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The Semblance of Ideologies and Scientific Theories and the Constitution of Facts

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ABSTRACT

Responding to those who want to consign ideologies to the dustbin of history, I make what is perhaps an unexpected connection between ideologies and scientific theories to ward off what may amount to be an assault on the former's cognitive value. Although there are significant differences between ideologies and scientific theories, particularly in terms of objectivity and openness to innovation, I find that they are similar insofar as each is a cognitive fund which allows us to make sense of the world that we live in. Part of the sense-making quality of scientific theories is that they allow us to constitute and appreciate facts about the world. In other words, the facts of science are theory-laden. Similarly, ideologies, such as Noam Chomsky's libertarian socialism or anarchism are also cognitive funds with sense-making qualities which laden facts, albeit facts of a different kind. More than that, however, I argue that the ability of ideologies to constitute and appreciate facts gives us reason for thinking the decline of ideologies as shapers of global politics to be premature.

INTRODUCTION

Some theorists believe that we are witnessing the resurgence of ideologies and ideological conflicts, while others declare that History has come to an end with the triumph of liberal democracy. Still others have grown weary of ideologies and have talked of their obsolescence. Indeed, a recent essay by Harvard professor Samuel P. Huntington, in which he replaces the "clash of ideologies" with the "clash of civilizations" as the dominant global form of conflict, is just the latest attempt to consign ideologies to the dustbin of history.¹ If Huntington's thesis is correct, ideologies are no longer the prime movers of global politics. But does this alleged retreat from the political scene suggest that ideologies are less capable of influencing how we view the world? In short, does his thesis have drastic implications for the cognitive status of ideologies? It need not.

The literature dealing with the differences between ideology and scientific theory is considerable. Ideologies are often associated with closed, dogmatic, and inflexible systems of mere belief and falsehood, whereas scientific theories are thought to involve knowledge and truth. Although there is much to be said for these characterizations, this ideology-science antithesis does not provide us with an honest depiction of these conceptual frameworks. This is because they do not admit the possibility that ideologies and scientific theories have something in common. The present paper will argue that these frameworks are not as disparate as is often thought. In Part One I claim that ideologies and scientific theories have a common function; that is, they allow us to make sense of the world that we live in. In Part Two I argue that this sense-making function is most clearly demonstrated in the way that theories provide us with a framework of understanding in order for "something" to be constituted as a fact. In the final part I claim that ideologies, because of their sense-making quality, also exhibit this constitutional feature, and that it is because of this kinship to facts that we have reason to believe the claim that ideologies are no

longer shapers of global politics to be premature.

PART ONE : IDEOLOGY AND SCIENTIFIC THEORY

It should first be noted that the concept of ideology is not of recent origin. On the contrary, the term 'ideology' was coined by the French post-Enlightenment theorist Antoine Destutt de Tracy. De Tracy and the other *Idéologues* thought that each person has the ability to ascertain what is true and what is right through reason and experience.² As harmless as it may sound, this view had profound ramifications for French Society, for it meant a rejection of the authoritarianism of the *ancien régime* as well as a call to perfect society. The method that was developed to carry out this program came to be called 'ideology,' which they understood to be more of a "technique for discovering truth and dissolving illusion" than a body of infallible philosophical and political doctrine.³ In short, it was a newly conceived science—the "science of ideas," and it was because of its role as a means of bringing about change in French society that ideology acquired its political character.

Although the concept is still associated with politics, it has undergone various shifts in meaning since its introduction in the eighteenth century. The changes range from the negative or pejorative shift sponsored most notably by Marx—a shift contrasting ideology with reality and labelling it "false consciousness"—to the present-day nonpejorative conceptions found in the writings of some contemporary social scientists and philosophers.⁴ Indeed, one who reviews the literature dealing with the concept of ideology may easily come away believing that there is no core meaning among the various conceptions—conceptual anarchy at its worst! Those who believe this are mistaken, however. A closer examination of the literature finds two common elements: an ideational element, which is not value neutral, and an action-program. The conjunction of these elements is what I mean by ideology.

