observations to determine the status of a causal condition as necessary or sufficient. For example, the observation of a smoking gun is only a strong piece of evidence if it is complemented by further observations that document the consequences of the shooting on the basis of temporal and spatial contiguity (see Section 3.5.2).

As a result of these reflections, we propose to use the following terminology:

Variable-scoring observations: A cluster of empirical information that is used to determine the score or value of a case for a specified and operationalized variable. Usually, the search for these kinds of empirical information is guided by indicators and measurement scales for the variables that are determined ex-ante - although in case study research, the actual research process is much more iterative than in large-N studies with respect to specifying indicators and measurement scales, and collecting empirical information.

Process-tracing observations: A cluster of empirical information that is used (a) to determine the temporal order in which causal factors work together to produce the outcome of interest, (b) to determine the status of these causal factors as individually necessary and jointly sufficient for the outcomes in the cases under investigation, and/or (c) to identify and to specify the social mechanisms that form the basis for mechanism-based explanations.

1.7 Three approaches to case study research: An overview

In this section, we provide a short comparative overview of our three explanatory approaches to small-N research. This overview reveals how the three approaches differ in terms of their main research goals, their focus, the selection of cases (and theories), data generation and data analysis, and the understanding and direction of generalization. In the following chapters of this book, we present each approach separately to display the internal consistency of each approach; each aspect is delineated in great detail and illustrated with examples. These chapters also contain extensive explanations and definitions of the terminology that we have introduced only briefly in this overview.

Research goals and questions

Each empirical research project, whether or not it follows a case study approach, starts with a research question that needs to be answered to achieve the goal of the research project. The co-variational approach (COV) to case study research typically aims to investigate whether a

specific factor makes a difference. For example: Does government reorganization reduce public spending? Are humanitarian interventions successful? As this kind of research is interested in the effect of a specific causal factor, or independent variable, this research can be labeled Xcentered research. But the focus on 'independent variables' has a further, deeper meaning, because the COV approach assumes that the causal factors function independently of each other; this approach is based on the ontological assumption of autonomous causal factors.

Contrast this with research projects that start with an interest in a specific (kind of) outcome. They ask what factors lead to a concrete outcome or what makes a specific kind of outcome possible. For example: What factors led to World War I? Which conditions lead to social revolution? Because the researcher is interested in a relatively complete explanation of an outcome or a full-fledged understanding of a social process rather than the effect of a specific variable, this approach can be called Y-centered research. Nevertheless, with respect to causal analysis, the main difference between the causal-process tracing approach (CPT) and the COV approach is that, within CPT, the researcher starts with the assumption that a plurality of factors work together to produce the outcome of interest. Such a holistic ontological starting point leads to the search for configurations of causal conditions or social mechanisms.

Other case studies are conducted with the aim of contributing to the theoretical debate in a discipline or field of research. Typical research questions read as follows: Which theory of organizational decisionmaking is most consistent with the real decision-making processes in business organizations? Is Liberal Intergovernmentalism the best explanation for European Integration? Such research questions recognize that paradigms and theories have an important function in the process of knowledge generation because they provide the anchor points for research programs and structure the scientific discourse. In the congruence analysis approach (CON), theories are not reduced to single independent variables (as in the COV approach) but are treated as comprehensive worldviews that are specified through a set of constitutive and causal propositions. Case studies are used to elucidate and to compare the explanatory merits of competing or complementary theories.

1.7.2 Case and theory selection

For the COV approach, case selection is crucial to demonstrate that it was indeed variation in X and not another factor that caused the effect (variation in Y). In other words, case selection is crucial to making

valid causal inferences. A plurality of cases is selected according to the experimental template. This means that the cases must express strong differences with respect to the main independent variable of interest, and they must be as similar as possible with regard to variables associated with other potential explanations. This design is described using the term 'most similar system design' (Przeworski and Teune 1970) or, alternatively, a term that emphasizes the underlying logic, the 'method of difference' (Mill 1875); this design also corresponds to the 'comparable cases' approach of Lijphart (1975).

Because causal-process tracing depends on gaining a comprehensive overview over the temporal unfolding of the causal-process, the ability to provide a dense description of critical moments, and the possibility of gaining deep insights into the perceptions and motivations of important actors, the accessibility of a case is the primary precondition for investigation. Causal-process tracing is a within-case analytical technique; therefore, we need not select more than one case, although we do have the option to do so. In the ideal-typical form of the CPT approach, those cases that show a strong positive result with respect to the outcome of interest are selected. In a second step, further 'possible' cases can be selected to test the relevance of specific factors that have been identified as necessary for the outcome in the first study.

