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Case-Oriented Comparative Methods

Often, comparativists seek to formulate historical (or, in Nagel's 1961 terminology, "genetic") explanations of specific historical outcomes or historically defined categories of empirical phenomena. Instances of such phenomena are intrinsically interesting to comparativists as cases, in part because they embody certain values (Weber 1949, 1975, 1977) but also because they are finite and enumerable. It is their particularity—the fact that they are instances of significant events or phenomena—that attracts the attention of the investigator. Sometimes, there is only one or two or a small handful of such instances.

Various case-oriented research strategies have emerged to accommodate this interest in specific cases and specific historical chronologies. Present-day followers of Weber, for example, employ a comparative strategy centered on extensive use of ideal types and other theoretical devices to guide the interpretation of empirical cases (Bonnell 1980; Ragin and Zaret 1983). Others use comparative materials to conduct "parallel demonstrations of theory" or to analyze causal mechanisms across sets of comparable cases (Skocpol and Somers 1980). Still others use "universalizing," "encompassing," or "variation-finding" strategies (Tilly 1984) to aid comprehension of diverse historical trajectories. Most investigators who use case-oriented strategies, however, are not self-consciously methodological; that is, they do not regard the case-oriented strategies they use as formal methodologies. Nevertheless, there is substantial agreement among comparativists concerning the essential features of the case-oriented approach.

The goals of case-oriented investigation often are both historically interpretive and causally analytic. Interpretive work, as defined in Chapter 1, attempts to account for significant historical outcomes or sets of comparable outcomes or processes by piecing evidence together in a manner sensitive to historical chronology and offering limited historical generalizations which are sensitive to context. Thus, comparativists who use case-oriented strategies often want to understand or interpret specific cases because of their intrinsic value. Most, but not all, case-oriented work is also causal-analytic. This companion goal is to produce limited generalizations concerning the causes of theoretically defined categories of empirical phenomena (such as the emergence of class-based political parties) common to a set of cases.

In *Social Origins of Dictatorship and Democracy*, for example, Barrington Moore interprets the process of polity modernization in seven major countries *and* pinpoints common historical features constituting three major paths to polity modernization. While Moore's purpose is both to interpret these cases and to pinpoint the historical origins of these different paths, the goal of causal generalization is given precedence over the goal of historical interpretation. In some investigations, however, the goal of interpretation takes precedence over the goal of causal analysis. For example, while case-oriented comparisons are very important in Bendix's work (1977, 1978), his primary goal is to interpret each case. He produces little in the way of empirical generalization because he emphasizes the particularity of each case as a representative of a distinct theoretical type. Thus, differences between the cases he selects overwhelm their similarities.

Many empirically oriented comparativists (such as Smelser 1976; Skocpol and Somers 1980) stress the basic, underlying similarities between case-oriented comparative work and other kinds of empirical social science. They emphasize the use of empirical data on cases to decipher important causal patterns and downplay the interpretive side of comparative work. The goal of causal generalization is emphasized to create a gulf between comparative social science and highly abstract, nonempirical work that traditionally has been called interpretive (that is, work which is concerned almost exclusively with problems of meaning). There is no necessary contradiction, however, between doing empirically based causal analysis and interpreting cases historically. Both goals (causal analysis and historical interpretation—as defined in this work) are important; having one does not entail a denial of the other.

Regardless of which goal may take precedence, the underlying logic of

case-oriented comparisons is roughly the same. Most discussions of case-oriented methods begin (and often end) with John Stuart Mill's presentation of canons of experimental inquiry in *A System of Logic: Ratiocinative and Inductive* (1843). Mill outlined several general research strategies for establishing empirical generalizations. His main goal was to establish a logical foundation for inductively oriented scientific investigation. Two of Mill's methods are of particular relevance to case-oriented investigations: the method of agreement and the indirect method of difference.

MILL'S METHOD OF AGREEMENT

The method of agreement is by far the simplest and the most straightforward of Mill's methods, but it is also generally regarded as an inferior technique that is likely to lead to faulty empirical generalizations. Simply stated, the method of agreement argues that if two or more instances of a phenomenon under investigation have only one of several possible causal circumstances in common, then the circumstance in which all the instances agree is the cause of the phenomenon of interest. The application of this method is straightforward: if an investigator wants to know the cause of a certain phenomenon, he or she should first identify instances of the phenomenon and then attempt to determine which circumstance invariably precedes its appearance. The circumstance that satisfies this requirement is the cause. Although Mill stated that researchers should look for a single causal condition in which all instances agree, he would probably allow for the possibility that this single circumstance might be a recurrent combination of conditions. All instances would have to agree in this single causal combination.

