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## INTEGRATING POSITIVIST AND INTERPRETIVE APPROACHES TO ORGANIZATIONAL RESEARCH\*

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The interpretive approach to organizational research has been gaining increasing attention as a legitimate alternative to the more traditional positivist approach. The organizational literature has already provided thorough descriptions of each approach, and clarified the differences between them. Indeed, it often appears that the two approaches are opposed, with the differences irreconcilable.

This paper will go beyond the differences and establish an integrated framework for the two approaches. An actual, published organizational study will be used as an exemplar for the integrated framework (Nardulli 1978, 1979).

(PUBLIC POLICY; METHODOLOGY; POSITIVISM)

### Introduction

The interpretive approach to organizational research has been gaining attention in recent years as an alternative to the more traditional positivist approach. By the "interpretive approach," this paper refers to such procedures as those associated with ethnography, hermeneutics, phenomenology, and case studies. By the "positivist approach," this paper refers to such procedures as those associated with inferential statistics, hypothesis testing, mathematical analysis, and experimental and quasi-experimental design.

The organizational literature has already thoroughly covered what differentiates the two approaches from each another. In their review of the literature, Morey and Luthans (1984) observe that organizational researchers have described the differences between the two approaches in the following ways: objective versus subjective (Burrell and Morgan 1979), nomothetic versus idiographic (Luthans and Davis 1982), quantitative versus qualitative (Van Maanen 1979), outsider versus insider (Evered and Louis 1981), and etic versus emic (Morey and Luthans 1984). In the literature, it often appears that the two approaches are opposed, with the differences irreconcilable. This has generated concern over what Morey and Luthans call the "widening gap between the two major orientations to organizational research" (1984, p. 29)—a gap so wide that some authors have called for a rapprochement between the two approaches (Evered and Louis, Luthans and Davis, Morey and Luthans).

The intended contribution of this paper is to provide a refutation to the widely held notion that the positivist and interpretive approaches are opposed and irreconcilable. The refutation will consist of a framework that integrates the two approaches, and an example of how the proposed framework applies. In providing the refutation, the paper seeks to demonstrate how the two approaches to organizational research can be mutually supportive, rather than mutually exclusive.

The framework proposed in this paper is formulated to achieve a particular goal, subject to certain constraints. The goal of the framework is to persuade positivist researchers and interpretive researchers of a particular common ground between them—one that calls for each approach to play an active role in strengthening the other in a truly collaborative research effort, as opposed to one that merely allows

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the two approaches to maintain a peaceful but separate co-existence. However, the constraints upon the framework are to accept the fundamental concepts of the positivist approach, to accept the fundamental concepts of the interpretive approach, to provide an even-handed treatment that does not favor one approach over the other, and to recognize the methodological legitimacy of the procedures of each approach, apart from the legitimacy of their integration and collaboration.

In satisfying these constraints, the paper will step inside the positivist framework, demonstrating to positivist researchers how they may benefit from using interpretive procedures *in addition to* their positivist procedures. In corresponding fashion, the paper will also step inside the interpretive framework, demonstrating to interpretive researchers how they may benefit from using positivist procedures *in addition to* their interpretive procedures. In other words, the paper's underlying strategy is to be persuasive to both a positivist audience and an interpretive audience, each on its own terms.

No claim will be made that the framework being proposed is the best one or the only one that can be devised for integrating the two approaches. Instead, in using the proposed framework to refute the notion that the positivist and interpretive approaches are opposed and irreconcilable, the author intends to open up the possibility for additional (and more daring) integrative frameworks to be developed and advocated.

The paper will begin by providing descriptions of the fundamental concepts of the positivist approach and the interpretive approach. Next, the paper will present the framework that integrates the two approaches. Last, the paper will turn to a study, published in the organizational literature, to serve as an exemplar for the proposed, integrated framework.

### 1. Fundamental Concepts of the Positivist Approach

The positivist approach to organizational research puts into practice a view of science that has its origins in a school of thought within the philosophy of science known as "logical positivism" or "logical empiricism." A major tenet of logical positivism is its "thesis of the unity of science" (Hempel 1969, Kolakowski 1968, p. 178), which maintains that the methods of natural science constitute the only legitimate methods for use in social science. This approach has been explicitly recognized, and advocated, as the "natural-science model" of social-science research, and has found widespread application in social science in general, and in organizational research in particular (see Schutz 1973, p. 48; Behling 1980, p. 483; Schön, Drake and Miller 1984, p. 9; Burrell and Morgan 1979, p. 4; Daft 1983, p. 539; Lee 1989a, b).

Only by applying the methods of natural science, according to the positivist school of thought, will social science (including organizational research) ever be able to match the achievements of natural science in explanation, prediction, and control. The difficulties of capturing social reality in formal propositions, quantifying it, and subjecting it to experimental controls, are said to be the reasons that organizational research, like the rest of social science, has not yet reached the same level of scientific maturity that characterizes natural science. At the same time, this also means that organizational researchers must try harder to make the study of organizations fit the natural-science model, since (according to the positivist approach) this is the only way in which organizational research can become truly scientific.

In a nutshell, the positivist approach involves the manipulation of theoretical propositions using *the rules of formal logic* and *the rules of hypothetico-deductive logic*, so that the theoretical propositions satisfy *the four requirements* of falsifiability,

logical consistency, relative explanatory power, and survival. Immediately following are the details to this outline.

(1) *The Rules of Formal Logic*

In the positivist approach, a scientific explanation is expressed in formal propositions, so that the rules of formal logic may be applied. This is important because the rules of formal logic provide a powerful means by which to relate propositions to one another, and to deduce new ones. The axiomatic systems of mathematics, like Euclid's system of geometry, provide the ideal for how this system of logic is supposed to work (Feigl 1970, Hanson 1969, Nagel and Newman 1960). For this reason, it is preferred, and sometimes even required, that scientific explanations be stated mathematically, since this would allow the scientist to use a well established subset of the rules of formal logic—a subset widely known as the rules of algebra.

Whether or not mathematical, the rules of formal logic have two important consequences for the development of a scientific explanation. First, the process of logical deduction is able to extract consequences that are contained only implicitly in the explanation's opening premises, thereby leading to unanticipated discoveries (Barker 1969, p. 238, citing Hempel). Second, any proposition that cannot be shown to be logically connected to, or logically deducible from, the remaining propositions would be "exposed" as groundless (Hanson 1969, p. 61). In this way, the scientist can use the rules of formal logic to eliminate propositions that originate from the scientist's own "subjective" opinions, values, and biases. In the positivist approach, the origin of all deduced propositions must be found in the explanation's own "objective" foundational premises.

(2) *The Rules of "Hypothetico-Deductive Logic"*

The rules of formal logic in general, and the rules of mathematics in particular, pertain to the task of how to relate propositions to one another. As such, these rules meet the needs of the formal logician or pure mathematician, who restricts his or her attention to the world of ideal relations—the strictly artificial world of formal propositions and the relationships between them. The scientist, however, works not only in the artificial world of propositions—propositions that are of his or her own invention—but also in the "real world" that he or she is observing. The scientist, therefore, faces not only the task of how to relate these propositions to one another (so that they are *logical*), but also the additional task of how to relate these propositions to the empirical reality of interest (so that the propositions are *true*). Therefore, in addition to the rules of formal logic (which include the rules of mathematics), the scientist needs a distinct set of procedural rules with which to relate his or her propositions to the empirical reality being investigated.

A major obstacle confronting such a procedure is that scientific propositions are resistant to testing by direct observation. The reason is that scientific propositions typically posit the existence of entities, phenomena, or relationships that are not directly observable, for whatever reason. The researcher can only *theorize* that they exist, like protons, electrons, and photons in physics, black holes in astronomy, evolution in biology, elasticities in economics, social structures in sociology, and so forth. None of these things can be seen directly. By what procedure, then, may the scientist relate his or her propositions to empirical referents that are not directly observable? Researchers who take the positivist approach address this concern by using what is called "hypothetico-deductive logic." The main idea behind hypothetico-deductive logic is that theorized entities have consequences that are observable, even if the entities themselves are not.

