Industrial Relations: A Paradigmatic Analysis

Stanley Young

After noting some of the differences between paradigmatic and normal research, the author suggests, as has occurred with other disciplines, the need for industrial relations paradigmatic research.

Thomas Kuhn has observed that disciplinary development requires two kinds of research activity, normal and extraordinary (paradigmatic). Although this observation appears to be historically valid, systematic and reasonably rigorous paradigmatic research is a relatively recent development in the social sciences. In the economic discipline there appears little agreement as to the number, content or validity of paradigms. In the social psychological literature, for the past five years there has been an ongoing discussion as to whether social psychological behavior is best portrayed in terms of historical or positivistic paradigms. Paradigmatic analysis is also ongoing in sociology, psychology, anthropology and political science.

* YOUNG, Stanley, Professor, Department of Management, University of Massachusetts, Amherst.

** The author is indebted to Mark Reichenbacher for research assistance performed in this analysis and Professor Sol Barkin for his comments.

2 GORDON, David, Theories of Poverty and Underemployment, Boston, Lexington Books, 1974, p. 17.
This analysis will note some of the differences between paradigmatic and normal research. The characteristics of paradigms will be briefly reviewed and the significance of paradigmatic research will be discussed. Two paradigms, humanistic and positivistic, will be presented and applied to a selected number of normal industrial relations research studies to demonstrate the relationship between normal and paradigmatic research. The purpose of this analysis is to suggest as has occurred with other disciplines, the need for industrial relations paradigmatic research. Because the industrial relations discipline appears to be multiparadigmatic, such research is critical if a valid and realistic view of industrial relations is to be achieved and improvements in industrial relations systems are to occur.

PARADIGMS

Kuhn has provided a number of interpretations to the construct, paradigm; however, for the purpose of this analysis the following will be utilized. A paradigm consists of a set of initial perceptual assumptions (a set of cognates) as to what is the nature of the fundamental entities of the social world with which the discipline is concerned. It further involves how these entities interact with each other, what questions can be legitimately asked about such entities and what techniques or methodology can be employed to seek answers to these questions. Such a belief structure is typically shared among members of the discipline who would constitute a paradigmatic community.

There is no dispute as to the existence of paradigms. The psychological necessity of having a perceptual, cognitive map in order to understand and interpret the external world requires no detailed explanation.

A set of initial perceptual assumptions are necessary in order to conduct research. The researcher does not approach his research environment with a blank mind and merely record physical, sensory data.

Given the objective of doing research, the appropriate responses given a particular paradigm would appear as in Figure I.

---

9 KUHN, Thomas, op. cit., pp. 4-5.
In order to demonstrate the characteristics of paradigms two academic belief systems currently utilized in industrial relations research will be cited. (There are additional belief systems, but two should be sufficient for this analysis.) A comparison will be made between what is usually referred to as the positivistic and the humanistic belief premises concerning the social world for illustrative purposes. Both of these paradigms will be treated in ideal Weberian terms and no attempt will be made to explore the intellectual history or various interpretations of these paradigms. The positivistic position is usually identified with Comte or the Vienna Circle of the Post First World War I. The humanistic position derives primarily from cultural anthropology and legal theory.

The extent to which any given researcher or community of scholars appear to believe and conform to either of these two ideal types, as shall be noted, is problematic.

TABLE 1
Two Paradigms

<table>
<thead>
<tr>
<th>Humanistic</th>
<th>Positivistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Man-Made</td>
<td>1. Natural</td>
</tr>
<tr>
<td>2. Ideational/Symbolic</td>
<td>2. Materiality</td>
</tr>
<tr>
<td>3. Purposeful/Normative</td>
<td>3. Purposeless</td>
</tr>
<tr>
<td>Coherent/Rational</td>
<td></td>
</tr>
<tr>
<td>5. Learned/Non-Deterministic</td>
<td>5. Natural Forces/Deterministic</td>
</tr>
<tr>
<td>6. Changes on Basis of Historical</td>
<td>6. Changes on the Basis of Natural</td>
</tr>
<tr>
<td>Developments/Non-Deterministic</td>
<td>Forces</td>
</tr>
</tbody>
</table>

The difference between these two academic belief systems relates to their initial assumption as to the nature of the properties of the social world and the interrelationship of these properties. Positivists believe that those properties which they investigate are natural. Therefore, these properties can be analyzed and understood in a manner similar to that practiced in the biological or physical sciences. The humanists believe that the properties of the social world are man-made.

The term "humanistic" as herein utilized is defined traditionally as that which is humanly made or constructed, i.e., humanistic.

The forms of analysis required then are similar to those found in the humanities, law, or history, i.e., the evolution of human effort.

The positivists believe the basic properties of behavior have a natural, material origin (genetic or physical); humanists believe the origin is ideational, symbolic or informational. Positivists assume in some ultimate sense that such systems are purposeless or basically no different than any other natural system. In nature there are no objective human values. Positivists reject teleological explanations, or the view that social systems adjust or evolve toward some higher or utopian human purpose. The humanists believe that all social systems are basically purposeful and normative; that is deliberately constructed to achieve certain human ends.