The method of agreement, especially in comparative social science, proceeds by elimination. Suppose, for example, that an investigator is interested in the causes of peasant revolts and gathers evidence on major revolts. Among the possible causes are land hunger (see Paige 1975), rapid commercialization of agriculture (see Wolf 1969; Moore 1966; Chirot and Ragin 1975), a strong middle peasantry (see Stinchcombe 1961; Wolf 1969), and peasant traditionalism (see Chirot and Ragin 1975; Moore 1966). Suppose further that all the possible causal circumstances exist in the first case the investigator examines. Which one is the cause? The method of agreement dictates that the researcher examine the other instances of peasant revolt in an effort to eliminate any of the four explanatory variables. For example, if

an instance of peasant revolt in a country or region lacking a strong middle peasantry could be found, then this factor could be eliminated as a possible explanation of peasant revolts. The search for cases lacking one of the other four conditions would continue until no other cause could be eliminated. The remaining cause (or set of causes) would be considered decisive because at this point the investigator could conclude that all cases of peasant revolt agree in only this precondition (or set of preconditions). If all cases agreed on all four causes, then the investigator would conclude that all four conditions are important.

The method of agreement is used extensively by both comparativists and noncomparativists. Comparativists often use it when they are concerned primarily with a single case. To support their interpretation of a causal sequence in a specific case they often cite secondary cases that agree with the first in displaying both the cause and the effect. Many noncomparativists also use the method of agreement. It bears a striking resemblance, for example, to the technique of analytic induction used by many qualitatively oriented microsociologists. Analytic induction is useful both for eliminating causes, as in the work of Lindesmith (1968), and for demonstrating cause, as in Cressey's (1953) work.

Essentially, the method of agreement is a search for patterns of invariance. All instances of a phenomenon are identified, and the investigator attempts to determine which of the possible causal variables is constant across all instances. Thus, a constant (say, peasant revolt) is explained with another constant (say, rapid commercialization of agriculture—if all cases agreed on only this cause). Mill believed that the main problem with this method is its inability to establish any necessary link between cause and effect. For example, the fact that all instances of peasant revolt also display rapid commercialization of agriculture does not guarantee that rapid commercialization causes peasant revolts. Both rapid commercialization and peasant revolts may result from some unidentified third factor (say, a change in the political balance between the state and the landed aristocracy resulting from the increased power of large landowners) and the observed relationship may be spurious. Mill reasoned that the only way to be certain that a cause–effect sequence has been established is to attempt to recreate it experimentally.

There is another problem with the method of agreement that is particularly relevant to comparative social science: the method of agreement is completely incapacitated by multiple causation (which was known to Mill as plural causation). If peasant revolts result from *either* rapid commercializa-

tion *or* land hunger, then there may be instances where revolt has resulted from only rapid commercialization and other instances where revolt has resulted from only increased land hunger. Application of the method of agreement would lead to the incorrect conclusion that neither of these factors causes revolts. In situations of multiple causation, therefore, the method of agreement is likely to yield incorrect results. (Of course, it still might be possible to argue in advance that two causes are somehow equivalent at the conceptual level, and the presence of either constitutes a single, invariant cause. Mill did not address this issue directly because of his interest in techniques of inductive inquiry.)

Plural causation is an important problem because many comparative social scientists use a technique known as *paired comparisons* to support their arguments. Specifically, they compare pairs of cases to reject competing explanatory variables. The typical argument has the form, "Even though X (land hunger) appears to be the cause of Y (peasant revolt) in country A, it is not, because country B also has Y (peasant revolt) but does not have X (land hunger)." There is nothing inherently wrong with such statements if the phenomenon of interest is known to result from a single cause (which, of course, is impossible to know in advance). To allow the possibility of multiple causation, however, closes off paired comparisons as an avenue of argumentation and makes application of the method of agreement a relatively futile exercise.

Mill cautioned against liberal use of the method of agreement and suggested that investigators use experimental designs whenever possible (a technique he called the method of difference). Some (such as Skocpol 1979) have argued that Mill's method of difference, which involves comparisons of cases differing in only one causal condition, the treatment variable, is available to comparative social scientists in the form of longitudinal comparisons. Russia in 1905, for example, resembled Russia in 1917 in most respects. What key differences account for the greater success of the 1917 revolt? While longitudinal comparisons are often useful, they do not come close to conforming to the demands of experimental design. One obvious key difference between Russia in 1917 and Russia in 1905 is the simple fact that 1917 Russia had already experienced 1905 Russia, whereas 1905 Russia had not. (Other problems with this design are discussed in Campbell and Stanley 1966 and Cook and Campbell 1979.) Mill argued that when direct experimental manipulation is not feasible, investigators should use the indirect method of difference, a method which attempts to approximate experimental design with nonexperimental data.