Hypothetico-deductive logic is a particular way of applying the logic of the syllogism. The standard syllogism (see Figure 1) involves applying a major premise,

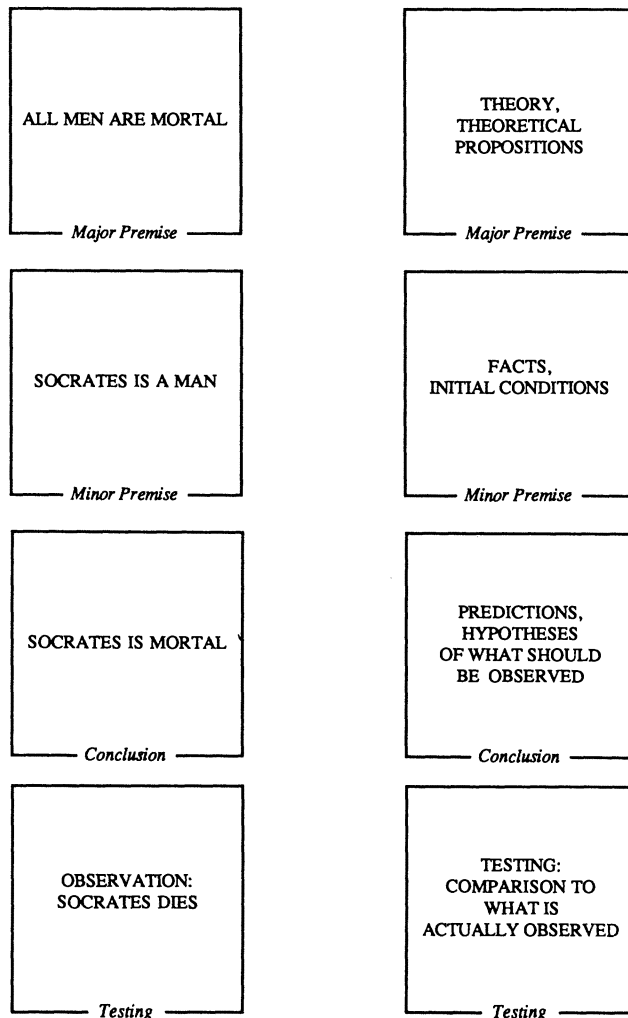


FIGURE 1

such as “All men are mortal,” to a minor premise, such as “Socrates is a man,” in order to reach a conclusion, which, in this case, would be “Socrates is mortal.” In syllogistic reasoning, the conclusion can be true only if the major premise is true and, conversely, the major premise can be true only if the conclusion is true. In other words, each serves as an indicator of the truth or falsity of the other.

In hypothetico-deductive logic (see Figure 1), the major premise is a general theory, the minor premise is a set of facts (the “initial conditions”) describing a situation, and the conclusion is what the theory predicts or hypothesizes to be observed in that specific situation. This means that, even if a theory is not directly verifiable because it refers to unobservable entities, it can still be tested indirectly, through the observable consequences (equivalently called “predictions” or “hypotheses”) that are logically deducible from it. For example, the theory that “All men are mortal” can be tested through its prediction that “Socrates is mortal” by observing whether or not Socrates dies. This also means that no theory can be conclusively verified as true, since a new situation and a new prediction (“Plato is mortal”) would re-open the possibility for its being disproven. A theory that is said to be “confirmed” or “corroborated” is one that has survived such a test, but remains open to being disproven in future tests. (See Copi 1986 and Popper 1968a.)

Of course, the testing of hypotheses and predictions calls for rigorous controls. This means that when the scientist tests what the theory predicts to happen, against what he or she actually observes to happen, the scientist must be able to attribute the phenomenon or relationship being observed to the factor of interest being tested, where the potentially confounding effects of the remaining factors are somehow removed or “controlled for.” The controls of laboratory experiments and the controls of inferential statistics exist for this purpose.

### (3) *Four Requirements for the Theoretical Propositions to Satisfy*

When the rules of formal logic and the rules of hypothetico-deductive logic are used to manage theoretical propositions, there are *four* “checks” or requirements that the propositions must satisfy, so that the researcher knows that he or she is managing the propositions properly (Popper 1968a, pp. 32–33).

The first requirement is **falsifiability**. The presence of inaccuracies in the empirical content of theoretical propositions can be detected only through contradictory observations—observations that disconfirm a prediction and thereby falsify the theory from which the prediction follows. In this regard, Popper (1968, p. 37) takes the position that the Marxist theory of history, “in spite of the serious efforts of some of its founders and followers,” eventually adopted the practice of making predictions so vague that the predictions could hardly be disconfirmed. The lack of falsifiability in the Marxist theory of history therefore had the effect of concealing any inaccuracies in it; “by this strategem they destroyed [their theory’s] much advertised claim to scientific status.” The now common characterization of scientific theories as falsifiable, refutable, testable, and disconfirmable is an indication of the widespread extent to which the rules of hypothetico-deductive logic have been put into practice.

The significance of the requirement of falsifiability is magnified in the situation where the scientist must evaluate competing theories. In general, it is possible for the same observation to be consistent with several theories simultaneously. This means that the accumulation of more and more observations consistent with a particular theory does not prove that it is the true one, or, if considered alone, that it is true at all. The key, therefore, is not to accumulate observations that are consistent with a theory, but to seek observations that disconfirm or falsify a theory; the result would be a reduction in the number of theories considered viable, with the surviving one(s) thus earning the status of “confirmed” or “corroborated.” Unlike the Marxist theory of history, at least in the way that Popper characterizes it (above), such theories must be formulated in a way that allows their disconfirmation or falsification.

The second requirement is **logical consistency**. One test for logical consistency, already mentioned, is that all of a theory’s propositions must be shown to be related to one another by the rules of formal logic, or be logically deducible from the same set of premises. Another test—one that the hypothetico-deductive framework emphasizes—is that the different predictions which follow from a theory must be compatible with one another. In other words, a theory that allows predictions of contrary or mutually exclusive events is said to lack logical consistency.

For instance, consider a set of theoretical propositions that explain race-based and gender-based employment discrimination in terms of the dynamics of psychological and group processes. Suppose further that the theoretical propositions, when applied to the facts and figures describing a certain organization, lead to the following three predictions about the actual salaries in the organization (where all factors but race and gender are held constant): on average, the white women earn more than the black men, the black men earn more than the black women, and the black women earn more than the white women. Clearly, the situations posed by any two of the predictions logically preclude the situation posed by the third. The methodological

result, in which all three predictions are deducible from the same theory, would be a sign that the theoretical propositions, from which the predictions follow, lack consistency and must be “tightened up” before they are ready for empirical testing.

The third requirement is **relative explanatory power**. A given theory must be able to explain, or predict, the subject matter as well as any competing theory. As an example, consider two theories that purport to explain the same phenomenon. Each theory undergoes testing in the same five laboratory experiments, where each experiment poses a different set of empirical conditions. The predictions of the first theory are confirmed in all five laboratory experiments. The predictions of the second theory, however, are confirmed in only three of the experiments; in the remaining two experiments, the results are unfavorable or inconclusive. The second theory, in not predicting as well as the first theory, is rejected for its relative deficiency in explanatory power.

The fourth and last requirement is **survival**. While falsifiable, a theory must survive the actual attempts aimed at its disconfirmation through controlled empirical testing. Passing an empirical test, however, can never verify conclusively that the theory of interest is true. “It should be noted that a positive decision can only temporarily support the theory, for subsequent negative decisions may always overthrow it” (Popper 1968a, p. 33). The rules of hypothetico-deductive logic therefore necessitate the on-going testing of previously confirmed theories.

## 2. Fundamental Concepts of the Interpretive Approach

The interpretive approach to organizational research maintains that the methods of natural science are inadequate to the study of social reality. This school of thought takes the position that people, and the physical and social artifacts that they create, are fundamentally different from the physical reality examined by natural science. Unlike atoms, molecules, and electrons, people create and attach their own meanings to the world around them and to the behavior that they manifest in that world (Schutz 1973, p. 59). Stated differently, the same physical artifact, the same institution, or the same human action, can have different meanings for different human subjects, as well as for the observing social scientist. The observing social scientist must, among other things, interpret this empirical reality in terms of what it means to the observed people. In accepting these intersubjectively created meanings as an integral part of the subject matter that he or she is studying, the social scientist must collect facts and data describing not only the purely objective, publicly observable aspects of human behavior, but also the subjective meaning this behavior has for the human subjects themselves.

The interpretive school of thought maintains that, because the world of intersubjectively created meanings has no counterpart in the physical reality of natural science, the methods of natural science are, at best, inadequate to social science. Consequently, social science calls for methods radically different from, and foreign to, those of natural science (Schutz 1973, p. 58).

