18] In order to observe, we must have in mind a definite question which might be decidable by observation ~~(1974:259)~~.[19]

All knowledge is theory impregnated, including our observations. We always identify problems against a background of knowledge or dispositions which are there previously. This background knowledge assumes at least a language which always incorporates many theories in the very structure of its usages. It also contains many other theoretical assumptions that are unchallenged, at least for the time being. Even our sense organs have theory-like expectations built into them. They are blind to stimuli they are not built to react to. Thus, an observation becomes the starting point of inquiry only if it reveals a problem with our pre-existing knowledge, expectations, and theories

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of Science (Dordrecht-Holland: D. Reidel Publishing Co., 1973), p. 250.

[18] Karl Popper, "The Logic of the Social Sciences," in The Positivist Dispute in German Sociology (London: Heinemann, 1976), p. 88; Idem, Objective Knowledge: An Evolutionary Approach (Oxford: At the University Press, 1972), p. 258.

[19] Idem, Objective Knowledge, p. 259.

~~(Popper, 1968:46; 1976a:89; 1974: 71-72,145,165)~~.[20] We gather facts and count as facts only what our pre-existing cognitive and interpretive apparatus is set to perceive.

Names, concepts and classifications are theoretical in character, since they systematize reality. Once we have absorbed them, they possess considerable autonomy within our systems of perception and thought and exert considerable influence on them.[21] This in no way denies the existence of objective facts. It does, however, mean that we always select facts in the light of pre-existing expectations, frameworks, concepts, and theories. Since they are carried to us as perceptions, statements, theories, etc., we never experience them free of interpretation. Moreover,

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[20] Idem, Conjectures and refutations: The Growth of Scientific Knowledge, 2nd Edition (London: Routledge & Kegan Paul, 1965), p. 46; Idem, "Logic of the Social Sciences," p. 89; Idem, Objective Knowledge, pp. 71-72, 145, 165.

[21] Even supposedly neutral methodologies, by predetermining what kinds of facts are to be collected, predetermines the kind of picture of reality that will result. As Marx Wartofsky has put it, "ontology recapitulates methodology.""How to Begin again: Medical Therapies for the Philosophy of Science," in Frederick Suppe & Peter D. Asquith, eds., PSA 1976: Proceedings of the 1976 Biennial Meeting of the Philosophy of Science Association, Volume 2 (East Lansing, MI: Philosophy of Science Association, 1977), p.112.

nature is structured loosely enough so that different and even contradictory accounts of the same facts are common--even in the natural sciences.

All knowledge thus consists of selected stimuli mixed with interpretation. Perception and interpretation not only select out of the infinite number of potentially-perceptible signals emanating from external-reality-as-it-is, they become psychologically fused with it. They forge *Gestalten* with these signals, constructing *reality for us*. This means it is impossible to separate preconceptions (or prejudices) from knowledge. They are an integral part of knowledge. Without preconceptions, we would not be not left with a blank slate, let alone pure knowledge, but with chaos.

There is thus no guarantee of congruence between the structures of nature and society and the structures of meaning and order that man imposes on them. Scientists cannot even rely upon physical nature always to falsify the hypotheses they try to impose on it. Since different theories construct different realities-for-us, they are, in an important sense, *not even about the same reality*. To be sure, the history of the natural sciences abounds with examples where the reality-as-it-is decisively tipped the scales in favor of one theory or hypothesis over another. Yet it is also replete with examples where the "facts of nature" have been inconclusive with respect to choice. Commonly, not only competing scientific theories, but even competing metaphysical and magico-religious explanations have appeared to fit the facts more or less well.

Social scientists cannot avoid using models, metaphors, analogies, and ideal types in their efforts to make sense of the social world. These models will always be abstractions, interpretations of reality. Yet, once we construct a model, it guides and shapes our perception of reality. Since we approach the data with a preconceived theoretical model, "we are liable to feel that we see it, either within or behind the

changing, observable events as a kind of permanent ghost or essence." ~~(Popper, 1960:136)~~.[22]

This quality does not distinguish the social sciences from the natural sciences ~~(Popper, 1974:976)~~.[23] Even in the natural sciences, it is all too easy to confuse any model used to interpret reality with the reality it is interpreting. This helps explain the dogmatism and passionate disagreements that pervades the history of the natural sciences. It is always possible to find facts that fit any theory. In fitting the theory, these facts confirm it. The resulting illusion of fit and confirmation helps to explain our natural psychological tendency to forget that we selected these facts in light of the theory in the first place. Every successful fitting of a concept to new, uninterpreted facts creates an amalgam of fact and interpretation. Psychologically, fact and interpretation fuse. The signals emanating from the world are distinguished from noise by our pre-existing interpretive apparatus, provide constant confirmation of the seemingly natural fit of fact and report of fact. We forget that we selected the facts, even constructed them, using preexisting concepts, theories, interpretive frameworks.