Before describing the indirect method, it should be noted that the method of difference is available to investigators as a theoretical method (see Stinchcombe 1978; Bonnell 1980). It is possible to contrast an empirical case with an imaginary case representing a theoretically pure instance of the phenomenon of interest—that is, conduct a type of thought experiment (see Weber 1949 and 1978). For example, an investigator might contrast the Sandinista Revolution in Nicaragua with a theoretical pure instance of anti-neocolonial revolution (that is, with an ideal-typic anti-neocolonial revolt constructed from knowledge of many such cases and embellished with the aid of theory). The goal in this analysis would be to link the differences between the Nicaraguan case and the ideal-typic case in relevant causes to differences in outcomes. This method would allow the investigator to explain and interpret specific features of the Nicaraguan case. In this general type of analysis the divergence of the empirical case from the imaginary case in causes is the experimental or treatment variable; differences in outcome show the effect of the experimental variable (see Ragin 1985). While attractive, this method is a *theoretical* method and therefore not in the same class with such empirical methods as the method of agreement and the indirect method of difference.

MILL'S INDIRECT METHOD OF DIFFERENCE

Mill's indirect method of difference is a double application of the method of agreement. Suppose an investigator believes that rapid commercialization causes peasant revolts. First, the investigator identifies instances of peasant revolt to see if they agree in displaying rapid commercialization. If they do, then instances of the absence of peasant revolts (among peasant societies) are examined to see if they agree in displaying an absence of rapid commercialization. In effect, the presence and absence of peasant revolts is cross-tabulated against the presence and absence of rapid commercialization in peasant societies. If all cases fall into the presence/presence or absence/absence cells of the 2×2 matrix, then the argument that rapid commercialization is the cause of peasant revolts is supported.

This pattern of results would correspond to a perfect zero-order correlation in statistical analysis, which also would support the inference of causation. Because of this correspondence, it is tempting to see the indirect method of difference as a simple statistical technique. After all, it involves cross-tabulations of causes and effects. It is not a statistical technique, however. Like the method of agreement, the indirect method of difference is

used to establish patterns of invariance. Imperfect (that is, probabilistic) relationships are the province of statistical theory, not the indirect method of agreement. (In practice, of course, perfect relationships are rarely identified, and the investigator is forced to account for deviant cases.)

Ideally, Mill (1843) argues, the second set of cases—those displaying an absence of both the cause and the effect—should also provide a basis for rejecting competing hypotheses. Thus, for example, if the cases displaying both peasant revolts and rapid commercialization also display land hunger, a possible explanation of revolts, then some of the cases displaying an absence of both rapid commercialization and peasant revolts (ideally) should also display land hunger. This pattern of results would allow the investigator to reject land hunger as a possible explanation of revolts, because revolts are absent in the second set.

This is another type of paired comparison. It has the form: "even though it appears that *X* (land hunger) may be the cause of *Y* (peasant revolt) in country A, it is not, because country B has *X* (land hunger) but lacks *Y* (peasant revolt)." If all competing explanations can be rejected in this manner, Mill reasoned, then the conclusions reached by the indirect method of difference are reinforced, for true experimental design (Mill's method of difference) has been approximated. Thus, the indirect method of difference has three distinct phases: two applications of the method of agreement (the cross-tabulation of cause and effect) and a third phase involving the rejection of competing single-factor explanations through paired comparisons.

While this closer approximation of experimental design is preferable to the simple method of agreement, especially to Mill, it suffers some of the same liabilities as the method of agreement in situations of multiple causation. If land hunger and rapid commercialization both independently cause peasant revolts, there may be instances of revolt caused by rapid commercialization in the absence of land hunger and vice versa. If an investigator were to examine instances of land hunger, he or she would find agreement between land hunger and revolts. However, the second phase of the indirect method of difference would lead to the conclusion that land hunger is not the cause of revolts because rapid commercialization by itself—in the absence of land hunger—also causes revolts; thus, there are instances of the absence of land hunger associated with revolts. Parallel investigation of rapid commercialization would lead to parallel conclusions if there are revolts caused by land hunger in the absence of rapid commercialization. In the language of the statistical method, the cross-tabulation of the outcome with either causal variable would lead to independent rejection of both variables.

The reliance of the indirect method of difference on negative cases to reject competing arguments, as discussed above, is also flawed. Neither land hunger nor rapid commercialization can be rejected with instances showing an absence of revolts and a presence of one of these two factors because both independently cause revolts. The fact that neither cause can be accepted or rejected illustrates the inconclusive nature of the indirect method of difference in situations of multiple causation.