Within the CON approach, the selection of theories has to be done more explicitly than in the other approaches. Ideally, this step precedes the selection of cases. We advocate selecting more than one theory and avoiding the ex-ante integration of those theories in a synthetic explanatory approach. The researcher should consider a plurality of theories and should reflect on the status of these theories in the scientific discourse. This allows for selecting a 'crucial case' - whereby the 'crucialness' of the case depends on the 'likeliness' that it is congruent with the expectations that we can deduce from the selected theories. This ex-ante likeliness, in turn, depends on some prior knowledge of the cases.

When we apply the above guidelines for case selection, it becomes obvious that for the COV and the CON approaches significant prior knowledge about the cases is necessary if we want to select optimal cases. Nevertheless, this knowledge is often not available ex-ante or it turns out to be superficial when we learn more about the cases. For the CON approach, selecting a non-crucial case only undermines the impact of the study on the theoretical discourse, but for the COV approach, the selection of non-similar cases can be devastating because it undermines the possibility of drawing valid causal inferences. This is one major

Table 1.1 Three explanatory approaches in case study research

	Co-Variational Analysis (COV)	Causal-Process Tracing (CPT)	Congruence Analysis (CON)
Research questions and research goals	Does variable X make a difference? Testing whether different values of X lead to different outcomes	What makes the outcome (Y) possible? Revealing the temporal interplay among conditions or mechanisms that lead to specific outcomes	Which explanatory approach provides more/new insights? Comparing the descriptive and explanatory merits of different theories
Focus	Independent variables as factors that have an autonomous influence	Causal configurations as sequential and situational combinations of causal conditions or social mechanisms	Theories understood as comprehensive interpretative and explanatory frameworks that compete with or complement each other
Selection of cases and theories	Select multiple cases according to: - strong differences in respect to the independent variable of interest, AND - high similarity in respect to control variables	Select one or more cases according to: - their accessibility, AND - the practical or theoretical relevance of the outcome Selection of one or more cases sequentially: 1. 'positive' case(s) 2. 'possible' case(s)	Select multiple theories according to: - their place in the scientific discourse, AND - the researcher's theoretical aspiration Selection of one or more cases according to the ex-ante 'likeliness' of cases in respect to the selected theories
Data generation	Observations: Information corresponding to the indicators specified for the variables	Observations: Information on the temporal unfolding of the causal-process; Information on spatial-temporal distance and proximity between causes and consequences; Information on perceptions and motivations of important actors	Observations: Information corresponding to the expectations (propositions, hypotheses, predictions) deduced from theories
	Resulting data: Scores of each variable for all cases	Resulting data: - Comprehensive story line - Smoking gun observations - Confessions	Resulting data: Confirmations or contradictions for each expectation
Data analysis = drawing causal inferences for the cases under investigation	Necessary content of data: Co-variation among scores of the dependent variable (Y) and scores of the independent variable of interest (X)	Necessary content of data: - Causal chains and conjunctions - Smoking gun observations - Confessions	Necessary content of data: a full set of confirmations and contradictions for each theory
	Conclusion: X has a causal effect on Y	Conclusions: - The causal configuration consisting of the conditions A,B and C is sufficient for outcome Y. - The causal mechanism consisting of the social mechanisms s, a and t is sufficient for outcome Y.	Conclusion: Relative importance or specific role of selected theories in explaining the case(s)
	Further necessary conditions for conclusions: No theoretically plausible co-variation among scores of the dependent variable and scores of other independent (control) variables	Further tools for drawing conclusions (in respect to the necessity of each element of a causal configuration/mechanism): Counterfactuals and/or coherent theoretical conceptualizations of mechanisms or process dynamics	Further possible conditions for drawing conclusions: Ex-ante expectations about the 'likeliness' that the case is congruent with the expectations derived from different theories
Generalization = drawing conclusions beyond the cases under investigation	Statistical generalization Drawing conclusions about the causal effect of X on Y from the selected cases and generalizing to a population of cases that are similar in respect to all control variables	Possibilistic generalization Drawing conclusions from the identified causal configuration(s) and mechanisms to the set of potential configurations and mechanisms and/or to the set of proven causal configurations and mechanisms	Theoretical generalization Drawing conclusions from the explanatory power of theories in more or less 'crucial' cases to the relevance of theories in the scientific discourse

reason why the COV approach is often complemented by causal-process tracing which allows reducing indeterminacy.