The interpretive approach has a large following. We find it, for example, in (1) phenomenological sociology, (2) hermeneutics, and (3) ethnography. These three examples are illustrative, not exhaustive, of the different ways in which the interpretive approach may be taken.

### (1) *Phenomenological Sociology*

Central to this school of sociological thought is Max Weber’s well-known “postulate of subjective interpretation” (Schutz 1973). Here, the adjective “subjective” is not a synonym for “biased,” “opinionated,” or “untestable,” but refers instead to the

meaning held by the observed human *subject*. According to Schutz (p. 62), “The postulate of subjective interpretation has to be understood in the sense that all scientific interpretations of the social world *can*, and for certain purposes, *must* refer to the subjective meaning of the actions of human beings from which social reality originates.” Along the same lines, Natanson writes (1963, p. 278), “If we go back to Max Weber’s conception of the subjective interpretation of meaning in social action . . . , Weber maintains that the primary task of the sociologist is to understand the meaning an act has for the actor himself, not for the observer.”

In addition to the postulate of subjective interpretation, phenomenological sociology also utilizes the allied concept of *Verstehen*. In general, *Verstehen* means “understanding.” In phenomenological sociology, *Verstehen* has at least two specific meanings. In its first sense, *Verstehen* refers to “understanding” as the process by which people in everyday life come to interpret and, therefore, to understand and guide themselves in their world. However, the observing social scientist is also one such person, albeit with different cognitive motives. *Verstehen*, in this more narrow sense, refers to “understanding” as the particular process by which the observing social scientist interprets the subjective meanings that give rise to the behavior of the people he or she is studying.

Based on its postulate of subjective interpretation and its concept of *Verstehen*, the discipline of phenomenological sociology makes frequent use of such terms as (a) the “common-sense thinking of everyday life,” (b) the “life world” (or *Lebenswelt*) in which common-sense thinking and human meanings arise, (c) the “natural attitude” with which people in everyday life approach one another, and (d) the “scientific attitude” with which the observing social scientist approaches the *Lebenswelt* that he or she is studying. (See Schutz 1973, pp. 56–57; and Bernstein 1978, pp. 136–141.) Today, the recognition that social scientists give to the phenomenology of everyday life is reflected in the well-known phrase, (e) “the social construction of reality” (Berger and Luckmann 1967).

## (2) *Hermeneutics*

In the field of hermeneutics, we find that the interpretive approach has been taken in scholarly efforts to understand literary and religious texts. The motivating question in hermeneutics is: after a writer has implanted certain meanings in a text, how might readers of the text, especially those who belong to a different time and culture from the writer of the text, proceed to interpret the text for the meanings originally implanted in it, where other portions of the text itself are the primary, or sometimes the only, cross-referencing tools available? *Today, the methods of hermeneutical interpretation are used not only in the reading of texts, but also in the reading of human behavior, which is framed as a “text analogue.”* (See Tice and Slavens 1983, pp. 293–299; Taylor 1979; and Bernstein 1978, 1983.) As such, hermeneutics has obvious ramifications for such fields as anthropology, history, sociology, and organizational studies.

Thomas Kuhn provides the following description of how a hermeneutical analysis proceeds (cited in Bernstein 1983, p. 132; emphasis added):

When reading the works of an important thinker, look first for the *apparent absurdities* in the text and ask yourself how a sensible person could have written them. When you find an answer . . . when those passages make sense, then you may find that more central passages, ones you previously thought you understood, have changed their meaning.

Along the same lines, Taylor (1979, p. 27) interjects the notion of the “hermeneutical circle,” in which the meaning of a particular passage in a text (or a particular



human behavior in a social setting), as interpreted by the reader (or the observer), is related inextricably to the meanings of all the other passages in the same text (or the meanings of all the other human behaviors in the same social setting). Because of this, any clarification or other change in the interpretation of a passage (or a behavior) has the effect of rippling through the circle and changing the framework supporting the previous interpretations of the other passages in the text (or the other behaviors in the social setting). This requires the reader (or observer) to come to a new understanding. “This is why Gadamer,” according to Bernstein (1983, p. 139), “tells us that to understand is always to understand *differently*.” Then the new understanding, following from a new interpretation, changes the circle yet again—a process that, Taylor recognizes, can continue forever (p. 28). However, each iteration around the circle brings the meanings of the different parts into greater consistency, or closer harmony, with one another, as well as with the whole.

### (3) *Ethnography*

In the discipline of anthropology, the “interpretive approach” is synonymous with ethnography. “Doing an ethnography,” as anthropologists put it, is doing an interpretation of the behavior of human subjects in their local settings. The anthropologist seeks to understand the meanings that the local behaviors signify to the human subjects (the “natives”) themselves. The following discussion of ethnography, which is necessarily brief, will draw heavily on the views of Geertz.

Geertz points out that the field of anthropology has referred to the distinction between the native’s understanding and the observer’s understanding with the following formulations (1983, p. 56): “‘inside’ versus ‘outside’, or ‘first person’ versus ‘third person’ descriptions; ‘phenomenological’ versus ‘objectivist,’ or ‘cognitive’ versus ‘behavioral’ theories; or, perhaps most commonly ‘emic’ versus ‘etic’ analyses.” To this list, Geertz adds yet another formulation, “experience-near” versus “experience-far,” that he attributes to Heinz Kohut (p. 57). How does the anthropological observer go about interpreting the inside/first-person/phenomenological/cognitive/emic/experience-near understanding held by a native?

Different anthropologists offer different responses to this question. Some, such as Sanday (1979, p. 527), say that empathy and identification with the observed people are needed. Geertz takes the contrary position, following from Malinowski, that anthropologists do not do their work by empathy, by achieving a “psychological closeness” or “transcultural identification” with their subjects (1983, p. 56), or by somehow “achieving communion” with them (p. 70). Geertz says that “[t]he trick is not to get yourself into some inner correspondence with your informants” (p. 58). Instead, in his own past work as an ethnographer, Geertz states that he had proceeded by “searching out and analyzing the symbolic forms—words, images, institutions, behaviors—in terms of which . . . people actually presented themselves to themselves and to one another” (p. 58). This manner of interpretation proceeds by analyzing the meanings of these symbolic forms (among which Geertz explicitly includes manifest behaviors) with respect to one another, as well as to the whole that they comprise (“a continuous dialectical tacking between the most local of local detail and the most global of global structure in such a way as to bring them into simultaneous view” p. 69). If this description resembles a description of hermeneutics, the resemblance is no accident. Geertz states (p. 69):

[T]he hermeneutic circle . . . is as central to ethnographic interpretation, and thus to the penetration of people’s modes of thought, as it is to literary, historical, philological, psychoanalytic, or biblical interpretation, or for that matter to the informal annotation of everyday experience we call common sense.

Of course, Geertz's view is only one among many views of ethnographic interpretation. Sanday (1979) divides ethnography into the holistic, semiotic, and behavioristic schools of thought, and she further subdivides the semiotic school into thick description (of which Geertz is the main spokesman) and ethno-science.

There are different, but related, ways by which researchers across the different interpretive traditions test the validity of their interpretations. As the above quotation of Kuhn indicates, a good interpretation is one that resolves the "apparent absurdities" in the researcher's initial interpretations of the passages in a text or the concrete behaviors in a social setting. In such a resolution, the researcher manages to interpret an individual passage or behavior in such a way that it no longer appears absurd, but instead appears rational *in relation to the rest of the text* or "*text analogue*." "A successful interpretation," according to Taylor (1979, p. 27), "is one which makes clear the meaning originally present in a confused, fragmented, cloudy form . . . [W]hat is [initially] strange, mystifying, puzzling, contradictory [for the researcher] is no longer so, is accounted for" (Taylor, p. 27).

In ethnography, one test for the validity of an interpretation is the extent to which the behavior of the native does *not*, or *no longer*, strikes the ethnographer as absurd, peculiar, pointless, irrational, surprising, or confusing. The premise here is simply that, for the natives being observed, their own actions are sensible; they perform their actions for a reason. In a sense, the premise is that *people know what they are doing*. If there are any actions that appear irrational or peculiar to the outside observer, it is not because the people are behaving in ways that they themselves would consider irrational or peculiar, but because the outside observer has not yet succeeded in reading the meanings behind the actions, as these meanings exist in the local culture. Thus, a good ethnography—one that identifies these meanings—would enable the ethnographer to understand the rationality, or at least the rationale, behind the actions that he or she observes, while a poor ethnography would leave the ethnographer with the impression of some of the actions as being absurd, peculiar, pointless, irrational, surprising, or confusing.