Note also that the type of paired comparison used in the third phase of the indirect method of difference is seriously incapacitated by conjunctural causation. Suppose that revolts occur when land hunger and rapid commercialization coincide and that all instances of land hunger also are instances of rapid commercialization, but not the reverse. (In essence, instances of land hunger form a subset of instances of rapid commercialization.) The investigator believes that land hunger alone causes revolts, however, and the data seem to support this conclusion. All instances of land hunger would also be instances of revolt, and all instances of the absence of land hunger would agree in showing no revolt. Further, the third phase of the indirect method of agreement would allow us to reject rapid commercialization as a cause of revolts because some instances of the absence of revolts display rapid commercialization without land hunger. In other words, the paired comparison of a positive instance (where land hunger and rapid commercialization combined to produce a revolt) with a negative instance (where rapid commercialization without land hunger failed to produce a revolt) leads to the rejection of rapid commercialization as a cause of revolts, when in fact it is the coincidence of land hunger and rapid commercialization that causes revolts. This pattern could not be observed because the investigator believed land hunger alone to be sufficient to cause a revolt. Thus, conjunctural causation seriously debilitates the type of paired comparison involved in the third phase of the indirect method of difference.

The major point of contrast between the indirect method of difference and the method of agreement is that the indirect method uses negative cases to reinforce conclusions drawn from positive cases. Generally, the indirect method is preferred to the method of agreement, but in some types of investigation the set of negative cases is ill-defined and the indirect method cannot be used. The examination of negative cases presupposes a theory allowing the investigator to identify the set of observations that embraces *possible* instances of the phenomenon of interest. Ideally, the definition of this set should not be influenced by knowledge of instances of hypothesized causes or instances of the effect.

It is often impossible in case-oriented inquiry to define such inclusive sets because an interest in specific cases or in specific categories of cases often motivates research. For example, it would be difficult to define the set that includes all negative instances of social revolution. Skocpol (1979), for example, uses nineteenth-century Germany as a negative instance of social revolution and compares this case with positive instances (France, Russia, and China). However, Germany did experience a massive upheaval in 1917–1918 that came close to being a full-blown social revolution. Thus, Germany is borderline at best as a negative instance. Because the selection of negative cases is arbitrary in the absence of strong theoretical or substantive guidelines, investigators who are interested in unusual or extreme outcomes tend to rely on the method of agreement. (For these reasons, Tilly 1984 correctly views Skocpol's approach as a "universalizing" strategy, his term for the method of agreement.)

MULTIPLE AND CONJUNCTURAL CAUSATION IN CASE-ORIENTED RESEARCH

These two methods, the method of agreement and the indirect method of difference, form the core of the case-oriented strategy. While they are both useful, especially as inductive techniques, both appear to be incapable of handling multiple or conjunctural causation, at least in the simple and relatively abstract versions presented above. If multiple conjunctural causation is in fact common, as argued in the previous chapter, why should these case-oriented techniques remain popular? What explains their continued use?

Case-oriented methods are used primarily to identify invariant relationships. They are used to pinpoint patterns of constant association, not to explain variation. Because of causal complexity, however, it is difficult to identify invariant relationships that are neither circular nor trivial. Typically, therefore, when the method of agreement or the indirect method of difference is applied in a mechanical fashion to the evidence, the investigator's initial argument is disproved. If the investigator has reason to believe that the argument has at least an element of truth to it, however, then it is not likely to be discarded. Usually, a dialogue between the investigator's ideas and the evidence develops. The initial rejection of preliminary arguments is simply the first step in this dialogue. Often such rejections constitute the anomaly to be explained and may become the primary focus of an investigation.

Several options are available to case-oriented investigators once preliminary hypotheses have been rejected. Investigators can refine their arguments and try to effect a better fit with the evidence. Suppose, for example, that the initial argument is that a certain outcome follows a coincidence of three preconditions, and the investigator finds that all instances of the outcome agree in displaying a coincidence of these three. Suppose also, however, that there are instances of the absence of the outcome which also display the same three preconditions. Rather than discard the initial formulation of the hypothesis, the investigator at this point might try to identify additional conditions relevant to the outcome that must accompany the original three. If, for example, all instances of the outcome agree in an additional precondition, and instances of an absence of the outcome displaying the original three preconditions agree in not displaying the fourth condition, then the investigator could report that the evidence supports a more elaborate argument than initially proposed. The investigator in this example successfully narrows the range of empirical conditions relevant to an outcome from a coincidence of three conditions to a coincidence of four.

Other responses to rejections of preliminary hypotheses are possible. An application of the method of agreement may show that instances of a certain outcome display no common causes. Confronted with this initial rejection, the investigator may search for differences among instances of the outcome that may have been overlooked. Perhaps the investigator originally assumed that all outcomes identified as instances of the phenomenon of interest (as instances of ethnic political mobilization, for example) were identical or at least of the same type, when in fact several different types exist. The investigator would then try to delineate these types (that is, types of ethnic mobilization) and then determine the different combinations of causes relevant to each type.