1.7.3 Data generation and data analysis

While it is a defining characteristic of all case study approaches that a large number of (diverse) empirical observations are collected per case and that there is an intensive reflection on the relationship between concrete empirical observations and abstract theoretical concepts, there are strong differences in the ways in which observations are transformed into data and in the ways this data are analyzed to draw causal inferences. Despite these differences, all case study approaches share one feature: in case study research, it is the first step, data generation, that is most crucial; case study researchers invest much more time and intellectual energy in this first step than do large-N statistical analysts, and the cogency of case studies depends much more on this. In Table 1.1, we present the processes of data generation and data analysis separately to present clearly the functional equivalents in each approach. Whereas for the rather deductive approaches COV and CON, this neat separation represents the way we conduct case studies (or at least, it corresponds to the way we present the findings), that is not the case with the inductive CPT approach, in which the separation of data generation from data analysis is less clear-cut.

In the COV approach, indicators that scholars have selected for operationalizing variables into observable entities define which empirical information is seen as relevant and which information must be collected for each case. The relevant empirical information is used to determine the scores for each of the variables; therefore, we call the corresponding information 'variable-scoring observations' (see above). Researchers invest significantly in making sure that each score is valid, and they typically employ a large number of empirical observations for this task. As a result, a crucial step in this research approach is the process of transforming the information that we find 'out there' in the social world into scores for individual variables. Compared with large-N studies, the COV approach makes it much easier to apply indicators in a context-sensitive way, which means that nominally different states of the social world (for example, number of parties in a parliament) can be treated as functionally equivalent (for example, for the concept of 'competition'), and nominally equal states can be scored differently. Data analysis takes place in a second distinct step after we have transferred all scores of all cases for all variables into a rectangular data sheet. Through

visual inspection, we discover whether there is co-variation among the scores of the dependent variable of interest (Y) and the scores of the independent variable (X). If so, we can conclude that X has a causal effect on Y. A necessary condition for this inference is that there exists no other theoretically plausible co-variation among scores of other independent variables and the dependent variable - which is what we try to guarantee through the careful selection of cases but which has to be controlled for in the process of data analysis.

In the CPT approach, the search for relevant empirical information proceeds in a much more inductive fashion. The researcher has to search for all kinds of information about the temporal unfolding of the causal-process that allows her to present a comprehensive storyline with a sequence of causal steps. For decisive situations and phases of transformation, the researcher searches for information that gives him a more detailed picture of the 'scene' and a denser description of the temporal unfolding of events during these critical times. Finally, she has to dig deeper and collect information about the perceptions and motivations of major actors. The data generation process in the CPT approach is not only more inductive in comparison to the COV approach, but the separation between data generation and data analysis is also less clear-cut. Nevertheless, the functional equivalents to scores for the variables in the COV approach are 'comprehensive storylines', 'smoking guns', and 'confessions'. From the comprehensive storylines, the scholars extract 'causal chains' and 'causal conjunctions'; detailed descriptions of critical situations lead to strong evidence for a dense connection between a cause and an effect (corresponding to the observation of a 'smoking gun'), and 'confessions' provide deep insights into the perceptions and motivations of major actors. These kinds of condensed empirical information have to be combined with counterfactual thought experiments and/or with theoretical reflection on the working of causal mechanisms and process dynamics to identify those configurations of conditions and/or mechanisms that are individually necessary and jointly sufficient for making the outcome possible.

In the CON approach, the sort of information required is delineated by expectations (propositions, hypotheses, and predictions) deduced from the theories that have been selected and specified ex-ante. This is to some extent similar to the COV approach. Nevertheless, in this approach, the information is not transformed into variable scores but is used to determine whether the formulated expectations are confirmed or contradicted. As a result, the investigator obtains a set of confirmations and/or contradictions for each of the theories. As a

second analytical step, he uses the differences among the theories with respect to the level of congruence between expectations and observations either for drawing conclusions about the relative importance of the selected theories in explaining the case(s) or for combining the theories into a comprehensive explanation. If the researcher is interested in judging the relative merits of the selected theories, he has different options for doing so: he can compare the absolute levels of confirmations and/or contradictions or he can compare the results with what he was expecting on the basis of some prior knowledge about the case(s) and reflections on the 'likeliness' that the case(s) would be congruent with the selected theories. Whereas reflections on the ex-ante 'likeliness' are not necessary for drawing conclusions about the relative merits of different theories in explaining the case(s) under investigation, such reflections are necessary for drawing solid conclusions about the relevance of the theories in the wider scientific discourse.