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[22] Popper, Karl R. 1960. The Poverty of Historicism (London: Routledge & Kegan Paul), p.136.

[23] As Popper puts it, "all good science and all good philosophy consists of lucky oversimplification' or if you prefer the term, idealization—"Replies to My Critics," in P.A. Schillp, ed., The Philosophy of Karl Popper (La Salle, IL: Open Court, 1974), p.976.

We refer casually to *reports of facts* as *facts*. We think of them as if they were faithful replicas of the things in the real world, just as Galileo saw the mathematical formulations of science as faithfully replicating the underlying mathematical structure of nature ~~(Burtt, 1954: 74-75)~~,[24] and just as Aristotle's "basic premises" were statements describing the essences of things. The fact and its interpretation have become psychologically fused or reified. Once this psychological fusion of fact and interpretation takes place, it biases us against alternative selection and constructions from the same set of uninterpreted facts.

III. MAX WEBER'S IDEAL-TYPICAL METHOD: REIFICATION THROUGH THE BACK DOOR

Weber subscribes to the neo-Kantian view, discussed in the preceding section, that science *imposes* its theories and ideal types on the world rather than discovering them, in the sense of laying them bare. The kind of social science that is at the center of interest in his methodological and substantive writings alike is "an empirical science of concrete reality" (*Wirklichkeitswissenschaft*) ~~(1949:72)~~.[25] In Weber's view, we *compare* ideal types "with the real situation or action." It is "by means of this category [that] the adequacy of our imagination, oriented and disciplined by reality, is *judged*

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[24] Burtt, E. A., The Metaphysical Foundations of Modern Science (Garden City, N.Y.: Doubleday Anchor Books), 74-75.

[25] Weber, Methodology, p. 72.

~~(1949:93)~~."26 Weber makes clear, throughout his methodological writings, that the social scientist freely modifies or replaces ideal types which turn out to be inadequate for the investigation of reality. Moreover, in his own substantive sociological work Weber remained sensitive to the real world. He allowed the real world to correct the intellectual constructs he used to investigate it.

To be sure, in his methodological writings Weber does not deny the existence of a real social world. Yet he pictures a social reality infinitely rich in detail and in a state of constant flux. In his view, it is only the subjective interests and point of view of the social scientist that can give unity ~~(Weber, 1949:91)~~."27 Life with its irrational reality and its store of possible meanings is inexhaustible. The *concrete* form in which value-relevance occurs remains perpetually in flux, ever subject to change in the dimly seen future of human culture. The light which emanates from those highest evaluative ideas always falls on an ever changing finite segment of the vast chaotic stream of events, which flows away through time ~~(Weber, 1949:111).28~~

For Weber, ideal types are thus *merely* instruments. The ideal type, he contends, is "no 'hypothesis' but it offers guidance to the construction of hypotheses. It is not a *description,* of reality but it aims to give unambiguous means of expression to such a description." ... In its conceptual purity, the mental construct (*Gedankenbild*)

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[26] Weber, Methodology, p. 93.

[27] Weber, Methodology, p. 91.

[28] Weber, Methodology, p. 111.

cannot be found anywhere in reality ~~(Weber, 1949:90)~~."29 And further, "[i]t is a conceptual construct (*Gedankenbild*) which is neither historical reality nor even the 'true' reality. It is even less fitted to serve as a schema under which a real situation or action is to be subsumed as one instance" ~~(Weber, 1949:93)~~.30

In his explicitly methodological writings, Weber thus does not spell out how social reality might kick against or strain the ideal types the social scientist attempts to impose on them. Relying on his account, it is difficult to conceive of that reality with which the social scientist might compare ideal types. Only a *judgment* on the part of the investigator can lead to modification or replacement of an ideal type. Since, however, the ideal type was constructed on the basis of a value judgment in the first place, there must be another value judgment to modify it or to construct a new one.