Suppose an investigator is trying to identify the causes of national revolts in Third World countries (see Walton 1984) and has collected information on the causes of all major national revolts. The method of agreement may show no common cause or set of causes. Rather than conclude that there are no invariant relationships, the investigator may suspect that there are different types of national revolts and that different sets of causes are relevant to each type. In a reanalysis of the evidence, the investigator would attempt to establish these different types by using the method of agreement to show invariant relationships within each type. The indirect method of difference would then be used to distinguish between types. Thus, multiple causation is addressed by reconceptualizing the phenomenon of interest so that types can be distinguished. Used in this manner, case-oriented methods provide a

powerful basis not only for identifying causes but also for differentiating among important types and subtypes of social phenomena.

This second strategy is often used when negative cases are difficult to define. In order to use the indirect method of difference to study revolutions, it might be necessary to identify negative cases (that is, instances of an absence of revolution) because the double application of the method of agreement, which comprises the first two phases of the indirect method, requires positive and negative cases. As noted above, however, the set of nonrevolutions is virtually infinite, and it would be difficult to construct a list of nonrevolutions that would satisfy all critics. This problem exists in many comparative investigations. The set that contains all instances of the failure to form an ethnic political party is also difficult to define. It is possible to identify successful formations; delineating the class of nonformations is problematic. One solution is to identify types. The indirect method of difference can then be applied to types because instances of other types provide negative cases whenever the conditions relevant to a certain type are assessed. Tilly (1984) would describe this as an exercise in "finding variation."

Generally, unanticipated differences among positive cases can be addressed by differentiating types and assessing patterns of multiple causation, while the analysis of patterns of conjunctural causation (that is, combinations of causes) provides a basis for elaborating the crucial differences between positive and negative cases. The method of agreement and the indirect method of difference, therefore, provide rough guidelines for the conduct of comparative inquiry, especially for carrying on a dialogue with the evidence. They are not used in a rigid or mechanical manner in most case-oriented investigations.

It is important to distinguish, therefore, between formal characteristics of case-oriented methods, as formulated by Mill and others, and their application. Formally, they tend to be incapacitated by either multiple or conjunctural causation if used in a rigid manner; in practice, such apparent failures of case-oriented methods provide opportunities for the development of new theoretical and empirical distinctions and for the elaboration of historical models and types.

CASE-ORIENTED METHODS IN PRACTICE

In practice, case-oriented methods often stimulate the development of new substantive theories. The theory-generative nature of case-oriented inquiry

is evident even in its most basic application—the use of the method of agreement to resolve a simple paradox. Characteristically, this paradox has the form: "objects A and B are different. Yet they both experienced outcome *Y*. What causally relevant similarities between A and B explain this common outcome?" The goal of this type of analysis is simply to identify common causes and thereby explain a common outcome. Only when A and B are very different is it difficult to identify common causes. The more A and B differ, the greater the apparent paradox and the more challenging the task of identifying the common underlying causal factors.

An excellent example of this type of simple paradox resolution is found in Marvin Harris's (1978) investigation of various "sociocultural puzzles." For example, Harris studied specific meat taboos in several regions of the world. From a Western point of view many of these taboos seem bizarre, and traditional explanations of these practices cite religious beliefs. Harris rejects these arguments as unscientific because a different belief system is cited in the explanation of each taboo. As a substitute for particularistic explanations, Harris is able to show that in each case the emergence of these practices resulted from ecological pressures and crises. These ecological crises, in turn, are traced to tensions between the technology of food production and human reproduction. Thus, a common outcome, religiously proscribed foods, is explained in a variety of different settings with a single overarching framework emphasizing the interplay of social and ecological constraints. In the course of showing the underlying similarities among these different settings, Harris is able to dispose of particularistic, culturalist explanations of certain food taboos.

There are three basic steps in this research strategy. First, the investigator searches for underlying similarities among members of a set displaying some common outcome (or any characteristic of interest). Second, the similarities identified are shown to be causally relevant to the phenomenon of interest. And third, on the basis of the similarities identified, the investigator formulates a general explanation. In short, it is a straightforward application of the method of agreement. It is deductive because initial theoretical notions serve as guides in the examination of causally relevant similarities and differences. (Without theoretical guides, the search for similarities and differences could go on forever.) It is inductive because the investigator determines which of the theoretically relevant similarities and differences are operative by examining empirical cases. In this phase of the investigation the researcher formulates a general explanation on the basis of identified

similarities. Thus, induction culminates in concept formation and the elaboration of initial theoretical ideas.

Harris makes it look simple. But the results of applications of this strategy are rarely so neat. More typically, the process of identifying underlying similarities and differences is anything but straightforward. The problem is that the mechanical identification of similarities and differences rarely provides very much in the way of raw material for producing a satisfactory resolution of the initial paradox. Obvious similarities, which may be few in number, may be causally irrelevant to the outcome of interest or may be too general to provide a satisfactory basis for formulating an adequate explanation. Furthermore, the possibility of identifying types of a phenomenon as a way of circumventing the absence of underlying commonalities is not very attractive if there are only two or three cases. The more challenging the paradox and the more dissimilar the cases, the less the likelihood that causally relevant commonalities can be easily identified.