Positivists believe there exists a natural social order. Humanists believe that while there is an order to social behavior, this order is the consequence of human effort and rationality. Man is able to construct coherent, functional, stable, rational human systems and act in accordance with these constructions. The positivists believe the stability of such order can be attributed to natural forces (physiological, physical, psychological, economic, and social). Such a social system can thus be understood to be deterministic in the same sense that physical or organic systems are.

Humanists believe industrial relations behavior is guided by, or is the consequence of, a body of social knowledge which can be categorized into a set of rules, such as: laws, contracts, norms, mores, customs, traditions, ethics, practices, roles, policies, procedures, decision guides, conventions, standards, methods, or man-made shared understandings or a web of rules of how we are to act or interact with each other. In general rules are a set of instructions which provide that under certain identifiable circumstances, individual(s) are to respond in a particular fashion, if he/they expect to achieve a certain result. Humanists believe stability derives not only from the ability to create rules, but also to act in conformity to such rules, which may be maintained over long periods of time. Positivists attribute social change to changes in underlying natural forces; social, economic, and so forth. Humanists attribute change to historical developments, specifically the creation and use of new social knowledge, or the development of new rules or rule-making systems which are non-deterministic in any natural science sense.

Given these initial belief premises, two alternative methodologies derive. The positivists adopt a method of investigation similar to that found
in the natural sciences. The research sequence would initiate with a specific hypothesis which usually suggests that some set of events, characteristics, or independent variables \( x_1, x_2, \ldots, x_n \), affect \( y \), the dependent variable. All of the variables are to be observable, precisely defined and independent of each other, at least in operational terms. As a consequence of empirical investigation of the hypothesis, if one can establish that a significant statistical relationship exists then to that extent one can infer that the behavior of the dependent variable has been explained. Typically the researcher is aware that correlation does not necessarily imply causality and will frequently employ such terms that the independent variables 'force', 'exert pressure on', 'influence', 'stem from', 'assures' or 'produces' a particular consequence.

Humanistic research, on the other hand, is concerned with an attempt to understand behavior in terms of the content, purpose and meaning of rule-determined behavior from the point of view of the actors themselves. Such behavior is considered to be a human construction, and in large measure, historically derived. Observed behavior has a historical origin or cause, and the analyst has to ascertain when and why a particular rule was developed. What were the human reasons for its creation? This form of analysis on the part of anthropologists is referred to as ethnological.

While many rules governing industrial relations behavior fall outside the legal category, i.e. plant practice or company policy, nevertheless, the legal discipline perhaps more than any other has concerned itself with the analysis of rule-determined behavior. As to the employment relationship, legal research might investigate the following rule-related issues. What is the form and content of the rule, labor law, contract company policy, or practice? What are the circumstances of its application? What are the actors understanding of the rule (intent) and the rationale of the rule? Why was the rule created? What are the expected and actual consequences of the rule? What is the extent to which actors conform to the rule; and what are the penalties for rule violation? What is the history of the evolution of specific rules, i.e. court precedents, legislative history, changes in contract or practice? If the legal analyst can capture the human meaning and purpose of the actors as manifested in the history of their rule-making and rule-following behavior, a complete explanation would be delineated.

From an applied research point of view, assuming one wanted to improve the performance of the industrial relations system at the level of the firm, market place or nation, these two paradigms will provide two different strategies. Positivists believe it is possible to scientifically control human behavior and would say that personnel problems require a technical solution in the form of new social technologies. One approach is to attempt to optimize the dependent variable, for example, worker productivity, by ad-
justing the values of the independent variables. Another approach is through research and development. It may be possible to develop new techniques of employee selection, motivation, bargaining tactics, and so forth. On the other hand, humanists maintain that improvements will occur via social innovation, or through the invention of new rule-making systems or new rules that are voluntarily accepted by the parties involved, i.e. Scanlon Plan or Co-determination.

The two forementioned belief systems generally fit what Kuhn refers to as a paradigm. They constitute a set of initial perceptions and assumptions as to the nature of social reality. Both have been applied to the structuring, understanding and interpreting of the social world. In this sense, all academic belief systems constitute self-confirming systems. At the descriptive level, whether observed behavior is the consequence of natural or man-made causes in the form of law, custom or tradition, is not immediately apparent. Both man-made law and natural law will produce human behavior that is objective, observable, and recurrent and will provide statistically significant results. These two paradigms are mutually exclusive and represent alternative and competing descriptive views of the social world.

NORMAL AND PARADIGMATIC RESEARCH

What are some of the differences between performing paradigmatic and normal research? Paradigmatic and normal research have different objectives, environments, methods of analysis and standards of evaluation. When normal research is performed, the fundamental properties of the environment and their general interactions are assumed to be established and valid. The researcher treats the paradigm in an axiomatic fashion for an explanation that has already been established and requires no further analysis. The normal research product is the articulation of those phenomena which the paradigm supplies\textsuperscript{12}. Paradigms offer a general framework and only a partial or incomplete explanation of the environment. They lack specificity. They do not provide explanations as to the interaction of specific environmental events.