Sanday offers a second way to test the validity of an ethnography (1979, p. 529): "If, after having completed the ethnography, the observer can communicate the rules for proper and predictable conduct as judged by the people studied, he or she has produced a successful product. The ethnographer is like the linguist who has studied and recorded a foreign language so that others can learn the rules for producing intelligible speech in that language."

In phenomenological sociology, Schutz poses a provocative method by which to judge the validity of an interpretation. His method pertains to researchers who seek to work in both the world of interpretation and the world of scientific theory. Because his method suggests a mean by which to integrate the positivist approach and the interpretive approach, the paper will provide the details of this method in the section that follows.<sup>1</sup>

### 3. An Integrated Framework for the Positivist and Interpretive Approaches

Which approach should we take to organizational research? The positivist approach makes the claim that its methods—the methods of natural science—are the only truly scientific ones, while the interpretive approach makes the counterclaim that the study of people and their institutions calls for methods that are altogether foreign to those of natural science. Thus, the positivist approach and the interpretive approach would appear to be in opposition. Still, both approaches clearly have

<sup>1</sup>Discussion of this method appears in the text accompanying footnote 3.

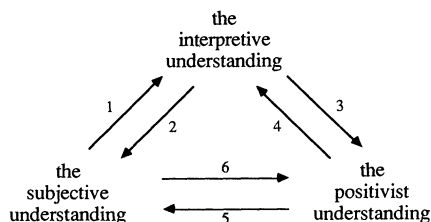


FIGURE 2

something to offer. How, then, might the two approaches be integrated so that organizational researchers can simultaneously enjoy the benefits of both, rather than just one or the other?

This paper integrates the two approaches into a single framework, consisting of “three levels of understanding.”<sup>2</sup> The framework fully recognizes and incorporates the fundamental concepts of both approaches.

**The understanding at the first level** belongs to the observed human subjects. This understanding consists of the everyday common sense and everyday meanings with which the human subjects see themselves, and which give rise to the behavior that they manifest in socially constructed settings.

**The understanding at the second level** belongs to the observing organizational researcher. This understanding is the researcher’s reading or interpretation of the first-level, common-sense understanding. When capturing the common-sense understanding, the researcher might even be said to be replicating it. Concepts that the researcher may find helpful in his or her development of the second-level understanding are the postulate of subjective interpretation, *Verstehen*, the hermeneutical circle, and thick description.

**The understanding at the third level** also belongs to the organizational researcher. This understanding is one that the researcher creates and tests in order to explain the empirical reality that he or she is investigating. This explanation, which is also called scientific theory, is made up of constructs that belong exclusively to the observing researcher (as opposed to the observed human subjects). The explanation consists of formal propositions that typically posit the existence of unobservable entities (like social structure). These propositions may also attempt to account for the influence of certain biographical and institutional factors of which the observed human subjects might not even be aware. In taking the form of formal propositions and in referring to factors unknown to the human subjects themselves, the theoretical explanation at the third level is qualitatively different from both the common-sense understanding located at the first level and the interpretation of the common-sense understanding located at the second level. In addition, the theoretical explanation located at the third level must obey the same rules of formal logic and controlled empirical testing that apply to scientific explanations in general. *These formal and experimental rules neither bear relevance to nor have application at the first two levels.*

In conformity with the terminology already established in this paper, the three levels of understanding will be called, respectively, *the subjective understanding*, *the interpretive understanding*, and *the positivist understanding*. Figure 2 depicts the cyclical nature of the relationships that exist among the three levels.

The subjective understanding provides the basis on which to develop the interpretive understanding (arrow 1). The procedures that the organizational researcher may utilize to develop the interpretive understanding from the subjective understanding include (but are not limited to) those of phenomenological sociology, hermeneutics,

<sup>2</sup>This framework is an elaboration of Schutz’s “first-level constructs” and “second-level constructs” (1973).

and ethnography. To test the validity of the resulting interpretive understanding, the researcher may refer back to the subjective understanding (**arrow 2**), accomplishing this, for example, in the ways described by Kuhn, Taylor, Geertz, and Sanday. One such way utilizes the hermeneutical circle to verify the sensibility of what initially appeared to be “apparent absurdities.” Another such way involves the researcher’s ability, based on the interpretive understanding, to read the behavior of the observed human subjects as rational, rather than as absurd, peculiar, pointless, irrational, surprising, or confusing. *The procedures of the interpretive approach are fully recognized and incorporated into the proposed framework, as embodied in arrow 1 and arrow 2.*

The interpretive understanding, once judged to be valid, may then provide the basis on which to develop the positivist understanding (**arrow 3**). An important point, which the exemplar in the next section of the paper will illustrate, is that a different reading or interpretation of what the organization means to the human subjects will lead to a different theoretical explanation for how the human subjects behave.

*Altogether, there are three tests that the resulting positivist understanding may undergo.* Once the organizational researcher has completed the formulation of the theoretical propositions, they must be subjected to controlled empirical testing. This is the same manner of traditional positivist testing that is administered to theoretical propositions in the natural sciences. However, in order for the organizational researcher to consider his or her theoretical propositions to be ready for traditional positivist testing, the propositions must first undergo testing that pertains to an additional, critical feature of social reality that distinguishes it from the physical subject matter of the natural sciences. This feature is the subjective understanding. This paper will utilize Schutz’s concept of “puppets” (1973, pp. 63–65) as a device for adapting the positivist understanding so that it may adequately account for this additional feature which characterizes social reality.

In an important way, the theoretical propositions that an organizational researcher formulates are not about people, but “puppets.” The organizational researcher constructs the puppets to think and act like the actual human subjects whom he or she is observing. In the way that the theoretical propositions are formulated, the researcher (i) endows the puppets with certain internally held values, (ii) specifies the variety of external opportunities and constraints that the puppets may encounter in their environment, and (iii) specifies the actions (the publicly observable behaviors) with which the puppets, given their internally held values, may respond to the externally encountered opportunities and constraints.

The first two of the three tests of the positivist understanding encourage the researcher to verify that the predicted actions are “rational” with respect to the subjective meanings attributed to the puppets based on the interpretive understanding. Indeed, the construction of a positivist understanding without the aid of a careful interpretation of the subjective meanings would invite the methodological error that anthropology calls “ethnocentrism” and history calls “anachronism.” In this methodological error, the researcher mistakenly applies the subjective meanings that exist in his or her own culture or organization, instead of the subjective meanings that exist in the culture or organization of the observed human subjects, when he or she is developing a theoretical explanation for the behavior of these people.

In order to avoid this methodological error, the first two tests insure that the following two sets of meanings are the same: (1) the subjective meanings that the human subjects themselves attach to their own actions, as earlier recorded by the researcher in the interpretive understanding, and (2) the subjective meanings that the positivist understanding assigns, explicitly or implicitly, to the actions of its puppets.

**The first test** is for use by the organizational researcher who is in the process of formulating a positivist understanding. In this test, the researcher simply makes sure

that the subjective meanings, earlier recorded in the interpretive understanding, have been built into the positivist understanding. To accomplish this, the researcher refers back to the subjective meanings earlier recorded in the interpretive understanding (**arrow 4**), which would then serve as the point of comparison for judging the subjective meanings contained in the positivist understanding (**arrow 3**).

Whereas the first test simply indicates whether or not the researcher has remembered to undertake the task of building the subjective meanings into the positivist understanding, **the second test** provides a way of indicating whether or not the researcher has performed this task successfully. Schutz states (pp. 63–64, emphasis added): “a scientific model of human action must be constructed in such a way that a human act performed within the real world by an individual actor as indicated by the typical construct [i.e., as predicted by the positivist understanding through its puppets, **arrow 5**] *would be understandable to the actor himself as well as to his fellow-men in terms of common-sense interpretation of everyday life* [i.e., the subjective understanding, **arrow 6**].”

In the terminology of this paper, the second test requires the positivist understanding to specify the actions of its puppets so that these actions, if performed “within the real world,” would be understandable to the human subjects themselves, in terms of their own subjective understanding. In other words, the actions that a theory specifies must be “subjectively understandable.”