In saying that ideology possesses an ideational element, I simply mean that ideology can be thought of as a set of ideas, the members of which are identifiable by their expression in certain statements.⁵ Of course, not every set of ideas constitutes an ideology, but only those by which people engage in the practice of public affairs. Or, as the political philosopher

Martin Seliger puts it, an ideology is a set of ideas by which people "posit, explain and justify ends and means of organised social action, irrespective of whether such action aims to preserve, amend, uproot or rebuild a given social order."⁶ Its intimate association with politics, however, should not lead us to believe that ideology is dissociated from the social and economic aspects of modern life. All three aspects, to be sure, are intertwined in both domestic and foreign affairs. The multiplicity and interrelatedness is readily seen, for instance, in Noam Chomsky's libertarian socialism or anarchism, an ideology in which the military adventurism and imperialism of the Western powers (including the United States) is a defining category.⁷

The scope of the above conception of ideology is, however, so broad that some may conclude that an ideology is coextensive with a political point of view, a political outlook, or a political philosophy. Terms acquire their meaning by specifying what does not count as such an item. Thus the term ideology must be shown not to cover everything. The political scientist Preston King does just that by distinguishing between ideology and these other notions. In his essay "An Ideological Fallacy," King cites three characteristics that distinguishes ideology from these others. They are (1) integration (or coherence), (2) substance, and (3) orientation towards action. According to King, ideology is the only one that exhibits all three characteristics.⁸ The others are generally weak in at least one area: a political point of view is not integrated into a general outlook; a political outlook is more integrated than a political point of view, but an outlook may fail to provide the substantive support for its claims; and a political philosophy, though similar to ideology insofar as both have an explanatory function, differs from ideology in that the motivation for direction of political conduct are not provided by every political philosophy, whereas they are a part of every ideology. The latter is an interesting case, since it is by venturing beyond the ideational element and appealing to what is called an "action-program" that King distinguishes between ideology and political philosophy. And this difference becomes even more pronounced when we take into account the degree of commitment that is shown by devotees of ideologies.

But this orientation towards action should not lead us to

think that the sole concern of ideology is normative in nature, *i.e.*, with *how the world should be*. Although ideology does contain such an element, this is not its only concern. The political theorist Willard A. Mullins writes of another concern in his essay "On the Concept of Ideology in Political Science" when he argues that ideology conceptualizes and evaluates the contours of reality, not simply as it might be shaped by politically organized human beings in the historical process, but also as it exists.⁹ This conception of ideology reflects what the French sociologist Raymond Boudon has called the "modern" definition of ideology. It is an apt label because it reflects the recent trend of defining ideology in terms of meaning rather than in terms of truth and falsehood.¹⁰ The French philosopher Raymond Aron said it best when he wrote that "political ideologies always combine more or less felicitously, factual propositions and value judgements. They express an outlook on the world and a will-turned towards the future."¹¹

What many call an ideology is typically one of the "isms" that have flourished in the twentieth century such as liberalism, conservatism, socialism, and feminism. A lesser known but just as noteworthy "ism" of our age is libertarian socialism or anarchism, exemplified most notably in the work of the American philosopher and linguist Noam Chomsky. Perhaps nowhere does Chomsky espouse this ideology as clearly as in his essay "Notes on Anarchism." Originally written as the introduction to Daniel Guérin's *Anarchism: From Theory to Practice*, this revised version is a spirited discourse on libertarian socialism, which is libertarian in its opposition to "state intervention in social life" and socialist in its opposition to, among other things, the private ownership of the means of production.¹² And yet it is a discussion of anarchism, for anarchism is nothing more than the amalgam of libertarian and socialist thought:

Anarchism is necessarily anticapitalist in that it "opposes the exploitation of man by man." But anarchism also opposes "the dominion of man over man." It insists that "*socialism will be free or it will not be at all*. In its recognition of this lies the genuine and profound justification for the existence of anarchism." From this point of view, anarchism may be regarded as the libertarian wing of socialism.¹³

These components are the cornerstones of his anarchist *vision* of a future society.¹⁴ The libertarian component reflects the idea of freedom of self-realization that is found in Wilhelm von Humboldt's liberal classic *The Limits of State Action*.¹⁵ But to realize one's potential as a human being, Humboldt states, one must be at *liberty* to do so. Thus "freedom is the first and indispensable condition which the possibility of such a development presupposes."¹⁶ It is small wonder, then, that classical libertarian thought strongly opposes state intervention in the social life of its citizens. Its concern for liberty forges a critique of statism, of the bureaucratic centralism and the coercive machinery designed to realize the state's potential to control or regulate an individual's potential. The anarchist is not, however, just a libertarian; he is also a socialist. As Guérin puts it,

anarchism is really a synonym for socialism. The anarchist[s] ... aim is to abolish the exploitation of man by man. Anarchism is only one of the streams of socialist thought, that stream whose main components are concern for liberty and haste to abolish the State.¹⁷