Michael Burawoy, for example, uses a case-oriented strategy in his study of the organization of work incentives at two points in time in a Chicago industrial establishment. In his book *Manufacturing Consent: Changes in the Labor Process Under Monopoly Capitalism* (1979) he contrasts the organization of work incentives in a single factory in the 1940s and again in the 1970s. His goal is to explain how different incentive systems produce a common outcome: worker compliance with production norms. Obvious similarities are (necessarily) few. The remuneration system used in the 1940s was oriented toward actual piece rates, and a major locus of conflict was over the rate attached to each job. In the 1970s, however, a different system prevailed, and conflict centered on base earnings and fringe benefits for different jobs and on the ease with which workers could move to the higher skilled jobs. "Whereas in 1945 bargaining between management and worker over the distribution of the rewards of labor took place on the shop floor, in 1975 such bargaining had been largely transferred out of the shop and into the conference room" (Burawoy 1979 : 50).

These two systems of worker remuneration produced the same outcome—worker conformity to production norms—on virtually identical shop floors. (Despite higher productivity, *relevant* technological changes were few.) Thus, Burawoy explains a constant (worker compliance) with a variable (different ways of producing it on the shop floor). At a mechanical level, few commonalities were identified, for the two systems of incentives

were fairly different. Yet the outcome was the same, and Burawoy produces a convincing social scientific account of how the same outcome was produced in different ways.

This example indicates that identification of underlying commonalities often does not involve a simple tabulation and analysis of common characteristics. Investigators must allow for the possibility that characteristics which appear different (such as qualitatively different systems of incentives) have the same consequence. They are causally equivalent at a more abstract level—at the level of the "game" that develops on the shop floor, according to Burawoy (1979 : 48–60)—but not at a directly observable level. Thus, there may be an "illusory difference" between two objects that is actually an underlying common cause when considered at a more abstract level. Allowing for the possibility of causal equivalence of apparently dissimilar features severely complicates the identification of underlying commonalities.

Another type of paradox resolution that uses a parallel case-oriented strategy involves cases with different outcomes. Two cases may appear to be very similar and yet experience different outcomes. In this type of investigation, the goal is to identify the difference that is responsible for contradictory outcomes. Instead of studying the underlying similarities between relatively dissimilar objects, the investigator studies the causally decisive differences between relatively similar objects. The basic mechanics of this type of paradox resolution are parallel to the mechanics of the first type: the investigator uses theory to aid in the identification of relevant differences; the differences identified are then shown to be causally relevant to the outcome of interest; and on the basis of the differences identified the investigator formulates or refines a general explanation of the phenomenon of interest.

Examples of this research strategy in comparative social science abound. Investigators are very concerned with matching cases as much as possible as a way to establish experiment-like designs. For example, researchers often restrict their investigations to countries that are as similar on as many theoretically relevant variables as possible. This strategy allows researchers to exclude certain types of explanations or certain confounding variables categorically. Alford (1963), for example, studied only English-speaking democracies with single-member, simple-plurality electoral systems in his study of the effect of urbanization and industrialization on the relationship between social class and party support. It was necessary to control for electoral system by holding it constant because the interpretation of the relationship

between social class and party support is different in electoral systems that use proportional representation. Traditionally, this strategy has been called the "most similar nations" design.

This strategy, while experiment-like, is not without problems of its own. The first strategy, sketched above, is confounded by illusory differences—features which appear different but are causally equivalent at a more abstract level. The second strategy is confounded by the obverse of illusory difference—"illusory commonality." The identification of causally significant differences is the key to the success of the second strategy. Yet two cases may appear to share a certain feature which the investigator might identify as a commonality (and therefore irrelevant to the explanation of differences in outcomes), when in fact these apparently common features differ dramatically in causal significance.

Illusory commonalities exist whenever two features appear similar but have different effects. For example, employment tests are used by some employers as a gating mechanism to screen out illiterate workers, regardless of the level of literacy required on the job. They are used by others to identify applicants with the greatest job-relevant skills. It would be a mistake to equate these two uses in an investigation of firms' hiring practices, even though they appear to be similar. It probably would be necessary in this investigation to contextualize the interpretation of employment testing (as a variable) by taking into account associated practices and the skill levels employers require of employees. In a low-skill context, employment testing may indicate a simple interest in excluding illiterates, who from the employer's perspective may possess other "undesirable" traits (such as minority membership). In the high-skill context, employment testing may indicate a simple interest in hiring the most qualified workers. Thus, in an investigation of hiring practices, the use of employment tests may be an illusory commonality.