The objective of normal descriptive research is to complete the explanation and provide this precise information as to why certain environmental events occur. For example, normal, positivistic research assumes at the outset that the social world consists of a number of natural causal relationships. What remains unanswered is what specific events cause what specific outcomes. If one is successful, an explanation or theory would have resulted.

\textsuperscript{12} KUHN, Thomas, \textit{op. cit.}, p. 24.
Normal research then is the product of the paradigm and the external environment to which it is applied where $R$ is published normal research, $E$ is the industrial relations environment i.e. employer, employee behavior, and $P$ is the paradigm. Normal research can be viewed as follows:

$$
R_1 = E_1 + P \\
R_2 = E_2 + P \\
\vdots \\
R_n = E_n + P
$$

$E_1$, $E_2$, ..., $E_n$ would constitute different segments of the industrial relations environment. P-P the same paradigm is utilized and in $R_1$, $R_2$, ..., $R_n$ one has the articulation of different segments of the industrial relations environment on the basis of the same paradigm.

Paradigmatic research, on the other hand, has as its objective the attempt to ascertain the validity of the paradigms themselves. The researcher does not accept the paradigm as given or established. An initial step would be to ascertain the number and conceptual content of the paradigms currently utilized in the industrial relations discipline. The following approaches or frameworks have been identified in the literature: systems, social action, Marxists, pluralistic, institutional and structuralists. One difficulty is whether approaches can be considered paradigms or manifestations of paradigms. What is of significance is the elucidation of the intellectual content of the underlying assumptions of the conceptual structure being utilized.

Once paradigms are identified, one would analyse their conceptual similarities and differences, their intellectual histories, the epistemology and methodology of alternative paradigms. For example if one analyzed the systems approach used by Dunlop in paradigmatic terms, it appears as if Dunlop views its basic entities as ideational, a rule-making/following system, held together by ideology or another set of ideas. The industrial relations system appears to be a human construct. Yet Dunlop also views the system as being a Parsonian, self-regulating one; that is, a biological analogue is being provided. He does not draw a clear distinction between physical, biological and man-made parts of his analysis in paradigmatic terms.

---

If paradigms make certain assumptions as to the nature of reality, one has to ask to what extent have such assertions been verified? What proof has been provided which establishes that its assumptions are in fact isomorphic with the reality being asserted?

Frequently paradigmatic research problems are generated because normal research produced anomalies over a range of investigations when correct analytical techniques are employed. Given competing paradigms, the selection of the paradigm which is most valid depends upon the one that is able to resolve such anomalies. As to paradigmatic research problems, in terms of the research literature, one would be sensitive to research anomalies, expectations not met, theoretical ambiguities and those areas of the external environment ignored or unexplained.

Kenneth Gergen has demonstrated the conduct of paradigmatic research in social psychology. He noted that the positivistic paradigm pos- tulates that the social world is natural. Thus it follows that once causal relationships are established they should not only be permanent, but reproducible. He observed that "the velocity of falling bodies, or compounding of chemical elements for example, are highly stable events across time. They are events that can be recreated in any laboratory, 50 years ago, or 100 years from now."17

Based on a review of normal research results in social psychological literature, Gergen found that frequently while such research related to the same phenomena, similar results were not forthcoming. How is one to explain such anomalies? He noted, "Between 1939 and 1958 some ten studies yielded support for the proposition that, when exposed to information and controversial topics, people more easily learned and less rapidly forgot information that agreed with their existing attitude than that which disagreed. However, after 1963, almost all published studies failed to support the proposition. A similar example of changing research results was a recent reversal of the Hawthorne effect."18

Gergen suggests that the appropriate paradigm for social psychology would be contemporary history. Social psychological behavior changes as a consequence of historical changes, which would account for and explain the anomalies he noted. If one follows his suggested paradigm, social psychological research would be confined largely to the explanation of psychological dimensions of changing cultural norms.

17 Ibid., p. 308.
It is possible at a given period of time that two or more paradigms may exist within a given discipline and then normal research would appear under these circumstances as follows:

\[
R = F(E + P) \\
R_1 = (E + P_1) \\
\ldots \\
R_N = (E + P_N)
\]

Reported normal research \( R \) would vary given alternative paradigms wherein the reality being investigated is assumed as constant. In such a situation, variability or normal research reflects alternative views of reality rather than different realities.