The key phrase here is "abolish the exploitation of man by man," a clear reference to socialism. If there is a common denominator among socialists, it is that they expose the defective nature of capitalism. This critique of capitalism is most apparent when it comes to the issues of economic monopolies and the ownership of the means of production (*i.e.*, factories, machinery and tools, and raw materials). Socialists of all kinds speak of the dismantling of such monopolies as well as the replacement of the private ownership of some or all of the means of production with some form of public or common ownership.

This attack on capitalism also shows up in other important concerns found in socialist thought such as the wage system (because it alienates the worker from his labor) and the causes and effects of capitalist foreign economic expansion (*i.e.*, imperialism and militarism). The latter is particularly important for Chomsky, since it is directly related to his scathing criticism of U.S. foreign policy. These concerns taken together thus represent the underpinnings of Chomsky's socialist bent, and which allow him to give a meaningful apprehension to events in

the world, events that are related to a nation's foreign policy.

Indeed, if there was ever a coherent and substantive set of ideas (and associated values) that could influence how people engage in the practice of making and implementing public policy, it is libertarian socialism. What we have here is a system which touches upon the political, social, and economic aspects of life, and which attempts to provide an understanding of these aspects as well as to suggest a program of action (which in its simplest form might amount to nothing more than "We get closer to goal W by not doing action X, Y, and Z"). It offers a general outlook as well as support for claims that give meaning to events in the world. Moreover, this system serves as a focal point for the commitment of its devotees, even though such commitment may result in a less than objective appraisal of the events. Yes it does have the advantage of being able to mobilize and direct people toward a goal, something which scientific theories tend not to impart.

Libertarian socialism, like other ideologies, can thus be summarized as (1) a system of political (as well as economic and social) ideas and values which are coherent and substantive, (2) which propose some understanding of man and his world, and (3) which couple this understanding with a program of action to bring about the attainment of some group goal.¹⁸

What is important in this summary statement of ideology is that even with all the apparent differences between ideology and scientific theory, it is the function of providing a meaningful apprehension of the world that is found in both frameworks, albeit each in their own particular way. The American philosopher of science Norwood Russell Hanson, in writing about theories of elementary physics in *Pattern of Discovery*, notes that theories "offer an intelligible, systematic, conceptual pattern for the observed data".¹⁹ The scientist, through the formulation of theories, strives to provide a conceptual pattern which will allow data to appear intelligible given the rest that is known about the items under investigation. In other words, theories help us to make sense of certain aspects of the world.

But if we acknowledge that scientific theories *qua* cognitive funds are capable of making sense of the world, surely we must also concede that ideologies *qua* cognitive funds also allow us to propagate a network of meaning through which the world,

makes sense to us. Take, for instance, Chomsky's libertarian socialism. His view of the world, both domestically and internationally, reflects his ideology; it predisposes him to view the world in certain ways by setting limits to what principles and interpretations of data can and cannot be accepted. His view on world affairs thus offers no surprises given his adoption of this brand of socialism. When he declares "that the United States has become the most aggressive power in the world, the greatest threat to peace, to national self-determination, and to international cooperation," he is reiterating the view that the United States is a power bent on imperialism.²⁰ It is a claim that is consistent with his ideology, since his anti-imperialist stance is rooted in his endorsement of socialism and its critique of capitalism. There is, however, another way in which his ideology supports a rejection of imperialism. If we broaden our definition of imperialism to include the domination and control of the social and political life of one nation by another, Chomsky's libertarian perspective offers ample support for a rejection of an imperialist foreign policy. The anarchist is not only a socialist who opposes capitalism, he is also a libertarian who opposes excessive state intervention in the lives of people, whether its own citizens or those of another state. To say as much, however, is to acknowledge that the thrust of the libertarian element of anarchism is to reduce or eliminate the economic, political, and social exploitation and enslavement of persons, thereby awakening their freedom of self-realization. It is small wonder, then, that Chomsky's libertarianism provides the foundation for his critique of American interventionism as a force that impedes the development of human potential.