For this reason, Weber's ideal-typical method leads precisely to what he wanted to avoid. It encourages confusion of ideal types with objective reality. A social scientist may, of course, be fortunate enough to possess the kind of judgment, historical erudition and intuitive grasp of social reality that Weber himself demonstrated in his own empirical sociological research. For such a social scientist reality may play the kind of disciplinary role Weber hoped it would ~~(Parsons, 1963:lxv-lxvi)~~.31 Otherwise, the ideal

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[29] Weber, Methodology, p. 90.

[30] Weber, Methodology, p. 93.

[31] As Talcott Parsons put it, Weber covers over the theoretical deficiencies in his methodology with a certain ad hocness "by his enormous historical erudition and excellent level of empirical insight and judgment." He goes on to suggest,

types will select out those aspects of reality which their social scientist creators have established, *a priori*, as essential to the phenomenon under investigation. The signals or data so selected out will then confirm and fuse with the ideal type which selected them out in the first place.

IV. THE COMPOSITION OF REALITY-IN-ITSELF AND OF REALITY-FOR US

Whatever may distinguish science from other forms of knowledge, modern science and philosophies that have taken their bearings from it continue a much older tradition of seeking the truth about reality. Galileo, the founder of the modern scientific tradition, for example, was not content to teach merely that the Copernican System of the World was a convenient instrument for making astronomical calculations and predictions. This would not have offended the Church. Yet Galileo believed it to be a true description of the world' ~~(Popper, 1968:98)~~.[32] He saw a rigorous necessity in nature resulting from its underlying mathematical structure. He took the conclusions of the natural sciences to absolutely true and necessary since he saw them as describing

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however, that "in the hands of a scholar of lesser genius than Weber, it would be very difficult to get comparable results through the use of his scheme," and that this may be one of the reasons for the relatively small cumulative outcome of Weber's work (Parsons, 1963: lxv-lxvi).

[32] Popper, Conjectures and Refutations, p.98.

the underlying geometrical structure of the world ~~(Burtt, 1954: 74-75)~~.[33] "Nature did not make human brains first and than construct things according to their capacity of understanding," Galileo wrote. "[B]ut she first made things in her own fashion and then so constructed the human understanding that it, though at the price of great exertion, might ferret out a few of her secrets" ~~(Burtt, 1954: 78)~~.[34]

The universe contains an immense variety of different kinds of things-in-themselves as well as of things-for-us. Each thing for us is a blend of signals emanating from the real world of things in themselves with some contribution from perception and interpretation. Moreover, nature is structured loosely enough so that different and even contradictory accounts of the same facts are common--even in the natural sciences. The things in themselves that are signaling may, like the atoms in the lattice of a crystal or the components of a biological organism have some strong interrelationship-in-itself among them. Or, the interrelationship may, like constellations of stars, be *created* by perception and interpretation. As Benjamin Lee Whorf puts it, the objective realm,

> displaying its characteristic attribute of extension stretches away from the observer toward that unfathomable remoteness which is both far away in space and long past in time, there comes a point where extension in detail ceases to be knowable and is lost in the vast distance, and where the subjective, creeping behind the scenes as it were, merges into the

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[33] Burtt, Metaphysical Foundations, pp. 74-75.

[34] Burtt, Metaphysical Foundations, p. 78.

> objective, so that at this inconceivable distance from the observer--from all observers--there is an all-encircling end and beginning of things where is might be said that existence, itself, swallows up the objective and the subjective. The borderland of this realm is as much subjective as objective ~~(1956:63)~~35.

Some real world objects emit sets of signals that, for us, are so unambiguous that there appears to be nothing left for human interpretation and intellectual digestion to add or distort. For example, brick walls, steel balls, and other objects with objects defined primarily in terms of mass and extension, with a certain density and hardness. Such objects appear to dictate their correct description to the human sensory and interpretative apparatus. In other cases, the mix of signal and noise emanating from the real world are ambiguous. It remains unclear to what extent reality is being represented and to what extent it has been constructed by interpretation. The objects referred to may be observable only indirectly, as with sub-atomic particles. Or two properties may be so combined that they are never found separately. So, a statement about the effects of one taken by itself may be testable only indirectly because of the masking effects of the other property ~~(Brown, 1963:179)~~.36

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[35] .Language, Thought and Reality (New York: Wiley, 1956), p.63.

[36] Brown, Robert, Explanation in Social Science (Chicago: Aldine, 1963), p. 179.