At the university level, particularly in the social sciences, one typically finds a community of scholars who share and apply the same paradigm that may underly one or more disciplines. Given the human world, disciplines represent a rough division of labor and specialize in and analyse segments and subsegments of that world. Given the existence of two or more paradigms, scholars not only belong to a disciplinary community in terms of that segment of the social world to be investigated, but also to a paradigmatic community in terms of shared outlook as to the manner in which that world is to be interpreted. Hence, in terms of conceptual organizations, the university can be viewed as having a matrix pattern such as:

\[
\begin{array}{cccc}
P_1 & P_2 & P_3 & P_4 \\
\end{array}
\]

- Economics
- Sociology
- Psychology
- Industrial Relations
- Law
- Business
- Education

**SIGNIFICANCE OF PARADIGMATIC RESEARCH**

If one grants descriptively that the purpose of research is to describe, explain and predict industrial relations behavior, then the validity of such research is the extent to which it is isomorphic with the reality it purports to
represent. The purpose of paradigmatic research is to assure that the paradigm truly represents the external reality it assumes.

Another reason to thoroughly explain academic belief structures is to provide a guide or interpretation with respect to normal research results. Full comprehension or normal research requires an understanding of its belief structures if one is to discern the total research product. Belief premises often remain implicitly imputed, largely hidden and frequently very ambiguous. It is unreasonable to expect the researcher, as a preliminary to any normal research study, to provide an extensive review of the belief premises which he assumes are shared by the reader. Yet, the extent of sharing and understanding is problematic. A clear exposition of belief structures would enable the reader to identify and categorize the analyst’s point of view and facilitate if not agreement, at least understanding.

Analogies, metaphors, similes and examples are continually supplied by the researcher that create images which are used to interpret results, construct theories and reach conclusions. Theory construction is a subjective mental process in which categories of thought and their relationship are structured partly in terms of acquired paradigms. The analyst’s subjective data derives from his belief premises, which in turn reflect his academic socialization and the discipline’s intellectual development. In the analysis of a normal research product one is not only reviewing some segment of the external world, but a particular view of that world simultaneously.

A third reason for specifically stating academic belief structures would be to raise the matter of changes in paradigms, or what Kuhn refers to as scientific revolutions. One might be able to recognize belief transformations that are occurring in a discipline. Changes in belief premises are affected by a variety of factors not all of which can be attributed to anomalous research results, but may be personal and institutional. When two or more paradigms exist, there are contending views of reality. For example, David Gordon performed such an analysis concerning poverty and unemployment. Paradigmatic controversy all too frequently becomes an expression of academic beliefs which tends to be a didactic process. Paradigmatic communities are characterized by a common language and conceptual framework. And until the meaning, intent and purpose of the language are analyzed, one has only a partial view of its vision of social reality. Prior to any discussion as to which view is more isomorphic with reality, assumptions as to that reality have to be elucidated, which in turn will facilitate resolution. Moreover, when there exists within a discipline (as appears to be the case in

the industrial relations field), two or more paradigmatic communities, each of which purports to provide valid but alternative descriptions of reality, then paradigmatic research is necessary to resolve the differences.

Another reason to be sensitive to the possibilities of paradigmatic research is that paradigms not only guide academic research but may guide the behavior of industrial relations practitioners as well. Assuming a researcher could adopt a paradigmatic neutral stance, a complete explanation of the parties' relationship would include a description of the paradigm underlying that relationship. Therefore, it appears that frequently management adopts a positivistic model and maintains that only those who are scientifically trained particularly in human resource management can enhance the interests of the employee via appropriate techniques of selection, training and motivation. In a similar view, it is not unusual to find that management, union officials and third parties have a positivistic attitude that the negotiation and administration of a contract is a very technical task better left to professionals.

On the other hand, those who embrace a humanistic view, see industrial relations in very human terms with all the limits and imperfections of a rule-making system. When the parties adopt different paradigms, this may be a source of conflict, that may reflect not only different interests, but social realities. The parties are subjectively living in different social worlds.

POTENTIALITIES AS TO PARADIGMATIC RESEARCH

In order to demonstrate the potentialities and necessity for paradigmatic research, a number of normal studies were reviewed: 1) to attempt to identify their paradigms, 2) to illustrate the relationship between paradigms and normal research, and 3) to raise possible paradigmatic research questions that might be investigated.

A set of questions was derived from the characteristics of the two paradigms, positivistic and humanistic and applied to a number of published articles. Articles were selected which appeared to be reports of normal research efforts, i.e. direct studies of specific behavior. The method of analysis was taxonomic. Table 2 was derived from the two paradigms, positivistic and humanistic. Their characteristics are listed on the horizontal and the twenty-one (21) articles are listed and numbered at the top of Table 2. These articles were then reviewed to ascertain if one could reasonably clas-