Both illusory difference and its obverse, illusory commonality, interfere with the identification of underlying similarities and differences. The more general class that encompasses both illusory commonality and illusory difference is multiple conjunctural causation. What makes a certain feature, a commonality, causally relevant in one setting and not in another is the fact that its causal significance is altered by the presence of other features (that is, its effect is altered by context). Similarly, apparently different features can have the same effect depending on which other features they are associated with. Such contextualization of the causal importance of different conditions

is the rule, rather than the exception, in most case-oriented studies. This is a primary justification for examining cases as wholes and for trying to decipher how different causal factors fit together. By examining differences and similarities *in context* it is possible to determine how different combinations of conditions have the same causal significance and how similar causal factors can operate in opposite directions.

Such contextualized causal arguments are necessary because the problem is to explain how relatively dissimilar cases experience the same outcome or how relatively similar cases experience different outcomes. Thus, mechanically identifiable similarities and differences may be few, and the investigation must focus on how conditions combine in different settings to produce the same or different outcomes. The identification of patterns of multiple conjunctural causation provides a basis for specifying, at a more abstract level, the underlying similarities responsible for similar outcomes and the underlying differences responsible for different outcomes.

THE LIMITS OF CASE-ORIENTED INQUIRY

One of the most valuable features of the case-oriented approach, as illustrated above, is the fact that it engenders an extensive dialogue between the investigator's ideas and the data. Each case is examined as a whole, as a total situation resulting from a combination of conditions, and cases are compared with each other as wholes. This makes it possible to address causal complexes—to examine the conjunctures in time and space that produce the important social changes and other phenomena that interest social scientists and their audiences. Furthermore, case-oriented methods require that investigators suspend assumptions about the equivalence of cases and conditions. For example, it is *not* assumed at the outset of an investigation that all the cases are drawn from roughly the same population or that the meaning of various measurements (including presence/absence variables) are the same from one case to the next. This flexibility, which is the hallmark of the case-oriented approach, enriches the dialogue between ideas and evidence.

The case-oriented approach works well when the number of relevant cases is relatively small. The comparison of two to four positive cases with the same number of negative cases is manageable. As the number of cases and the number of relevant causal conditions increase, however, it becomes more and more difficult to use a case-oriented approach. When there are only a few cases, as is the rule in many comparative historical investigations,

it is not difficult to identify similarities because the researcher usually has (or tries to establish) an intimate familiarity with relevant cases. For most of mainstream social science, however, such intimacy is rare. The typical survey study, for example, has hundreds of respondents; the typical quantitative cross-national study includes scores of countries. Not only does the difficulty of identifying commonalities increase, but the commonalities themselves become more scarce. As the number of cases increases, the likelihood that any given causally relevant characteristic will be common to the entire set decreases.

In *Social Origins of Dictatorship and Democracy*, one of the best examples of the case-oriented approach, for instance, Barrington Moore (1966) analyzes only eight cases. Seven of these cases are instances of successful polity modernization. Among these seven, Moore distinguishes three types: the democratic, fascist, and communist routes to the modern world. He uses the indirect method of difference to justify his assignment of these cases to the three subtypes and, at the same time, to elaborate their important similarities and differences. These seven successful cases are contrasted with an eighth, India, an apparently unsuccessful case.

While elegant, Moore's analysis is complex. He builds an intricate web of similarities and differences that is difficult to unravel. This complexity is a direct consequence of the logic of case-oriented comparative inquiry. Cases are compared as wholes with each other. As the number of cases increases, the number of possible comparisons increases geometrically. In Moore's study, which has a modest number of cases, eight, there are twenty-eight possible comparisons. A narrative that allows this many comparisons can easily get out of hand. Only a skilled comparativist can consider all the theoretically relevant similarities and differences and keep them organized. A thorough case-oriented study of twenty cases would entail almost two hundred possible comparisons.

This expanding volume of comparisons is further enlarged if the investigator considers a large number of causal conditions. Because case-oriented comparative methods are holistic, conditions are examined in combinations. As the number of relevant causal conditions increases, the number of logically possible combinations of causal conditions increases exponentially. An investigator who considers eight different causal conditions conceived in presence/absence terms, for example, might consider a maximum of 256 different combinations of these eight conditions.

While all these different combinations certainly would not exist empirically, they are relevant to speculation about the possible impact of altered circumstances (that is, they are the raw material of thought experiments). Comparative social scientists routinely consider how the presence or absence of a certain condition in a specific case might have altered the outcome it experienced. These theoretical comparisons using empirical and hypothetical cases are similar to the holistic comparisons of empirical cases. In this sense, the number of causal conditions considered increases the number of cases to be compared because it expands the set of relevant hypothetical cases. It is not surprising, therefore, that investigators who use case-oriented methods limit their investigations to small numbers of carefully selected cases and consider specific types of causal factors (instead of all possibly relevant causes). The volume of logically possible comparisons can easily get out of control if the analysis is not restricted in this way.