This does not mean, however, that ideologies and scientific theories are one in the same. There are significant differences. In theory construction, for instance, one becomes cognizant of a problem in need of a solution, constructs an hypothesis H that counts as a tentative solution, and tests H against experience *via* natural observation and experimentation. The attitude of self-criticism and desire for objectivity are particularly strong in this endeavor. The scientist, in seeking to establish an hypothesis, does so with an eye to abandoning it if it is deemed necessary, while satisfying the need for objectivity by relying on statements that are intersubjectively testable. As a result, scientific theories

tend to be amenable to change. The same cannot be said of an ideology, however. This is because an ideology's action-program works against self-criticism and objectivity by inducing strong commitments in their devotees, commitments which often lead to a distortion of the contours of reality. Acknowledgment of this is no better captured than in Edward Shil's remarks which contrast ideology with science:

With reference to the cognitive truthfulness of ideologies, it should be pointed out that no great ideology has even regarded the disciplined pursuit of truth—by scientific procedures and in the mood characteristic of modern science—as part of its obligations.

The ideological culture ... does in fact often interfere with the attainment of truth. This is, however, a result of the closure of the ideological disposition to new evidence and its distrust of all who do not share the same ideological disposition. The chief source of tension between ideology and truth lies, therefore, in the concurrent demands of the exponents of ideologies for unity and disciplined adherence on the part of their fellow believers.²¹

It must be reiterated, however, that while science's adherence to truth and objectivity is preferable to the false belief and subjectivity that ideology occasionally manifests, as when an ideology's cognitive claims are refuted or supplanted by those of a scientific theory, this opposition does not detract from the fact that both science and ideology make the world a meaningful place to live. And it is this sense-making quality that sustains the viability of ideologies even if Huntington is correct about their declining influence as sources of global conflict.

PART TWO : THEORIES AND FACTS

I have so far sketched scientific theories and ideologies as conceptual frameworks that make sense of the world. Inasmuch as both theories and ideologies have this much in common with each other, though, we need to consider the relationships between theories, ideologies, and facts, particularly since sense-making is linked with statements of fact. But what is the relationship between theories and facts? To begin with, what are facts?

Some theorists have acknowledged so-called "brute facts"; that is, facts that are "hard" and "known through observation." Hanson says of these facts that

they are just the things that happen; the hard, cold, stubborn facts, the sheer, physical, plain, and unvarnished facts, the observable facts out there for all of us to see, come up against, trip over. You know, we face the facts, collect them: the little, detached, lawless, particular, and individual facts. Facts, in short, are just chunks of the material world; sticks, stones, boxes, and bears."²²

But if we take Hanson at his word, we must reject the very existence of such facts. Perhaps the most obvious criticism levelled against conceiving facts in this way is that it totally disregards the nonspatiality of facts. It is easy to imagine someone looking at a pile of books and then bending over to collect them, but can the same be said of facts? What would a "pile of facts" look like?

A similar criticism is applicable to conceiving facts as situations (*i.e.*, the circumstances of something at a particular point in time). To be sure, the tension and drama of those hold up in Sarajevo and the surrounding countryside would be hard to miss for a traveller to that region of the former Yugoslavia. Their situation is unmistakably "tense" and "dramatic," but facts do not typically carry such semantic baggage. Moreover, one can obtain photographic documentation of the desperate situation of the residents of Sarajevo, but the same cannot be said of facts. What would it mean to photograph a fact? But if facts are not objects or situations that are found in the world, what are they? One gets the distinct impression that philosophers like Strawson and Hanson neither wish to posit facts as corporeal things in the world nor wish to disrupt the intimacy that exists between facts and the world. The move away from their corporeality is stressed in Strawson's assertion that facts are "wedded to 'that'-clauses." Unfortunately, he obscures his discussion by taking refuge in talk of a fact as a "pseudo-material correlate of the statement as a whole."²³

Likewise, Hanson understands facts to be neither items in the world nor semantic entities like true statements. As Hanson writes, "that-clauses are bits of language. Facts, we feel, are

something more There is nothing tangible between the furniture of the world and our statements about the world, *only that-clauses and facts.*"²⁴

Although Hanson admits to the elusiveness of facts, he is not shy when it comes to presenting facts. Take, for instance, his discussion of the members of the phylum Chordata found in *Perception and Discovery*. One fact about chordates is expressed in the following 'that'-clause:

(1) that they possess a notochord²⁵

Although a fact has been expressed to us, it has not been *stated*. Statements are either true or false, but 'that'-clauses do not possess truth value. They are simply the linguistic medium through which facts are presented to us. However, statements of fact can be made from 'that'-clauses. We can, for example, transform (1) into the following statement of fact:

(2) Chordates possess notochords.