Conclusions beyond the cases under investigation are usually discussed under the heading of 'generalization' - we follow this practice, although one of the main messages of this book is that 'generalization' means something quite different within the different case study approaches. We will briefly scrutinize the different meanings and directions of generalization in the final section of this overview.

1.7.4 Generalization

In principle, drawing conclusions within the COV approach is similar to the understanding of generalization in large-N studies; we therefore call it 'statistical generalization'. The researcher draws conclusions from the cases selected to a population of cases. Nevertheless, unlike the findings of large-N studies, which are broadly generalizable, the findings of COV studies can only be generalized to a relatively small population. It is reasonable to assume that the independent variable (X) has a particular effect on a specific outcome (Y) only in cases that are similar with respect to all control variables (assuming that such similarity exists in the cases selected).

It is important to realize that the CPT approach does not strive for this kind of generalization but for something that we call 'possibilistic generalization'. The findings of a CPT case study lead to knowledge about the causal configurations (combinations of causal conditions or social mechanisms) that make specific outcomes possible. The configurations of conditions and/or mechanisms that the researcher identifies

as necessary and sufficient for an outcome within the cases under investigation are used to elucidate the set of potential configurations (all possible combinations of the identified conditions and mechanisms) and/or the set of proven causal configurations. The first set is helpful for developing 'typological theories' inductively; the second set includes all those configurations that have been shown to lead to the outcome of interest.

Within the CON approach, the researcher uses the insights gained in the case study for the debate on the relevance of theoretical approaches in the broader scientific discourse. The impact that the case study might have on this theoretical discourse depends on how 'crucial' the selected case is for the theories that 'populate' the scientific discourse. In Chapter 4, we will lay out the factors that determine the theoretical 'crucialness' of cases. One of these factors is the standing of the selected theories within the scientific discourse (central or peripheral) - which makes clear the importance of case and theory selection for the possibility of drawing conclusions beyond the cases under investigation.

Overall, we hope that this overview serves as a helpful orientation for those who seek advice on determining the most appropriate approach for a given research goal and question. Chapters 2-4 will present the approaches and their underlying methodological concepts in much more detail and with illustrative examples. Our typology helps to reveal differences between the different approaches and clarifies the internal connections among the various elements of each approach. Like all typologies, our typology does have disadvantages. It might overstate the differences between the approaches and the need for internal coherence. According to our aspiration for striking a balance between principled and pragmatic research, Chapter 5 concludes the book by showing how our three divergent approaches can be combined.

inspection, would lead us to infer that performance-related pay increases staff performance.⁹

Let us now turn to our running examples of real world research and consider their methods of case selection and data analysis.

2.5.2 Examples

Kitschelt's Political Opportunity Structures and Political Protest

Kitschelt's study (1986) was a cross-sectional comparison, and he used the appropriate case selection criteria. He was interested in the effect of domestic opportunity structures on the strategy and impact of social movements. Therefore, he chose countries that varied with regard to this independent variable. His independent variable had two dimensions: open versus closed input structures, and strong versus weak output structures (or implementation capacity). For didactical purposes, we simplify his design by focusing on only one dimension: the input structure of the political system.

Kitschelt chose cases that varied with regard to their input structure. He selected Sweden and the United States (US), which both had an open input structure, and France and West Germany, which had a closed input structure (see Kitschelt 1986: 64). At the same time, these countries were selected because they displayed similarities in a number of variables that may also affect the strategies and impact of the anti-nuclear movements. For clarity of presentation, we focus on three control variables: (1) the objectives of social movements, (2) the objective threat of nuclear power, and (3) the social base of the movement (see Kitschelt 1986: 60–1). By keeping these factors constant, Kitschelt can control for the effect of these variables.

A visual inspection of Table 2.7 indicates that only the independent variable of interest and the dependent variable vary, providing confidence that the relationship is causal. As discussed above (Section 2.4.2), the author also presented an argument why the relationship should exist and why a certain score of the dependent variable should be expected (the 'direction' of the relationship). In Sweden, for example, an open input structure of the political system is associated with an emphasis on assimilative strategies by the anti-nuclear movement.

A situation in which the dependent variable varied may have occurred, but this variation would not have made sense theoretically. Hence, if an open input structure had been associated with a confrontational strategy, the visual inspection of the table would lead to the conclusion that the opportunity structure would have made a

Example: Kitschelt's Political Opportunity Structures and Political Protest 2.7 Table.