**The third of the three tests**, briefly mentioned above, has the purpose of confirming or disconfirming the theoretical propositions through controlled empirical testing. Procedurally, this is the same manner of traditional positivist testing that natural science theories typically undergo. Whereas the first two tests focus on the subjective meaning associated with the human actions predicted by the theory, the third test focuses on the purely physical or behaviorist component of the predicted actions. In the third test, the positivist understanding is confirmed if the actions of its puppets (the predicted human behaviors) match the actions of the actual people upon whom the puppets are modeled. With regard to the integrated framework being proposed, this means that the subjective understanding, through the publicly observable behaviors arising from it, may serve to confirm or disconfirm the predictions of the positivist understanding (**arrow 6**).

When undergoing the third test, the theoretical propositions must satisfy the rules of formal logic, the rules of hypothetico-deductive logic, and the four requirements of positivism: falsifiability, logical consistency, relative explanatory power, and survival. *Thus the formal and experimental procedures of the positivist approach, derived from the natural sciences, are fully recognized and incorporated into the proposed framework, as embodied in **arrow 5** (the derivation of predictions from the theory) and **arrow 6** (the testing of predicted behaviors against actual behaviors, arising from the subjective understanding).*

There are two additional points worth noting about the last test. The first point is that the proposed framework calls upon the researcher, not the human subjects being studied, to render the final judgment that the positivist understanding is confirmed or disconfirmed. The reason is that the proposed framework does not, cannot, and need not expect the observed human subjects to be conversant in the rules of formal logic (which include the rules of mathematics), the rules of hypothetico-deductive logic (which include the rules of experimental and quasi-experimental design), the four positivist requirements, or even the difference between a formal proposition and an everyday statement. For this reason, it would be inappropriate for the proposed framework to call upon the human subjects to render the judgment on the adequacy of the theoretical propositions.

The second point is that, even though the last test pertains to the validity of the positivist understanding, it also provides a provocative, if indirect, method by which to

judge the validity of the interpretive understanding.<sup>3</sup> Suppose that a particular set of theoretical propositions, constituting the positivist understanding, failed to survive controlled empirical testing. This would cast doubt on the adequacy of the interpretive understanding upon which the positivist understanding is based (**arrow 4**). Conversely, survival of controlled empirical testing would indicate that the foundation on which the positivist understanding rests—namely, the interpretive understanding—is itself also sound. Within the integrated framework being proposed, this procedure gives, to the organizational researcher, the option of using the positivist understanding and the interpretive understanding to cross-check and strengthen each other: the detection of a flaw in one would prompt the search for a flaw in the other, and an improvement in one would necessitate an improvement in the other. The result is that the positivist understanding and the interpretive understanding—far from being mutually exclusive and irreconcilable—may be utilized as mutually supportive and reinforcing steps in organizational research (as embodied in **arrow 3** and **arrow 4**).

In summary, the subjective understanding provides the basis to the interpretive understanding (**arrow 1**), which provides the basis to the positivist understanding (**arrow 3**), from which follow predictions (**arrow 5**) about the human subjects' actions. The actions that the human subjects display are outward signs or artifacts of their own subjective understanding. Through these publicly observable artifacts, the subjective understanding has the effect of either confirming or disconfirming the predictions of the positivist understanding (**arrow 6**). A disconfirmation would call for an improvement in the positivist understanding, which would call for an improvement in the antecedent interpretive understanding (**arrow 4**), which in turn would call for a fresh reading of the subjective understanding (**arrow 2**). The new reading would provide the basis to an improvement in the interpretive understanding (**arrow 1**), which would then provide the basis to an improvement in the positivist understanding (**arrow 3**), and so on. This would mark the next iteration through the cyclical relationships existing among the three levels of understanding.

In the course of each iteration through the cyclical relationships, there are two tests (described in detail above) that the interpretive understanding may undergo. In the first test, the researcher assesses the validity of the interpretive understanding by referring back to the subjective understanding, accomplishing this, for example, in the ways described by Kuhn, Taylor, Geertz, and Sanday. In the second test, the researcher uses the confirmation or disconfirmation of the predictions of human behavior, following from the positivist understanding, as an indicator of the validity of interpretive understanding. Specifically, a disconfirmed positivist prediction about behavior casts doubt upon the adequacy of the interpretive understanding on which the positivist understanding is based.

In the course of each iteration through the cyclical relationships, there are three tests (described in detail, above) that the positivist understanding may undergo. In the first test, the organizational researcher makes sure that the subjective meanings, earlier recorded in the interpretive understanding, have been built into the positivist understanding. In the second test, the organizational researcher makes sure that the actions, theorized by the positivist understanding through its “puppets,” would be understandable to the observed human subjects themselves, in terms of their own subjective understanding. In the third test, the organizational researcher compares the behavior that the positivist understanding predicts against the behavior that the researcher actually observes. The third test has the purpose of confirming or disconfirming the positivist understanding through controlled empirical testing.

<sup>3</sup>This is the method to which the paper earlier alluded in the text accompanying footnote 1.

It must be emphasized that the proposed framework recognizes the methodological legitimacy of the procedures of both the interpretive approach and the positivist approach, apart from the legitimacy of their integration and collaboration. No claim is being made that all researchers must utilize every part of the framework. The framework recognizes the legitimacy of the efforts of the positivist researcher who uses only positivist procedures, as well as the efforts of the interpretive researcher who uses only interpretive procedures.

For example, a positivist organizational researcher who does not bother to develop an explicit interpretive understanding might nonetheless succeed in developing a positivist understanding that satisfies the requirements of falsifiability, logical consistency, relative explanatory power, and survival. Also, an interpretive organizational researcher could very well develop an interpretive understanding that is judged successful in the ways described by Kuhn, Taylor, Geertz, and Sanday, even if he or she declines to proceed to the framework's subsequent step of developing a positivist understanding based on the interpretive understanding.

Just the same, the proposed framework indicates how positivist researchers may benefit from using interpretive procedures *in addition to* their positivist procedures, and how interpretive researchers may benefit from using positivist procedures *in addition to* their interpretive procedures. For instance, a positivist organizational researcher who needs to reformulate a set of theoretical propositions, owing to the repeated disconfirmations of his or her behaviorist predictions in controlled empirical testing, might be able to explain the disconfirmations by making explicit the (flawed) interpretive understanding presumed in the failed explanation. (Indeed, this might even lead the positivist organizational researcher to recognize the merits of basing all theoretical explanations on explicitly developed interpretive understandings.) In the same spirit, an interpretive organizational researcher who needs to choose among competing interpretive understandings might narrow down the possibilities with the help of the empirical and logical rigors of positivism. Based on each of the interpretive understandings, the interpretive organizational researcher could develop alternative positivist understandings and then rule out the ones whose consequent predictions are disconfirmed through controlled empirical testing.

#### 4. An Exemplar for the Integrated Framework

In his article, "The Caseload Controversy and the Study of the Criminal Courts" (1979) and in his book, *The Courtroom Elite: An Organizational Perspective on Criminal Justice* (1978), Peter Nardulli presents an instance of organizational research that illustrates the three levels of understanding and the relationships between them. Elsewhere, the author of this paper has selected certain works of Argyris, Kanter, and Markus for illustrations of formative versions of the integrated framework now being proposed (Lee 1986, 1989a, b). The current paper's rationale for selecting Nardulli's work is that, even as a single research effort, it is rich in examples of reasoning that would be understandable as sensible and valid to an interpretive audience (such as his nine-month participant observation study), as well as to a strict, behaviorist positivist audience (such as his utilization of multiple regression analysis to test competing theories). As such, Nardulli's work provides ample material with which the paper may satisfy the constraint of providing an even-handed treatment that does not favor one approach over the other, and also the constraint of recognizing the methodological legitimacy of both approaches. Motivating Nardulli's inquiry are considerations pertaining both to basic research and to policy (1979, p. 89):

In traditional criminal justice research, pervasive "dysfunctioning" in the criminal courts system has been attributed largely to caseload pressure. Some criminal justice scholars, however, have

recently questioned the central role accorded caseload pressure. . . . The demise of caseload pressure as a central concept in the study of criminal courts would leave a large gap in our theoretical understanding of how these units function. If caseload pressures do not account for high dismissal rates, pervasive plea bargaining, and the weakening of the adversary system, what does? The policy implications of this controversy are just as significant. If increasing court resources—which decrease caseload pressures—will not significantly improve the operations of criminal courts, what will?