"For him who wears shoes," goes the Buddhist saying, "the world is covered with shoe leather." In reality-for-us, all differences among the things in reality-as-it-is and among the kinds of possible mixtures of signal, perception, and theory are psychologically homogenized and fused together. The relationship of reality-as-it-is to reality-for-us is exceedingly difficult to grasp. Whenever we attempt to describe reality-as-it-is in terms that free it from interpretation, we only substitute one interpretation for another. For example, we might try to avoid describing light in terms free of the perception of color, as being electromagnetic radiation of a certain wavelength. Such a description, however, would merely substitute a different set of theories and instruments for the ones bound up with normal perception of color. Reality-for-us is one great reification, a cosmos, a continuous tissue into which previous experience is interwoven, capable of comfortably excluding a great deal of "noise" and comfortably absorbing or sloughing off a great deal of anomaly.

How, if we are trapped in the seamless web of our sensual, perceptual and interpretive, frameworks can we ever claim to know reality-as-it-really-is? To some extent this is merely an idle philosopher's question. The dramatic progress made in the advanced sciences is hard to deny. Moreover, even at the level of everyday experience, our hypotheses are routinely falsified by reality. It may thus seem easy to dismiss the kinds of problems discussed in the present section as inconsequential. On the other hand, how can we explain why people so often talk by each other when they seem to be arguing about the same real world things? Even more significantly, how can we explain the recurrent dogmatism and periods of stagnation in the natural sciences? These, in addition to the problem of reification suggest that reality-as-it-is only sometimes determines reality-for-us unambiguously, like when we run into a concrete wall.

This is the role that imagination, different styles of thinking, culture clash, marginality, and critical argument across different frameworks and paradigms play in the

growth of knowledge about reality-as-it-really-is ~~(Cf. Popper, 1976b:23-48)~~.[37] Each individual human being is trapped in his/her own private, constructed world. One individual's framework may comfortably assimilate a given set of signals as confirmation of his/her pre-existing picture of reality. The very same set of signals may jar the framework of another individual. The imagination of some individuals helps them see things in new and different ways, that is, to break out of their old frameworks. Marginal individuals and individuals from different cultures, living as they do in different frameworks, may become aware of the tensions between these frameworks. This tension may drive such individuals to seek an understanding of reality that transcends both frameworks.

Moreover, we are not total prisoners of our frameworks. They are not airtight. Reality-as-it-is, that is, the signals from some new observation, frequently delivers devastating shocks to our frameworks. The decision to search for contradictions among our beliefs about reality and between our observations and reality puts pressures on our frameworks. So does an attitude permitting and attempting to understand the criticisms of other people of our views of reality. Communication among human beings may be imperfect. Yet it is good enough to make it possible for two individuals argue with reference to the same reality-as-it-is. In striving to resolve their disagreements they may learn, not only about reality, but also about their own framework-prisons of which they were aware before engaging in critical discussion. So, the ideal of describing

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[37] Popper, "The Myth of the Framework," in Eugene Freeman (ed.), The Abdication of Philosophy (La Salle, IL: Open Court): 23-48.

pristine things-in-themselves may be utopian. Yet does not follow that reality-as-it-really-is cannot objectively constrain attempts to say what it is really like.

I propose that we regard ideal types as hypotheses about social-reality-as-it-is and that we formulate them in such a way that they invite reality to kick back, to falsify, to shatter them. To understand how this might be done, however, we must have some notion of the nature of social things. What is it that might be thought of as doing the kicking?

V. THE NATURE OF SOCIAL REALITY

The existence of social reality is largely independent of anyone's subjective awareness of it. It does not depend on the subjective awareness of the members of the society under investigation. Neither does it depend on the subjective awareness of the social scientists doing the investigating ~~(Popper, 1976a: 103; Wisdom, 1970)~~.[38] Social things have real, objective properties which make them, mapable, although it may sometimes be difficult to obtain adequate information about these properties. This is, of course, not unlike the situation in the natural sciences. Such difficulties exist there too. Their resolution often require great skill, imagination, and luck. The objective properties of social reality nevertheless can serve to constrain hypothesizing about it.

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[38] Popper, "Logic of the Social Sciences," p. 103; Wisdom, J. O., "Situational Individualism and the Emergent Group-Properties," in Robert Borger and Frank Cioffi (eds.), Explanation in the Behavioral Sciences (Cambridge: University Press, 1970), pp. 167-217.