20 See bibliography at the end of the article.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Duane E. Leigh</td>
<td></td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>(x)</td>
<td>(x)</td>
<td></td>
</tr>
<tr>
<td>2. Robert Evans, Jr.</td>
<td></td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>(x)</td>
<td>(x)</td>
<td></td>
</tr>
<tr>
<td>3. Charles A. Odewahn &amp; Allan D. Spritzer</td>
<td></td>
<td></td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>(x)</td>
<td>(x)</td>
<td>(x)</td>
<td></td>
</tr>
<tr>
<td>4. Wallace Hendricks</td>
<td></td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>(x)</td>
<td>(x)</td>
<td></td>
</tr>
<tr>
<td>5. John M. Mattila &amp; J. Peter Mattila</td>
<td></td>
<td></td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>(x)</td>
<td>(x)</td>
<td></td>
</tr>
<tr>
<td>6. Hinton &amp; Barrow</td>
<td></td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>(x)</td>
<td>(x)</td>
<td></td>
</tr>
<tr>
<td>7. Manuel London</td>
<td></td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>(x)</td>
<td>(x)</td>
<td></td>
</tr>
<tr>
<td>8. Paul O. Sterman</td>
<td></td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>(x)</td>
<td>(x)</td>
<td></td>
</tr>
<tr>
<td>9. Kathryn M. Bartol &amp; Robert A. Bartol</td>
<td></td>
<td></td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>(x)</td>
<td>(x)</td>
<td></td>
</tr>
<tr>
<td>10. Josip Obradovic</td>
<td></td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>(x)</td>
<td>(x)</td>
<td></td>
</tr>
<tr>
<td>11. Elchanan Cohn &amp; Morgan V. Lewis</td>
<td></td>
<td></td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>(x)</td>
<td>(x)</td>
<td></td>
</tr>
<tr>
<td>12. Gary A. Moore</td>
<td></td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>(x)</td>
<td>(x)</td>
<td></td>
</tr>
<tr>
<td>13. David B. Lipski &amp; Henry S. Farber</td>
<td></td>
<td></td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>(x)</td>
<td>(x)</td>
<td></td>
</tr>
<tr>
<td>14. Myron Roomkin</td>
<td></td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>(x)</td>
<td>(x)</td>
<td></td>
</tr>
<tr>
<td>15. Douglas A. Smith</td>
<td></td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>(x)</td>
<td>(x)</td>
<td></td>
</tr>
<tr>
<td>16. Yulk, et al.</td>
<td></td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>(x)</td>
<td>(x)</td>
<td></td>
</tr>
<tr>
<td>17. Dyer, et al.</td>
<td></td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>(x)</td>
<td>(x)</td>
<td></td>
</tr>
<tr>
<td>18. M.M. Petty &amp; Robert H. Miles</td>
<td></td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>(x)</td>
<td>(x)</td>
<td></td>
</tr>
<tr>
<td>19. Abel Ekpo-Ufot</td>
<td></td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>(x)</td>
<td>(x)</td>
<td></td>
</tr>
<tr>
<td>20. Field &amp; Ridenhour</td>
<td></td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>(x)</td>
<td>(x)</td>
<td></td>
</tr>
<tr>
<td>21. Robert J. Hanagan</td>
<td></td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>(x)</td>
<td>(x)</td>
<td></td>
</tr>
</tbody>
</table>
sify the article as falling within either of the two paradigms. An "X" indicated the presence of a characteristic of the paradigm and the absence of an x means that the attribute did not appear to be present. An x in parenthesis (X) indicates that the attribute is present, but is qualified in some respect.

The pattern in the table demonstrates that the articles can be paradigmatically categorized, with a few exceptions. The article by Gary A. Moore, "The Effect of Collective Bargaining on Internal Salary Structures in the Public Schools", and numbered (12) on the chart is representative of the positivistic paradigm; as are the following articles by Duane Leigh, numbered one (1) on the chart; Wallace Hendricks (4); John Mattila and Peter Mattila (5); Hinton and Barrow (6); Manuel London (7); Paul Sternman (8); David Lipski and Henry Farber (13); Myron Roomkin (14); Douglas Smith (15); Yokl, et al. (10); Dyer, et al. (17); Detty and Miles (18); Abel, Ekptrot (19); and Field and Ridenhour (20). All appear to subscribe to the same paradigm and exhibit the same paradigmatic characteristics.

The Moore article will be briefly summarized in order to demonstrate the relationship between normal research and its underlying paradigm with the understanding that the other articles just named project the same underlying view of the external environment. Moore’s article, “The Effect of Collective Bargaining on Internal Salary Structure in the Public Schools”, is typical of how positivistic research is conducted and reported. Moore constructs a basic model “to explain variation in secondary-elementary salary differentials among 201 Nebraska school districts for 1970-71 and the equation takes the following form

\[ D = a + bB + cT_s + dT_e + eE_s + fE_e + gS + hM + u \]

where:

- \( D \) = average secondary-average elementary salary differential for a given school district
- \( B \) = the presence of collective bargaining in a given district
- \( T_s \) = training or education of secondary teachers in a given district
- \( T_e \) = training or education of elementary teachers in a given district
- \( E_s \) = teaching experience of secondary teachers in a given district
- \( E_e \) = teaching experience of elementary teachers in a given district
- \( S \) = the presence of sex discrimination in a given district
- \( M \) = the presence of monopsony power in a given district
- \( u \) = random error term

22 Ibid.
"Ordinary least squares multiple regression techniques were used..."
In estimating the effects of the variables, regression results were summarized and presented in a table for the reader. In his conclusion, Moore suggests that a causal relationship of his variables does exist:

"The basic regression model developed and employed in this paper provides evidence to support the major a priori hypothesis that collective bargaining for teachers has had a significant impact upon the salary structure of the typical school district, and especially upon the differentials between secondary and elementary teachers' salaries. Consequently, if a particular beneficiary of teacher bargaining exists, it appears to have been elementary teachers... Thus, in addition to the inter-school district salary level impact estimated in previous studies, it appears that some significant restructuring of intraschool district salary levels has resulted from collective bargaining."23

In terms of the conduct of normal positivistic research, there is little question as to the validity of Moore’s analysis in terms of the requirements of this paradigm. What is the relationship between Moore’s analysis and its underlying but unstated paradigmatic descriptive view of collective bargaining in Nebraska schools?

Moore seemed to view the fundamental properties of his variables as natural, or as if they were objective, permanent, universal and existing apart from actors (teachers) who are subject to the research. Although Moore utilized a representative sample of the Nebraska schools, it was understood that this sample represented a larger universe. Or, to the extent that the variables were present in other school districts, one would achieve the same results. The Nebraska schools were not viewed as being idiosyncratic. Moore seemed to assume a natural social order, in which the task of the researcher was to discover and establish certain specific relationships in this order, which he incorporated in his hypothesis. Theory developments are explanations of which specific phenomenon determine which phenomena.

Another dimension of this assumed natural order is that if the researcher is able to establish on the basis of investigation, a causal relationship, such a conclusion provides a permanent explanation. Presumably if Moore were successful, he would have explained the salary differential not only for the representative sample of 201 Nebraskan school districts, but for all school districts. And, assuming the analysis was valid, i.e. correctly conducted, the study would also explain future salary differentials given the same variables. It is not expected that if variables, are universal, objective and permanent that their interrelationship will be continually changing in a random or capricious manner.

The essential purpose of positivistic analyses is to establish causality between the variables or naturalistic, deterministic relationships are as-

23 Ibid., p. 362.
sumed at the outset. Thus the purpose of Moore’s analysis is to ascertain if the independent variables determine secondary-elementary salary differentials, the dependent variable, and to what extent. The manner in which this is accomplished is to construct a statistical model which constitutes a representation of the phenomena being investigated. If one can infer that the data meets certain statistical tests of significance, a causal relationship is usually assumed. While it is understood that correlation does not imply causality, usually the researcher will draw certain inferences as to the degree of causality. In this context, such investigation would not be different than that conducted in the life and physical sciences. Therefore although it is not conclusive, one can reasonably infer that excessive cigarette smoking is more likely to lead to lung cancer than if one did not smoke. Moore notes, “the basic regression model developed and employed in this paper provides evidence to support the major a priori hypothesis that collective bargaining for teachers has had significant impact upon the salary structure of the typical school district…”

Assuming that the above is a reasonable interpretation as to the paradigmatic premises of Moore’s analysis, if one considered that a normal research product constitutes some combination of normal and paradigmatic analysis, to what extent is the paradigm representative of collective bargaining reality and what paradigmatic questions might one raise that would require paradigmatic research? By way of example, in what sense if anyone can view such variables as teacher experience and training, discrimination, employer monopsony or power as objective, permanent and universal phenomenon? Are we to understand such variables as having similar empirical properties as the velocity of falling bodies or the compounding of chemical elements? The composition of chemical elements have certain distinct material properties. What are the empirical properties of Moore’s variables and how are their properties ascertained? Is their composition, material, ideational, or neither? What is the origin of a natural industrial relations order? If as noted, one is able to utilize a regression analysis and achieve statistically significant results, with natural and man-made behavior, how does one distinguish between the two?

One can also identify the characteristics of the humanistic paradigm in terms of its normal research. Consider “The Great Computer Bubble: Has It Burst?” by Robert Evans, Jr. (No. 2 on the chart) as an example. Evans examines computer assisted job placement systems in Japan and the United States with references to experiences in Sweden and England. He arrives at “an assessment” based on his observations of the successes and problems of each system and then suggests “an alternative approach” to computer-

---

assisted job placement systems which is based on his assessment of historical developments and a consideration of the intended goals of public policy. In his conclusion he does not claim that any one variable has influenced another variable, but he does say that there is a

"... misunderstanding of the nature of information flows in the labor market and confusion about information and screening... Improvements lie in a reorganization of employment office services so that the different components — information, screening, and manpower services — can be effectively presented without the negative interactions which have plagued employment services around the world for almost a century."^{25}

Evans has observed and analyzed the deficiencies in these systems and based on past experiences he encourages several specific policy changes to improve the system for more effective delivery of job placement services. What is the relationship between Evans' analysis and its underlying paradigm? He seems to assume at the outset, computer-assisted job placement is man-made. Such systems are ideational in the sense that some set of individuals on the basis of a conceptual scheme are able to devise them. The system Evans describes, is purposeful or normative. In terms of public policy, presumably public officials, legislators and administrators were attempting to create and implement a more functional, rational system of job placement. Based on a historical assessment, he finds the system is not meeting its intended aims. He then suggests specific policy changes that would improve the learning segment of the system in terms of the nature of information flow in the labor market and confusion about information screening. What paradigmatic questions might be raised concerning this view of reality that could lead to paradigmatic research? Why after a century, if job placement is a man-made system cannot rational men collectively develop an effective job placement system? Are there market and psychological forces at work that policy makers are either unaware of or are unable to control? Could these be natural? If man is the designer of job placement systems, are there any limits as to what he can design? What cautions, if any, have to be made in terms of predicting outcomes of man-made historical developments such as the success of future job placement systems?