The result is a statement about a set of objects—the chordates—and not a statement about a fact. A fact is, however, stated in (2).

How do we come to learn that (2) is a statement of fact? By an empirical inquiry. Of course, not every inquiry of this kind will support a particular statement as a statement of fact and confirm that a particular 'that'-clause expresses a fact. In the case of chordates, an anatomical investigation of these creatures would allow us to determine whether chordates possess notochords. This is not, however, the same as finding something under the epidermis that goes by the name of "The fact that chordates possess a notochord." Facts are nothing of the sort, writes Hanson, since "*facts* [are] ... constituted of no more than those aspects of the world that are expressible in that-clauses. There is no more to the fact that chordates have notochords than that the world is such that an aspect of it is expressible in the phrase 'that chordates possess notochords.'"²⁶ Considered in this way, 'that'-clauses project the possibilities of linguistic expression into the world, and it is through them that the world becomes intelligible.

It should be clear that facts and language are intimately associated with each other. It is this association, however, that underlies the relationship between facts and theories, for Hanson writes that "our language, in the form of what we *know*, puts an indelible stamp on what we see, and on what we appreciate

as the facts of nature."²⁷ Assuming that theories are part of what we *know* about nature, it follows that theories leave their imprint on observations and facts. Linking facts, language, and theories in this way, then, sheds light on his claim that facts do not "speak for themselves," but need to be "spoken for."²⁸ More specifically, we have come to what I call Hanson's Theory-Ladenness of Fact Thesis (T1). This thesis may be presented as follows:

T1: Theories provide a framework of understanding that is needed for "something" to be constituted or appreciated as a fact.

Let us examine this thesis in greater detail by reviewing Hanson's discussion of the nineteenth-century controversy over the nature of light.

The following question was posed by physicists in the nineteenth century: Is the nature of light explained by the undulatory or wave theory or is explained by the corpuscular or particle theory? As Hanson notes, it was generally agreed at that time that "light must be *either* undulatory or corpuscular *but at least one of these and not both*."²⁹ Entertaining this idea as the central assumption of their research, physicists drew upon their knowledge of wave motion and sought the presence or absence of interference phenomena as evidence for deciding between the two theories. The most fundamental line of research grew directly from the work of Augustin Fresnel (1788-1827), whose experiments showed the presence of interference, indicated by the pattern of light and dark fringes on a screen, and thus provided experimental evidence for the wave theory of light.

For Hanson, however, seeing an interference pattern and having factual support for the wave theory are not one in the same. This is because we *do not see facts!* We see (and can photograph) interference pattern (or patterns of light and dark fringes), but we do not see (and cannot photograph) facts.

This does not mean that facts are any less important. On the contrary, facts are integral components of the scientific enterprise—facts are cited to confirm or disconfirm the sorts of claims that are made by scientists—and as such, figure into discussions of our seeing interference patterns and our acquiring support for the wave theory. As Hanson writes, what

persuades us that light is wavelike is *the fact* that when two light beams of identical wave lengths overlap (in phase) they interfere to produce a fringe-pattern. It is this fact that confirms the hypothesis that light is wavelike, and not the fringe-pattern itself. The fringe-pattern is not of the right logical type to refute or deny any hypothesis or theory. Fringe-pattern just *are*, like rocks and blades of grass. They are not assertive, hence they cannot confirm or deny.³⁰

While scientific theories serve to constitute facts, and, thereby, statements of fact, at the same time theories also function to constitute the sort of observations that play a role in whether a factual statement becomes a statement of fact. Thus, from Hanson's perspective, viewing bands of light and dark that appear on a screen need not mean that the observer sees an interference pattern. In a very basic way, we might think of the observer's utterances as an indication of what he sees, the basis upon which to decide if the observer sees light and dark bands or interference patterns. That a person's speech is fundamentally an expression of his cognitive fund is basic to the claim that theory is integrated with observation, what Hanson refers to as the "theory-ladenness of observation."³¹ He maintains that phenomena, like interference patterns,

can be appreciated only against a background of at least some elementary wave theory, certain general principles like that of the rectilinear propagation of light, and probably a good deal of experience with the characteristics of water waves and sound waves. A very young child, whose vision is every bit as good as ours, will not see interference fringes or diffraction patterns. He will see alternate bands of light and dark—and that is all. And that is the substance of our own visual impression too, though for us it is a sophisticated visual experience. We *see* interference and diffraction The significance we will attach to an observation is pretty largely a reflection of what we have been trained to regard as significant, which is just a way of saying that we see every new experience only through the lens of the knowledge we already possess.³²