Many of the properties of a society are outside the awareness and control of those who participate in them. These properties may even lie outside the awareness and control even of those who believed to be controlling them. As Berger and Luckmann put it:

> The institutions, as historical and objective facticities, confront the individual as undeniable facts. The institutions are *there*, external to him, persistent in their reality, whether he likes it or not. He cannot wish them away. They resist his attempts to change or evade them. They have coercive power over him, both in themselves, by the sheer force of their facticity, and through the control mechanisms that are usually attached to the most important of them. The objective reality of institutions is not diminished if the individual does not understand their purpose or their mode of operation. He may experience large sectors of the social world as incomprehensible, perhaps oppressive in their opaqueness, but real nonetheless. Since institutions exist as external reality, the individual cannot understand them by introspection ~~(Berger and Luckmann, 1966:57)~~.39

Ian Jarvie agrees that there exists a social world that is to some extent independent of the minds of those who participate in it (see comment above). "The social world, like the natural world," he writes, "is much as it seems. It is not a house of cards that will collapse if we blow on it. ... Institutions ... do not as a rule obediently fall

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[39] Berger, Peter and Thomas Luckmann, The Social Construction of Reality (London: Allan Lane, 1966), p.57.

down when we wish them to. When they refuse to budge in this way they might be described as independent of our belief in their existence, as 'mind-independent'." Jarvie also contends, however, that the way the social world really is "is not clearly separable from the way we evaluate it, the dispositions we attribute to it and to ourselves, and so on." "To an extent, and in some ways, [institutions] are also mind-dependent: they sometimes wobble when we cease to believe in their existence, and at other time fail to stand up, although we will them to ~~(Jarvie, 1972:146-147)~~."40

Jarvie characterizes social reality as being something between the hard reality of our physical surroundings and bodily limitations and the soft reality of our putative knowledge, our morals, fears, neuroses, imagination, etc. The things in the social world--other people, institutions, groups, friendships, relatives, etc., he contends, are "neither hard nor soft, but a bit of both."

> On the one hand, social entities are, like mental states, intangible; like friendliness and goodwill they may come out of nothing and fade into nothing. On the other hand, they are like physical states, they react strongly to our probes: when, as an exercise, one acts as though a brick wall is not there, one may suffer severe consequences, and the same is true of many social institutions, from table manners to taxes ~~(Jarvie, 1972:159)~~."41

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[40] Jarvie, Concepts and Society, p.146-47.

[41] Jarvie, Concepts and Society, p.159.

Jarvie's identification of the physical with the hard, the mental with the soft, and the social as "a bit of both," is interesting and true of certain kinds of social reality. Nevertheless, this distinction obscures the issue more than it resolves it. It does not establish a useful distinction between the natural and the social sciences.

Physical reality consists of clouds as well as clocks. That is, some of it is soft and reacts only weakly to our probes, while some of it is "neither hard nor soft, but a bit of both." Weather systems, like many entities in nature, also "come out of nothing and fade into nothing." Physical realities can, like air, be ephemeral, soft or even hard, depending on their velocity or ephemeral in gaseous form, soft in liquid form, and hard in solid form. On the other hand, mental and social reality can be as hard as rock, if we understand hardness metaphorically. Social things exhibit qualities analogous to hardness and softness. However, these are clearly not physical qualities. In sum, physical, mental and social reality can all be hard, soft, or a little bit of both.

What then accounts for the patterns, regularities, and invariants in both individual behavior and society? What kinds of things are there in social reality which can place strain upon the ideal types and other constructs social scientists use to analyze it? Once we ask this simple question, it is easy to point to a wide variety of such sources. A typical hypothesis describing orderliness in social reality will contain a mixture of such kinds of things as mental phenomena, habits, reasons, and biological characteristics and tendencies of the human objects of study and their environments, and social structures.

Some variables will belong to the individual and some to the social environment in which individuals act. Some regularities in the behavior of individuals result from the physical and social settings in which they find themselves. Some are attributable to regularities in such factors as the aims, resources, and dispositions of the individuals themselves. We can treat all of these as real. We can describe all of them objectively. Also, they can serve as constraints on our hypothesizing. The test is, in Bronowski's

words is: "Will the concept work? Does it give an unforced unity to the experience of men? Does the concept make life orderly, not by edict but by fact ~~(1975:41)~~?[42]

Sometimes social scientists ask questions about individuals That is they seek to explain action. Sometimes its interest is in the properties of the social stuff. That is, it asks questions about social wholes. Yet, whether its questions are about individuals or social wholes, it is an objective reality that serves as the crucial constraint on hypothesizing.

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[42] Bronowski, Jacob, Science and Human Values (New York: Harper & Row, 1975), p.41.

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