In the terminology of this paper, we can say that Nardulli conducts his analysis in the following way. (1) He reviews the *interpretive understanding* that the traditional criminal justice research has developed, or uncritically assumed, in its reading of what the court environment means for the judges, prosecutors, and defense attorneys working in it. (2) He describes the *positivist understanding* that follows from this *interpretive understanding*. It consists of a theory that attempts to explain the relationship between caseload pressure and court “dysfunctioning.” (3) He reviews the work of other scholars who have succeeded in providing empirical disconfirmations of the traditionally held *positivist understanding*. (4) Reasoning that the traditionally held *positivist understanding* is flawed because it follows from an incorrect *interpretive understanding*, he revises the *interpretive understanding*. He does this by conducting a nine-month participant-observation study, in which he undertakes a fresh reading of the *subjective understanding* that the judges, prosecutors, and defense attorneys have of themselves and the court organization. (5) The new and different *interpretive understanding* then leads to a new and different *positivist understanding* for explaining the “dysfunctioning” in the court organization. (6) Finally, Nardulli subjects the new *positivist understanding* to controlled empirical testing.

#### (1) *The Interpretive Understanding*

Nardulli identifies what he calls “the legal man assumption” as a key feature of the traditional criminal justice research. According to this assumption, the court organization has the following meaning for the prosecutors, judges, and defense attorneys who work there: it is an arena for the adversary process, shaped by due-process values. This reading of the subjective understanding maintains that Anglo-Saxon notions of due process and the formal rules of criminal procedure provide the everyday meanings and common sense with which the prosecutors, judges, and defense attorneys understand themselves and the court organization around them.

According to this interpretation, the defense attorney sees himself or herself as an advocate of the defendant’s interests; the prosecutor sees himself or herself as an advocate of the state’s interests; the defense attorney and the prosecutor see each other as adversaries in the adversary process; and the judge sees himself or herself as a neutral overseer who enforces the Anglo-Saxon notions of due process and the formal rules of criminal procedure.

#### (2) *The Traditionally Held Positivist Understanding*

In the terminology of this paper’s integrated framework, the “legal man” constructed by the traditional criminal justice research is a *puppet*, the actions of which are intended to match the actions of the actual human subjects (the prosecutors, judges, and defense attorneys) observed in the court organization. Through its theoretical propositions, the traditional criminal justice research (i) endows the “legal man” puppet with the idealized values “dictated by Anglo-Saxon notions of due process and embodied in the formal rules of criminal procedure” (1979, p. 90), (ii) specifies that the environment which the “legal man” puppet encounters is one where “most criminal courts are operating under severe caseload stress (*i.e.*, beyond optimal levels), given their present level of resources” (p. 90), and (iii) specifies that the actions with which the “legal man” puppet responds to such an environment are



marked by “speed and compromise” (p. 90), such as plea bargaining, coalition-building, and other types of cooperative behavior between puppets who, in an environment free of caseload pressure, would be behaving as adversaries (specifically, the puppet representing the prosecutor and the puppet representing the defense attorney). The displacement of due-process values by considerations of speed and compromise, under the condition of severe caseload pressure, “accounts for the observed dysfunctioning in criminal courts” (p. 91).

Because of its basis in the “legal man” assumption, the traditional theory might also be called the “legal man” theory.

### (3) *The Disconfirmation of the Traditionally Held Positivist Understanding*

The “legal man” theory in the traditionally held positivist understanding yields the following prediction (1979, p. 91):

[D]ysfunctioning can be curbed by increasing criminal court resources. As resources increase and caseload pressures decrease, due process values would begin to displace administrative values in the processing of criminal cases.

Nardulli (1979, pp. 91–92) cites the work of two other scholars, Heumann and Feeley, each of whom compiled statistical evidence that disconfirmed this prediction. In the Connecticut Superior Courts, Heumann found “no systematic differences in trial rates” despite variations in resources, whether viewed longitudinally or cross-sectionally. Similarly, Feeley found “no significant differences in trial rates, average number of motions filed, release statistics, bail structure, and sentencing structure” when comparing high-volume and low-volume trial courts, also in Connecticut. If the “legal man” theory were true, these predicted differences would have been observed.

### (4) *Revising the Interpretive Understanding*

The positivist understanding embodied in the “legal man” theory contains flaws—flaws made evident by the theory’s empirical disconfirmation. In the terminology of this paper, Nardulli can be said to utilize the disconfirmation of the positivist understanding to cast doubt upon the adequacy of the interpretive understanding on which it is based.

This interpretive understanding is inadequate, Nardulli argues, because of its faulty presumption that the actual judges, prosecutors, and defense attorneys are “legal men” who utilize Anglo-Saxon notions of due process and the formal rules of criminal procedure to understand themselves and the court organization around them. The traditional criminal justice researchers had mistakenly utilized the subjective meanings that the legal system had for them, rather than for the people they were studying. Instead, the interpretive understanding should be based on a reading of the actual subjective understanding held by the judges, prosecutors, and defense attorneys working in the court organization.

Nardulli performs this reading. He conducts a nine-month participant-observation study, in which he undertakes a fresh reading of the subjective understanding that the judges, prosecutors, and defense attorneys have of themselves and the court organization. In his field work, he enjoys close access to the people whom he observes (1978, p. 103):

Proceedings in the preliminary hearing courts were often observed by sitting on the bench next to the judge; trial proceedings were viewed from the jury box or a special chair located near the bench. Plea bargaining sessions and coffee klatches in judges’ chambers were attended, and many informal discussions were held with various participants. Some questionnaire and interview data were also collected. In addition, observational and file data were collected on several samples of cases processed during this period.

As such, Nardulli's participant-observation falls into the same category of analysis as Weber's postulate of subjective interpretation, *Verstehen*, the hermeneutical circle, and thick description.

Nardulli concludes that for the human subjects whom he observes—the judges, prosecutors, and defense attorneys—the Chicago criminal courts do not have the meaning of an *adversary process*. Instead, the criminal courts have the meaning of a *clubhouse* for these people, in which there are no adversaries, but club members, who regularly cooperate with one another and even form coalitions. Through these coalitions, the observed human subjects pursue their common interest, which is to process cases in ways that are expeditious *for them*, not necessarily for the defendant.

For example, judges, under pressure from impending monthly productivity reports, typically request that dates of certain cases be “moved up,” and consenting defense attorneys typically receive special scheduling privileges in return—privileges essential to defense attorneys in private practice (1978, pp. 180–182). Nardulli describes other features of the “clubhouse” meaning that the court organization has for its club members (1979, p. 100):

Cases involving recalcitrant defense attorneys would often be heard near the end of the daily call; their trials would frequently be interrupted while the court disposed of other matters, often stringing them out over several days. Moreover, uncooperative private defense attorneys could expect few assignments [of clients] from judges and even fewer from clerks or bailiffs. Uncooperative judges and prosecutors could expect more trials [as opposed to guilty pleas] and problems in obtaining informal discovery of defendants' cases.

In other words, a “native” of the court organization could be more accurately described as “clubhouse man” than “legal man.”

In the first of two tests that the interpretive understanding may undergo in the proposed framework,<sup>4</sup> the researcher assesses the validity of the interpretive understanding by referring back to the subjective understanding, accomplishing this, for example, in the ways described by Kuhn, Taylor, Geertz, and Sanday. In passing this test, it would be an interpretation “which makes clear the meaning originally present in a confused, fragmented, cloudy form... [so that] what is [initially] strange, mystifying, puzzling, contradictory [for the researcher] is no longer so, is accounted for” (Taylor, p. 27, quoted above). Equivalently stated, it would also be an interpretation that succeeds in presenting the “natives” in such a light that their behavior does *not*, or *no longer*, strike the outside observer as absurd, peculiar, pointless, irrational, surprising, or confusing.

To an outside observer, the appearance of cooperative (rather than adversarial) behavior in the court might very well seem absurd, peculiar, pointless, irrational, surprising, or confusing. After all, how could a person, whose job is to advocate the interests of the defendant, possibly cooperate with another person, whose job is to prosecute the defendant? Along the same lines, how could the judge possibly collude by closing his or her eyes to such a charade? Indeed, such an interpretation might even appear cynical and condescending.

The resolution to this “apparent absurdity” may be found by referring back to the subjective understanding (**arrow 2** in Figure 2) and examining two of its critical aspects. By accepting the clubhouse interpretation of the subjective understanding of the people in the court organization, the outside observer may verify the rationality, or at least the rationale, behind the cooperative behavior, thereby allowing the interpretive understanding to pass the first of the two tests.

<sup>4</sup>The discussion that immediately follows pertains to this test. The second of the two tests will be discussed in the text accompanying footnote 6.