Since the "conceptual repertoire" of the child differs greatly

from that of the physicist—it lacks the prerequisite concepts that would allow the child to see the interference patterns that are so commonplace for the physicist—it is small wonder that the child sees only alternate bands of light and dark.

The theory-ladenness of observation thus is consistent with the idea that our “lens of knowledge” or conceptual repertoire” is involved in the constitution or appreciation of facts. The young child, who lacks the conceptual repertoire of the physicist, will not only be unable to see certain things and events, but the child will also be unable to come to terms with the facts that support the wave theory. Indeed, how could a child appreciate the fact that “when two light beams of identical wave lengths overlap (in phase) they interfere to produce a fringe-pattern.” Moreover, if the child is unable to appreciate the facts that favor the wave theory, then he will face the additional disadvantage of being unable to draw inferences from those facts. So until the child acquires some of the conceptual apparatus of the physicist, he will be doomed to speak in terms of alternate bands of light and dark.

But to say that the inability to appreciate certain facts is confined solely to children, is to be deluded of the grounds of the scientific experience. While it is very likely that children will have difficulty grasping scientific facts, it may not be an experience that is peculiar to children. Indeed, it is likely that scientists experience the same problem. Just imagine, for instance, how dumbfounded Fresnel would have been if he witnessed the Compton X-ray scattering experiments. Unprepared to deal with the advances made by twentieth-century scientists, Fresnel would have been unable (at least before he became acquainted with the physics of our time) to appreciate the streaks in a Wilson chamber as the “constituents of facts” that support the particle theory of light. Thus, neither the child nor the scientists can grapple with the facts of the Fresnel-Young experiments or the Compton experiments unless he has some understanding to the theory of light as wavelike or particlelike respectively. Such facts, so the adage goes, “need to be spoken for”, for their constitution or appreciation occurs only by means of acquiring the relevant conceptual apparatus. Or, as Hanson puts it so succinctly, “Nothing can constitute a fact *unless understood in terms of some theory.*”³² Theories thus help us

to make sense of the world by allowing us to come to terms with facts.

PART III : IDEOLOGIES AND FACTS

But can the same be said of ideologies? Do ideologies have such a constitutional feature? I believe they do. Of the two elements of ideology, the ideational element proved to be the significant point of contact and between ideology and scientific theory. Although much was made of ideology being a coherent and substantive system of ideas that offers a view of how reality *ought to be*, this normative function must not overshadow its conceptualization of “the contours of reality” *as it is*. If we acknowledge that ideology has a cognitive role to play in assisting us in making sense of the world that we live in, then we have little choice but to modify T1 in order to recognize the contribution of ideologies in the constitution of certain facts. One need only recall the ‘that’-clause of Chomsky’s that I cited in Part One to get a sense of the sort of facts that are constituted by ideologies and that come to the forefront of ideological disputes. The new thesis, then, can be read in the following way:

T2 : Ideologies provide a framework of understanding that is needed for “something” to be constituted or appreciated as a fact.

Both science and ideology allow us to live in a world that is meaningful, a world in which we recognize certain items as facts. In reference to science, this statement is beyond question. However, T1 asserted the theory-ladenness of fact as if it were confined strictly to matters of science. To the extent that ideologies contribute meaning, the thesis cannot be restricted in this way. To argue, as Huntington does, that ideologies are no longer the prime movers of global politics, is a bit premature, for it is to imply that either ideologies have suddenly and mysteriously lost their capability to make such a contribution and, thus, no longer constitute facts, or their contribution is one that is no longer *accepted* by those who once took ideologies to be the guiding light of politics. To suggest the former is to take lightly the sense-making quality that ideologies have in common with scientific theories; to argue the latter is a legitimate contention, but one that needs to be explored with great care, since it is not obvious why after so many years “clashes of

ideologies" have been replaced with "clashes of civilizations." But whatever the case, the formulation T2, with all its consequences for Huntington's thesis, seems to be one that we must acknowledge. □