These observations on the limits of case-oriented methods turn Smelser's (1976) argument about the comparative method on its head. He argues that the method of systematic comparative illustration (that is, case-oriented methods) must be used when the number of relevant cases is too small to permit the use of statistical methods (see Chapter 1). The foregoing discussion suggests that the reverse is true. Because case-oriented methods compare cases with each other and consider combinations or conjunctures of causal conditions, the potential volume of the analysis increases geometrically with the addition of a single case, and it increases exponentially with the addition of a single causal condition. Thus, it is not the number of relevant cases that limits the selection of method, as Smelser argues, but the nature of the method that limits the number of cases and the number of different causal conditions that the investigator is able to consider.

SUMMARY OF THE CASE-ORIENTED STRATEGY

Investigators who use case-oriented methods often combine causal analysis, interpretive analysis, and concept formation in the course of their studies. Several distinctive features of case-oriented methods make this possible.

First, they are designed to uncover patterns of invariance and constant association. A cross-tabulation of cause and effect is accepted as definitive only if all deviating cases are accounted for in some way. Probabilistic relationships are not accepted as demonstrations of cause. This stringent requirement forces investigators to get very close to their data and become familiar with their cases as they try to pinpoint key differences between

cases. The search for invariance encourages greater specificity in causal arguments and often leads to the development of important distinctions between subtypes of social phenomena.

The second distinguishing feature follows from the first: the method is relatively insensitive to the frequency distribution of types of cases. A single case can cast doubt on a cause–effect relationship established on the basis of many observations. It does not matter how many cases are in the presence/presence and absence/absence cells of the cross-tabulation of causes and effect. If a single case exists in any of the deviating cells, the causal relationship is questioned and the investigator must account for the deviation. Thus, notions of sampling and sampling distributions are less relevant to this approach because it is not concerned with the relative distribution of cases with different patterns of causes and effects. More important than relative frequency is the *variety* of meaningful patterns of causes and effects that exist.

Third, case-oriented methods force investigators to consider their cases as whole entities. Researchers examine cases as wholes, not as collections of variables. An interest in interpreting specific cases and in pinpointing the combinations of conditions, the causal complexes, that produce specific outcomes encourages investigators to view cases as wholes. Thus, the different parts or conditions that make up a case are understood in relation to each other. They are considered together as composing a single situation. This approach contrasts sharply with how they are treated in other types of investigations. In statistical analyses of large numbers of observations, for example, relations between parts are understood only in the context of analyses of the entire population or sample. That is, relations between parts are seen as derivative of sample or population properties, not in the context of the separate wholes they form. In most statistical analyses, population or sample patterns determine how the parts of a single case are understood. (This argument is developed in greater detail in Chapter 4.)

Fourth, case-oriented methods stimulate a rich dialogue between ideas and evidence. Because these methods are flexible in their approach to the evidence—few simplifying assumptions are made—they do not restrict or constrain the examination of evidence. They do not force investigators to view causal conditions as opponents in the struggle to explain variation. Rather, they provide a basis for examining how conditions combine in different ways and in different contexts to produce different outcomes.

Thus, case-oriented studies have unique strengths and they have limitations. The distinctiveness of the case-oriented approach is magnified when contrasted with the variable-oriented approach, the focus of Chapter 4.

4

The Variable-Oriented Approach

Case-oriented methods, at least as I have described them, are classic comparative methods. They are oriented toward comprehensive examination of historically defined cases and phenomena. And they emerge clearly from one of the central goals of comparative social science—to explain and interpret the diverse experiences of societies, nations, cultures, and other significant macrosocial units. The case-oriented strategy is very much an evidence-oriented strategy. Thus, flexibility in approach to evidence is a key feature of case-oriented methods. By contrast, the variable-oriented approach is theory-centered. It is less concerned with understanding specific outcomes or categories of outcomes and more concerned with assessing the correspondence between relationships discernible across many societies or countries, on the one hand, and broad theoretically based images of macrosocial phenomena, on the other.

The popularity of the variable-oriented approach in comparative social science has been maintained over the last two and a half decades by renewed interest in macrosocial theory. The 1960s and the 1970s witnessed a renaissance of ecological and evolutionary approaches (Parsons 1977; Lenski 1966, 1974; Hawley 1981); the convergence of various strains of modernization theory into a coherent macrosocial theory (Inkeles and Smith 1974; Armer and Schnaiberg 1972; Delacroix and Ragin 1978); and an explosion of interest among North American social scientists in dependency theory (Frank 1967, 1969, 1972) and its theoretical descendant, world-systems theory (Wallerstein 1974, 1979, 1980, 1984; Ragin and Chirot 1984).