In a few studies, it was difficult to infer which paradigm was being used because either the authors appeared to use an admixture of both or their premises appeared to be ambiguous. The study by Odewahn and Spritzer (3) would typify this situation. Odewahn and Spritzer have researched college administrators' attitudes toward faculty unionism and suggest a weak causal relationship that faculty enthusiasm for unionism is associated with geographical location of the institution, size of the institution, administra-

---

^{25} Ibid., p. 167.
tors' view of the legitimacy of faculty bargaining in higher education, and the administrators' first hand experience in dealing with labor organizations.

The authors also examined historical developments in the section "Faculty Role in Decision Making". Their respondents, faculty administrators, indicated to them that:

"... the success of unionism is less likely if faculty members are given a greater voice in institutional decisions... a minimal role for faculty in the decision-making process, through nonbargaining mechanisms, should result in greater support for labor organizations seeking to accomplish this objective."\(^{26}\)

The logical summation of these attitudes that the authors express is that "... the success of faculty union organizing efforts may be related to the extent of faculty participation in decision-making."

Are they implying the existence of a system that is based on socio/economic forces or are they observing historical developments and implying purposeful policy changes that can be brought about by man-made decisions for action? Their research cannot be categorized as clearly humanistic or positivistic because it contains some degree of each paradigm.

Other studies manifest this admixture of paradigms. Mattila and Mattila (5) and the Petty and Miles (18) studies are concerned with construction apprenticeship programs and social service organizations respectively. Cohn and Lewis (11) discuss experiences with the Concentrated Employment Program (CEP), and Flanagan (21) discusses the effectiveness of the Office of Federal Contract Compliance (FCC). While the programs and institutions appear to be man-made, these authors base their explanations on a deterministic model. One article by London (7) and still another by Lipski and Farber (13) exhibit characteristics of a positivistic belief system; but the authors also include policy suggestions based on historical observations.

**CONCLUSIONS**

If the purpose of descriptive research is the attempt to develop a complete and valid explanation of industrial relations behavior, this analysis suggests that both types of research, normal and paradigmatic, are necessary. If as the current industrial relations literature suggests, it is still uncertain or ambiguous as to whether industrial relations behavior is man-made or natural; its variables are universal, objective and permanent or historical, and idiosyncratic; ideational or material; or that the industrial relations sys-

\(^{26}\) ODEWAN and SPRITZER, op. cit., p. 213.
tem is deterministic or non-deterministic; purposeful or non-purposeful; at best one has a very limited explanation of industrial relations behavior. If by explanation one means a valid explanation of why certain industrial relation events occur as they do, the resolution of such issues would appear to be fundamental. There is a considerable difference between explaining industrial relations behavior as the consequence of random historical events, or man's attempt to arrange his employment relations; or whether such behavior is to be understood as the consequence of natural, objective, permanent, psychological, economic forces, factors, or variables.

Normal research is of limited utility in resolving such issues. This is the purpose of paradigmatic research, apart from the paradigmatic community to which one may belong, or what one's paradigmatic assumptions may be. If the purpose of research is to empirically investigate the nature of industrial relations reality, one cannot assume that one's own subjective perceptions as to that reality has any validity. Such paradigmatic assumptions have to be empirically validated. This is the function of paradigmatic research.

BIBLIOGRAPHY

Industrial Relations, A Journal of Economy and Society, Institute of Industrial Relations, University of California, Berkeley, California.
LEIGH, Duane E., "Job Experience and Earnings Among Middle-Aged Men", 130-146.
Volume 15, No. 1, February 1976.
Volume 14, No. 1, February 1975.
OBRADOVIC, Josip, "Workers' Participation: Who Participate?", 32-44.

Volume 28, No. 4, July 1975.
Volume 29, No. 3, April 1976.
Les relations professionnelles: une analyse paradigmaticque

Thomas Kuhn a noté que le développement d’une discipline ou d’une science exige deux genres d’activités de recherche: l’activité normale et l’activité extraordinaire ou paradigmaticque. Bien que cette observation semble valable au point de vue historique, la recherche paradigmaticque rigoureuse, systématique et raisonnée est un développement relativement récent dans le champ des sciences sociales.