NOTES

1. For accounts of ideological resurgence, see, Terry Eagleton, *Ideology: An Introduction* (London: Verso, 1992), p. xi and Mark Jucgensmeyer, *The New Cold War?* (Berkeley: University of California Press, 1993), pp. 1-8. For a discussion of the end of History theme, see Francis Fukuyama, "The End of History?," *The National Interest* (Summer 1989): pp. 3-18 and *The End of History and The Last Man* (New York: Free Press, 1992). For a discussion of the clash of civilizations theme, see Samuel P. Huntington, "The Clash of Civilizations?," *Foreign Affairs* 72 (Summer 1993): pp. 22-49.

2. For a treatment of Antoine Destutt de Tracy and the Ideologues see Hans Barth, *Truth and Ideology*, trans. Frederic Lilge and with a Foreword by Reinhard Bendix (Berkeley and Los Angeles: University of California Press, 1976), pp. 1-16; Jay W. Stein, "Beginnings of 'Ideology,'" *South Atlantic Quarterly* 55 (April 1956): pp. 163-70 and *The Mind and the Sword* (New York: Twayne Publishers, 1961); and Richard H. Cox, "The Original Concept of Ideology," in *Ideology, Politics, and Political Theory*, ed. Richard H. Cox (Belmont, California: Wadsworth, 1969), pp. 10-27.

3. Willard A. Mullins, "On the Concept of Ideology in Political Science," *American Political Science Review* 65 (June 1971): p. 498. For a general study of ideology, see Eagleton, *Ideology: An Introduction*.

4. See Karl Marx and Frederick Engels, *The German Ideology* (London: Lawrence & Wishart, 1965). For an examination of Marx's contribution to the theory of ideology, see Louis Althusser, "Ideology and Ideological State Apparatuses," in *Lenin and Philosophy and Other Essays*, Louis Althusser (New York: Monthly Review Press, 1971), pp. 127-86; Barth, *Truth and Ideology*, pp. 38-127; Walter Carlsnaes, *The Concept of Ideology and Political Analysis: A Critical Examination of Its Usage by Marx, Lenin, and Mannheim* (Westport, Conn.: Greenwood Press, 1981), pp. 23-100; Charles W. Mills and Danny Goldstick, "A New Old Meaning of 'Ideology,'" *Dialogue* 28 (1989): pp. 417-32; Christopher L. Pines, *Ideology and False Consciousness* (Albany: State University of New York Press, 1993); Paul Ricoeur, *Lectures on Ideology and Utopia*, ed. George H. Taylor (New York: Columbia University Press, 1986), pp. 21-102; and Ferruccio Rossi-Landi, *Marxism and Ideology*, trans. Roger Griffin and with a Foreword by Salvatore Veca (Oxford: Clarendon Press, 1990).

There are numerous works which present a nonpejorative conception of ideology. See, for example, Samuel H. Barnes, "Ideology

and the Organization of Conflict: On the Relationship between Political Thought and Behavior," *Journal of Politics* 28 (August 1966): pp. 513-30; Bernard P. Dauenhauer, "Ideology, Utopia, and Responsible Politics," *Man and World* 22 (March 1989): pp. 25-41; Malcolm B. Hamilton, "The Elements of the Concept of Ideology," *Political Studies* 35 (March 1987): pp. 18-38; Preston King, "An Ideological Fallacy," in *Politics and Experience*, eds. Preston King and B.C. Parekh (Cambridge: Cambridge University Press, 1968), pp. 341-94; Mullins, "On the Concept of Ideology," pp. 498-510; Paul Ricoeur, "Can There Be a Scientific Concept of Ideology?," in *Phenomenology and the Social Sciences: A Dialogue*, ed. Joseph Bien (The Hague: Martinus Nijhoff, 1978), pp. 44-59, *Lectures on Ideology and Utopia*, pp. 21-266 passim, and "Science and Ideology," in *From Text to Action: Essays in Hermeneutics* trans. John B. Thompson (Evanston: Northwestern University Press, 1991), pp. 246-69; and Bernard Williams, "Democracy and Ideology," *Political Quarterly* 32 (October-December, 1961): pp. 374-84.