One critical aspect of the subjective understanding held by the people in the court organization is what Nardulli calls “the presumption of guilt,” which is “based upon the participants’ belief that weak cases are screened out at an earlier stage of the proceedings by police or prosecutors.” Nardulli continues (1978, p. 69):

Thus, the presumption of guilt leads to a rather mundane and routinized definition of work within the criminal court setting. The more glamorous, ultimate question of guilt or innocence, which courts were originally designed to resolve, is seldom seriously considered. What this means is that there is seldom any motivation derived from professional considerations to engage in formal adversary proceedings. Such proceedings are designed to resolve another type of question entirely—guilt or innocence. Informal, truncated proceedings are more appropriate to resolve the types of problems routinely handled in criminal courts.

Because the defense attorney and the prosecutor understand the question of guilt or innocence as having already been settled (in favor of guilt), they have no need to understand each other in adversary terms. Instead, they understand each other as sharing the same job—namely, the job of disposing with the guilty defendants.

The other critical aspect of the subjective understanding held by the people in the court organization is what Nardulli calls “the shared interests of the *courtroom elite*” (1978, p. 70). According to Nardulli’s reading of the subjective understanding, each member of the courtroom elite (the judge, prosecutor, and defense attorney) understands himself or herself as laying claim to some of the discretionary power essential to the expeditious processing of cases, *but also understands that none of them, alone, can dominate the operations of the court organization*. Therefore, they see one another as indispensable cooperators (rather than adversaries) and they see their group situation as one of coalition building. Based upon this reading of their situation, Nardulli concludes that one of the interests they share is the expeditious processing of cases. Moreover, to bring this about, they maintain another shared interest, which is their mutual cooperation.

These two critical aspects of the subjective understanding (the presumption of guilt and the shared interests of the courtroom elite) therefore explain the rationality, or at least the rationale, behind the cooperative meaning with which the judges, prosecutors, and defense attorneys understand one another and the court organization around them. Without a reading of these two aspects of the subjective understanding, the cooperative behavior of these courtroom professionals would likely strike the outside observer as absurd, peculiar, pointless, irrational, surprising, or confusing.

##### (5) *Revising the Positivist Understanding, Based on the Revised Interpretive Understanding*

The new interpretive understanding leads to a new theoretical explanation, at the level of the positivist understanding. In his new “clubhouse” theory, Nardulli specifies the following categories of variables (1979, Diagram 2, p. 98): internal factors (the shared interests and norms of the clubhouse members), external factors (rates of incoming cases, public pressure for punishment of offenders), the dispositional strategy (how the clubhouse members dispose of a case), and the criminal court outputs (the number of cases disposed). The “clubhouse” theory places a heavy emphasis on the explanatory role of the internal factors (1979, pp. 97–98):

[The internal factors] emanating from the collective efforts of judges, prosecutors, and defense counsel to pursue common interests have important consequences for the processing of criminal cases. . . . [T]hese common interests can be defined as the shared desire to process cases expeditiously. This shared desire is important because those who share it enjoy a virtual monopoly of power within the courtroom setting. This state of affairs leads to the development of a dispositional

strategy that is reflective of the interests of the courtroom elite [the judges, prosecutors, and defense counsel] and which emphasizes the expeditious handling of cases [as opposed to the procedures of due process].

Nardulli specifies the following relationships among the different variables: the criminal court outputs (the number of cases processed) are determined by the dispositional strategy, and the dispositional strategy is, in turn, determined by the internal factors and the external factors.

#### (6) *Testing the Revised Positivist Understanding*

In the proposed framework, the positivist understanding may undergo three tests. The first test would indicate whether or not the researcher has remembered to undertake the task of building the subjective meanings (earlier recorded in the interpretive understanding) into the positivist understanding. To accomplish this, Nardulli would refer back to the subjective meanings held by “clubhouse man” (as recorded in the revised interpretive understanding), which would then serve as the point of comparison for judging the subjective meanings contained in his “clubhouse” theory. Since Nardulli builds the subjective meanings held by “clubhouse man” (as recorded in the revised interpretive understanding) directly into the “clubhouse” theory, the subjective meanings contained in the latter compare favorably (and identically) with the subjective meanings held by the former.

The second test would indicate whether or not the researcher has performed this task successfully. In general, this test requires the positivist understanding to specify the actions of its “puppets” so that these actions, if performed “within the real world,” would be understandable to the human subjects themselves, in terms of their own subjective understanding. Therefore, this test requires the “clubhouse” theory to specify the actions of its “clubhouse men” so that these actions, if performed within the court organization, would be understandable to the actual judges, prosecutors, and defense attorneys themselves, in terms of the everyday meanings and common sense with which they see themselves and the court organization around them. Unfortunately, Nardulli performs no explicit assessment of whether or not the actual judges, prosecutors, and defense attorneys would find the actions theorized of the puppets (the “clubhouse men”) to be understandable. However, Nardulli’s “clubhouse theory” does appear to pass the second test, because the actions which it specifies for its puppets are restricted to the actions already being performed by the judges, prosecutors, and defense attorneys in the court organization. These actions are already understandable to the judges, prosecutors, and defense attorneys themselves.

The third test would indicate whether or not the positivist understanding is confirmed, based on controlled empirical testing. The major challenge confronting such traditional, positivist testing is that the “clubhouse” theory (like scientific theories in general) posits the existence of entities which are not directly observable. In other words, the “clubhouse” theory as a whole is not directly verifiable. Specifically, the unobservable entities in the “clubhouse” theory are power, dispositional strategy, clubhouse norms, and shared interests, as well as the dynamics by which these unobservable entities are theorized to interact. Given that the “clubhouse” theory refers extensively to such unobservable entities, how then might Nardulli’s positivist understanding be confirmed or disconfirmed?

In positing the existence of unobservable entities, Nardulli finds himself in the same position as the natural scientist. As this paper has already explained, natural scientists regularly posit the existence of unobservable entities, such as protons, electrons, photons, black holes, and evolution. Therefore, in his effort to confirm or disconfirm the “clubhouse” theory, Nardulli may avail himself of the same procedures

as the one used by natural scientists, namely, the procedures of hypothetico-deductive logic.

To recapitulate, the main idea in hypothetico-deductive logic is that unobservable entities have consequences which are observable, even though the entities themselves are not. These observational consequences are more commonly called the predictions or hypotheses that follow from a theory. Therefore, in order to compare the “clubhouse” theory with the “legal man” theory, Nardulli draws corresponding predictions (pertaining to publicly observable behaviors) from the two theories so that their respective explanatory powers may be evaluated.

Observable aspects of the behavior of the court organization are its caseload, the frequency or probability of a guilty plea decision, the length of sentence in guilty plea cases, and the frequency or probability of the decision to pursue a case to trial (rather than to plea bargain). These aspects are not only observable, but even measurable.

Three observational consequences (“predictions”) that follow deductively from the “legal man” theory are “a negative relationship between caseloads and sentences in guilty plea cases and between caseloads and the decision to pursue a case to trial” and “[a] positive relationship . . . between caseloads and guilty plea cases” (1979, p. 94). The reasoning behind the three observational consequences is that, as caseload pressures increase, the judge, prosecutor, and defense attorney (all as “legal men”) would experience increasing difficulties in handling cases according to the formal requirements of due process and would, therefore, (1) entertain shorter sentences in guilty plea cases, (2) decide to pursue cases to trial less often, and (3) settle cases through guilty pleas more often. Conversely, as caseload pressures decrease, these “legal men” would reduce their reliance on these “dysfunctional” procedures and resume their utilization of due process procedures instead.

In contrast, Nardulli’s “clubhouse” theory maintains that there is no relationship between caseload and any of the other factors. Specifically, the “clubhouse” theory allows for the derivation of the following three null hypotheses: no relationship between caseloads and sentences in guilty plea cases; no relationship between caseloads and the decision to pursue a case to trial; and no relationship between caseloads and guilty plea cases. The reasoning here is that, motivated and constrained by the informal clubhouse rules and culture, the “clubhouse men” would process cases in the same manner, regardless of the caseload.

To test the competing predictions, Nardulli conducts a statistical experiment that uses data describing the Chicago courts in 1972–73. “To analyze the effect of variations in caseload pressures, while controlling for other important factors that are not relevant for the purposes of this analysis, multiple regression analysis was used” (1979, p. 94). In running six multiple regressions, Nardulli finds no statistically significant explanatory power for either caseload variable.<sup>5</sup> Indeed, the coefficients for the independent variables are all practically zero. The observation (through controlled statistical testing) of no relationship disconfirms the “legal man” theory while simultaneously confirming the “clubhouse” theory.