Cet article présente l’ensemble des caractéristiques des paradigmes et en fournit deux exemples. On y compare la recherche normale et la recherche paradigmaticque et on mettra en relief les traits particuliers de la recherche paradigmaticque. Étant donné que la discipline des relations professionnelles semble être multiparadigmatique, cette forme de recherche est de toute première importance si on veut en arriver à une conception valide et réaliste des comportements en matière de relations de travail.

Le paradigme

Kuhn a noté qu’un paradigme est un ensemble de postulats intuitifs (un ensemble de propositions apparentées) se rapportant à la nature des entités fondamentales
de l'univers social qui intéresse cette discipline. Comment ces entités réagissent-elles les unes sur les autres, quelles questions peuvent être soulevées à propos de ces entités, quelles techniques ou quelle méthodologie peuvent être utilisées pour découvrir les réponses à ces questions? Pour être en mesure d'entreprendre une recherche, il faut disposer d'un ensemble de postulats intuitifs au sujet de la nature du milieu dans lequel l'individu se trouve.

Pour démontrer les caractéristiques des paradigmes, on considère ici deux systèmes de pensée ou de raisonnement que les chercheurs utilisent couramment dans la poursuite normale de la recherche en matière de relations de travail: l'un qui est humaniste et l'autre qui est positiviste. (Naturellement, il peut y avoir d'autres paradigmes.

Deux paradigmes

<table>
<thead>
<tr>
<th>Humaniste</th>
<th>Positiviste</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Volontaire</td>
<td>1. Naturel</td>
</tr>
<tr>
<td>2. symbolique</td>
<td>2. «matérialité»</td>
</tr>
<tr>
<td>3. finalité</td>
<td>3. sans finalité</td>
</tr>
<tr>
<td>4. ordre humain</td>
<td>4. ordre naturel</td>
</tr>
<tr>
<td>5. appris</td>
<td>5. déterminé</td>
</tr>
<tr>
<td>6. changement dû au développement historique</td>
<td>6. changement dû aux forces naturelles</td>
</tr>
</tbody>
</table>

La différence entre ces deux systèmes de pensée ou de raisonnement oblige à se rapporter aux postulats préalables de l'un et de l'autre systèmes concernant la nature des propriétés du milieu social et de leurs interrelations. Les positivistes croient que les propriétés qu'ils observent sont naturelles, matérielles et qu'elles interagissent les unes sur les autres d'une manière déterministe. Par voie de conséquence, cet univers social peut être examiné et interprété de la même manière que l'univers des sciences physiques.

D'autre part, les humanistes estiment que les propriétés du milieu social sont symboliques, qu'elles sont l'œuvre de l'homme, c'est-à-dire humanistes. Ainsi, le comportement dans le domaine des relations de travail serait alors guidé par un corpus de connaissances sociales qui peuvent être classées dans un ensemble de règles, telles que les lois, les contrats et les normes. On peut dire qu'une règle est un ensemble de directives qui incitent, compte tenu des circonstances identifiables, les individus à réagir d'une façon donnée s'ils veulent obtenir un résultat désiré. La méthode d'analyse appropriée découle de l'anthropologie culturelle ou de la loi et de la coutume.

La recherche normale et paradigmatiche

La recherche normale est l'application des paradigmes au milieu ambiant extérieur exprimé sous forme d'un problème de recherche, soit la réalité — le paradigme — la recherche normale — les résultats de la recherche.

Les paradigmes offrent un encadrement général ainsi qu'une explication partielle et incomplète du milieu ambiant. Par exemple, même s'il est possible de pren-
La recherche paradigmatique vise à établir la véracité du paradigme lui-même. Une telle recherche est essentiellement analytique. L’analyse paradigmatique nécessite: 1) qu’on s’assure du contenu conceptuel du paradigme; 2) et qu’on invente et qu’on applique les tests empiriques capables de vérifier les postulats sur lesquels il se fonde.

Le but de la recherche paradigmatique est de s’assurer que le paradigme représente vraiment la réalité qu’il postule. Par la suite, l’examen des systèmes de raisonnement théorique sera un guide aux résultats normaux de la recherche. L’élaboration d’une théorie est un processus subjectif: les données subjectives de l’analyse découlent de prémisses personnelles qui reflètent sa socialisation au milieu académique et, subséquemment, le développement intellectuel de la discipline.

Enfin, lorsqu’on se trouve en présence de plusieurs communautés paradigmatiques, chacune tendant à donner une description valable mais divergente de la réalité, il est alors nécessaire d’entreprendre une recherche paradigmatique pour amenuiser ces différences. Comme la littérature courante dans le domaine des relations industrielles le laisse voir, tant qu’il y aura incertitude et ambiguïté quant à savoir si les comportements en cette matière sont naturels ou volontaires, si leurs variables sont objectives, universelles et permamentes ou historiques et idiosyncratiques, s’ils sont matériels ou symboliques, s’ils sont déterministes ou non-déterministes, s’ils sont finalistes ou non-finalistes, on a, au mieux, une explication très restreinte des comportements dans le domaine des relations professionnelles.