5. This portrayal of ideology is in accordance with the usage of ideology found in various contemporary writings on the subject, including the following: Zbigniew K. Brzezinski and Carl J. Friedrich, *Totalitarian Dictatorship and Autocracy*, 2d ed., rev. Carl J. Friedrich (Cambridge: Harvard University Press, 1965), p. 88; and Martin Seliger, *Ideology and Politics* (New York: Free Press, 1976), p. 14.

6. Martin Seliger, *Ideology and Politics* (London: Free Press, 1976), p. 11.

7. See Noam Chomsky's "Notes on Anarchism," chap. in *For Reasons of State* (New York: Pantheon Books, 1970). For discussions of his anarchist tendencies, see Joshua Cohey and Joel Rogers, "Knowledge, Morality and Hope: The Social Thought of Noam Chomsky," *New Left Review* (May/June 1991): pp. 5-27; Christopher Coker, "The Mandarin and the Commissar: The Political Thought of Noam Chomsky," in *Noam Chomsky: Consensus and Controversy*, eds. Celia Modgil and Sohan Modgil (New York: Falmer Press, 1987), pp. 269-78; and Carlos P. Otero, "Introduction to Chomsky's Social Theory," in *Radical Priorities*, Noam Chomsky (Montreal: Black Rose Books, 1981), pp. 11-56.

8. King, "An Ideological Fallacy," pp. 349-50.

9. Mullins, "On the Concept of Ideology," p. 503.

10. Raymond Boudon, *The Analysis of Ideology*, trans. Malcolm Slater (Chicago: University of Chicago Press, 1989), p. 53.

11. Raymond Aron, *The Opium of the Intellectuals* (London: Greenwood, 1977), quoted in Boudon, *The Analysis of Ideology*, p. 19.

12. Noam Chomsky, "Notes on Anarchism," chap. in *For Reasons of State* (New York: Pantheon Books, 1970), p. 376.

13. *Ibid.*

14. Carlos P. Otero, "Introduction to Chomsky's Social Theory," in

Radical Priorities, Noam Chomsky (Montreal : Black Rose Books, 1981), pp. 26-38.

15. Wilhelm von Humboldt, *The Limits of State Action*, ed. with an Introduction by J. W. Burrow, Cambridge Studies in the History and Theory of Politics (London : Cambridge University Press, 1969), p. 9.

16. *Ibid.*, p. 16.

17. Daniel Guérin, *Anarchism: From Theory to Practice*, trans. Mary Klopper with an Introduction by Noam Chomsky (New York : Monthly Review Press, 1970), p. 12.

18. A similar definition of ideology is found in Graeme Duncan, "Understanding Ideology," *Political Studies* 35 (December 1987) : pp. 649-59.

19. Norwood Russell Hanson, *Patterns of Discovery: An Inquiry into the Conceptual Foundations of Science* (Cambridge : Cambridge University Press, 1958), p. 121.

20. Noam Chomsky, *American Power and the New Mandarins* (New York : Pantheon Books, 1969), pp. 399-400. For more recent claims, see Noam Chomsky, *Year 501: The Conquest Continues* (Boston : South End Press, 1993).

Edward Shils, "Ideology: The Concept and Function of Ideology," in *International Encyclopedia of the Social Sciences*, ed. David L. Sills (New York : Macmillan, 1968) ; Glencoe, Ill. : Free Press, 1968), p. 74.

22. Norwood Russell Hanson, *Perception and Discovery: An Introduction to Scientific Inquiry* (San Francisco : Freeman, Cooper, and Co., 1961), p. 171.

23. P.F. Strawson, "Truth," *Proceedings of the Aristotelian Society*, Suppl. Vol. 24 (1950) : pp. 135-36.

24. Hanson, *Perception and Discovery*, p. 193.

25. *Ibid.* A notochord is an axial, rod-shaped support, structurally much like cartilage, that extends along the anterior-posterior axis of chordate embryos directly beneath the developing central nervous system. Amphibians are a group of chordates. (Leslie Brainerd Arey, *Developmental Anatomy: A Textbook and Laboratory Manual of Embryology*, 6th ed., [Philadelphia : W.B. Saunders Co., 1954], p. 62).

26. *Ibid.*, pp. 195-96.

27. *Ibid.*, p. 183.

28. *Ibid.*, pp. 220-37.

29. *Ibid.*, p. 203.

30. *Ibid.*, pp. 209-10.

31. Hanson, *Patterns of Discovery*, p. 19.

32. Hanson, *Perception and Discovery*, p. 215.

33. *Ibid.*, p. 216.