The two competing theories also predict another set of observational consequences for the situation of excess capacity (low caseload pressures) in the court organization.

<sup>5</sup>In three of the regressions, the respective dependent variables are the guilty plea decision (0 = no guilty plea, 1 = guilty plea), the sentence in the guilty plea case (in months), and the decision to pursue the case to trial (0 = dismissal, 1 = trial), while the independent variable whose coefficient is being tested for significance is “judge caseload” (“the number of cases on a given judge’s docket in each of the twenty-four months included in the sample” [1979, p. 94]). The remaining three regressions use the same respective dependent variables, but the independent variable whose coefficient is being tested for significance is “system caseload” (“the total number of cases pending in the entire criminal trial court system in each of the twenty-four months under consideration” [p. 94]).

The “legal man” theory predicts a resumption of the procedures of due process (e.g., fewer guilty pleas, more decisions to pursue a case to trial). The “clubhouse” theory does not predict a resumption of due process procedures, but predicts that the same “clubhouse” procedures would be used as during periods of high caseload pressures. To test the two predictions, Nardulli runs a multiple regression using data for the situation of excess capacity. The dependent variable is the length of sentence in a trial case, and the independent variables include “resistance indicators [which are] whether or not the defendant demanded a jury trial, the number of legal motions his attorney raised, and evidence of stalling tactics” (1979, p. 100). In the due process perspective of “legal man,” there is no relationship between these independent variables and the length of sentence, where excess capacity exists. In contrast, in the “clubhouse” perspective of “clubhouse man,” these relationships would persist even if caseload pressures disappeared, since the same “clubhouse” norms would still exist; therefore, defendants (and defense attorneys) refusing to cooperate would be socially sanctioned in the form of longer sentences. Nardulli writes: “Controlling for offense seriousness, each of these variables was strongly and positively related to sentence in trial cases. The regression equation explained seventy-three percent of the variance in sentence” (p. 100). In other words, “clubhouse” behaviors are manifested even during periods of excess capacity. Again, an observation, made through controlled statistical testing, disconfirms the “legal man” theory and confirms the “clubhouse” theory.

In general, the confirmation or disconfirmation of a positivist understanding, through controlled empirical testing of predictions about publicly observable behaviors, also serves as an indicator of the validity of the interpretive understanding on which it is based. In this instance, the confirmation of the “clubhouse” theory provides support for the validity of “clubhouse man” interpretation.<sup>6</sup>

In Nardulli’s work, we therefore recognize an exemplar for the integrated framework being proposed. Nardulli’s work illustrates each of the three levels of understanding, as well as the relationships existing among them. His work also demonstrates how the interpretive understanding and the positivist understanding can be mutually supportive steps in organizational research, where an improvement in one may initiate an improvement in the other.

Finally, Nardulli’s work also demonstrates how the integrated framework respects the integrity of both the interpretive approach and the positivist approach. Nardulli’s interpretive understanding is true to the spirit of the interpretive approach. His interpretive understanding accounts for the fact that people, unlike atoms, molecules, and electrons, create and attach their own meanings to the world around them, and that it is the job of the observing organizational researcher to read or interpret this subjective understanding. In this instance, it is what the Chicago criminal courts mean to the judges, prosecutors, and defense attorneys whom Nardulli observes. In developing his interpretive understanding of the court organization as a clubhouse, Nardulli employs methods that have no counterparts among, and are even foreign to, the methods of natural science. Indeed, Nardulli’s interpretive understanding could even be improved by more systematic application of phenomenological, ethnographic, or hermeneutical methods.

Nardulli’s positivist understanding is true to the spirit of the positivist approach. His “clubhouse” theory fits the strict behaviorist, natural-science model of social-science research. It is not only statable in formal propositions, but can even take the form of mathematical regression equations. Moreover, it satisfies the four require-

<sup>6</sup>This constitutes the second of two tests that the interpretive understanding may undergo. The first test was discussed in the text accompanying footnote 4.

ments that pertain to all scientific explanations. Its hypotheses are falsifiable. Its mathematical form makes its logical consistency verifiable. Its explanatory power exceeds that of its rival theory (the “legal man” theory). And it has survived several attempts directed at its disconfirmation through controlled empirical testing.

## 5. Conclusion

Three additional points are worthy of some emphasis. The first point is that this paper makes no claim that the proposed framework is the best one or the only one that can be employed for organizational research. However, the proposed framework provides a demonstration of the feasibility of integrating two approaches often believed to be opposed and incompatible when performing organizational research. The combined framework fully accounts for an additional, critical feature of social reality that distinguishes it from the physical subject matter of the natural sciences—namely, the subjective understanding—while retaining all the rigors of the natural-science model of traditional positivism.

The second point is that this paper does not advocate that a given organizational study must pursue the interpretive approach and the positivist approach with equal emphasis, as Nardulli does. Rather, this paper is simply making the point that the two different approaches are mutually supportive, not mutually exclusive. Nardulli’s exemplar shows that this mutual support is achievable within a single study. At the same time, there is no reason that the two approaches are precluded from being mutually supportive across different studies, whether conducted by the same or different researchers. One researcher in one study, for example, might do an ethnography of systems analysts and end-users. Based on these results, another researcher in another study might formulate a formal, general theory that explains, for example, end-user resistance to systems analysis. This researcher could then test the theory, whether through a rigorous statistical model (as Nardulli does) or some other means of controlled empirical testing (such as a field experiment or a laboratory simulation). Next, the application of the theory to the empirical circumstances (the “initial conditions”) of a new organizational setting, whether by the same or a different researcher in yet another study, would lead to new predictions and, hence, to new opportunities for the theory’s refutation. Such a refutation, if encountered, would cast doubt on the ethnography on which the theory was originally based. This would call for a fresh ethnography—a fresh reading or interpretation of the subjective understanding held by the systems analysts and end-users—in the new setting. Based on the new ethnography, the theory might then be refined in order to explain end-user resistance in the new setting, while still explaining end-user resistance in the old settings in which it had not been refuted. Through this manner of successive testing and refinement, a theory generalizable across different organizational settings could emerge.

The third point is that one of the goals of this paper has been to open up the possibility for additional (and more daring) integrated frameworks to be developed and advocated. The framework proposed in this paper is presented only as one example of an integrated framework. Variations and extensions are certainly possible. One important extension, to be mentioned briefly here, is a way of operationalizing the second test of the positivist understanding. This is the test in which the organizational researcher makes sure that the actions, theorized by the positivist understanding through its “puppets,” would be understandable to the observed human subjects themselves, in terms of their own subjective understanding. This test could be operationalized with the assistance of traditional survey research, in which the responses of the human subjects themselves would provide the basis for the organiza-

tional researcher's assessment as to whether or not the actions, theorized in the positivist understanding, are "subjectively understandable." Such an extension would be in keeping with the collaborative spirit of the proposed integrated framework, since survey research is a traditional, positivist method which, in this instance, would be utilized to examine and to provide documentation of the subjective understanding.

To recapitulate, the framework proposed in this paper for integrating the positivist and interpretive approaches consists of three levels of understanding. They are:

(1) *The subjective understanding*, which consists of the everyday meanings and everyday common sense with which the observed human subjects see themselves and the organizational world around them,

(2) *The interpretive understanding*, which consists of the organizational researcher's reading or interpretation of the subjective understanding, developed with the help of such methods as those of phenomenological sociology, hermeneutics, ethnography, and participant-observation, and

(3) *The positivist understanding*, which consists of theoretical propositions, manipulated according to

(a) the rules of formal logic

(b) the rules of hypothetico-deductive logic

So that the resulting theory satisfies the requirements of

(i) falsifiability

(ii) logical consistency

(iii) relative explanatory power

(iv) survival.

In each iteration through the cyclical relationships existing among the three levels of understanding, the organizational researcher may, with justification and without contradiction, utilize a range of methods that are objective and subjective, nomothetic and idiographic, quantitative and qualitative, outsider and insider, and etic and emic. This paper therefore does acknowledge the "widening gap between the two major orientations to organizational research" (Morey and Luthans, cited above), but reframes this gap as a *diversity* in methods whose effect is a mutually supportive collaboration, rather than a widening separation, between the positivist and interpretive approaches.

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