Germany	Shutting down	1–2 gigawatts/ million inhabitants	Middle-class Closed	Emphasis on confrontational strategies
US	Shutting down	1–2 gigawatts/ million	Middle-class Open	Emphasis on assimilative strategies
France	Shutting down nuclear sites	1–2 gigawatts/million inhabitants	Middle-class Closed	Emphasis on confrontational strategies
SWE	Shutting down nuclear sites	1–2 gigawatts/million inhabitants	Middle-class Open	Emphasis on assimilative strategies
	Control variable Movements objective	Objective threat	Social base Opportunity structure	Movement's strategy
	Control variable	Control variable	Control variable Independent variable of	interest Dependent variable

difference, but the explanation would still need to be rejected because the causal pathway or mechanism underlying the hypothesis could not have worked.

Note that the Kitschelt himself did not construct such a table in his article. However, we strongly recommend visualizing the analysis in a table, which helps to clarify and systematize the argument to readers and, as our experience with supervising students shows, to the authors of the respective study as well.

Haverland's National Adaptation to the European Union

Haverland's study (2000) concerned the adaptation of member states to the requirements of the EU. Cases that had the most similar scores with regard to variables that also affected the domestic adaptation to EU requirements in the area of environmental policy were selected. Haverland chose Germany, the Netherlands (NL), and the United Kingdom (UK), three countries that displayed similarities in economic capacities, the level of technological development, and the strength of the environmental movement.

At the same time, these cases varied on two independent variables rather than one variable. One of these variables captured the dominant approach in the studies on national adaptation to the EU requirement: the goodness-of-fit approach. According to this approach, those countries whose national policies, styles, and structure are most compatible with the EU requirements are more likely to adapt to the EU requirements. The other variable captures Haverland's argument that the structure of the decision-making process is important. Countries in which the decision-making process offers opportunities to veto the adaptation to the EU are less likely to adapt (Table 2.8).

Table 2.8 Example: Haverland's National Adaptation to the European Union

		Germany	NL	UK
Control variable	Technological development	Advanced	Advanced	Advanced
Control variable	Economic capacities	High	High	High
Control variable	Strength environmental groups	High	High	High
Control variable	Goodness of fit	High	Medium	Low
Independent variable of interes <u>t</u>	Veto points	2	1	1
Dependent variable	Successful adaptation	No	Yes	Yes

Through visual inspection of the dataset observations and the application of Mill's method of difference, the economic capacities, technological development, and strength of the environmental movements can be eliminated as explanations. They are similar across cases; following Mill, similarities cannot explain differences; hence they cannot explain the difference in member states' degree of adaptation to EU requirements. This way of reasoning does not allow us to discriminate between the goodness-of-fit explanation and the veto point explanation. However, theoretical reasoning helps to discriminate between the two rival explanations. Regarding the goodness-of-fit explanation, Germany had the best goodness of fit, the UK the weakest goodness of fit, and the Netherlands held a position in between. With regard to the number of formal veto points, the UK and the Netherlands had one veto point, and Germany had the additional veto point of the 2nd chamber of the legislature (the Bundesrat, representing the state governments).

According to the goodness-of-fit approach, the country with the best goodness of fit, Germany, should adapt most successfully, whereas the Netherlands and the UK should adopt less successfully. In fact, the UK and the Netherlands adapted successfully to the EU. Hence, the veto point hypothesis could be corroborated, whereas the goodness-of-fit hypothesis received no empirical support for the case studied.

This example highlights an important point about the relationship between the different approaches to case studies that we discuss. Although we have introduced the COV approach in an ideal-typical way as an approach that attempts to answer the question 'does X make a difference?' with the help of theoretical knowledge and by carefully selecting cases, it can also be used to contribute to theoretical debates. In this example, the co-variational case study provided leverage for the rationalist theory, from which the veto point hypothesis was extracted, against the theory of Sociological Institutionalism, from which the goodness-of-fit hypothesis is drawn.

2.5.3 Concluding remarks

The example just discussed demonstrates that Mill's method of difference contributes to identifying a causal effect if cases are selected carefully, but it also points to the need for theory. Patterns of similarities and differences are often not sufficiently conclusive, and they do not allow for discrimination between all explanations. Theoretical

Nevertheless, positive feedback loops are not the only process dynamics common in social and political life. Negative feedback loops and cyclical processes are also very common. Bennett and Elman (2006: 258) illustrate these alternative dynamics with the balance-of-power dynamics in the Westphalian State System and with the politics of abortion (see Table 3.3): each success of the proponents of abortion resulted in an increased mobilization of the opponents, and vice versa. These alternative process dynamics are also driven by underlying causal mechanisms that can be aligned to basic social theories (see Mahoney 2000a).

This very brief overview makes it obvious that alternative process dynamics are possible. As a consequence, a researcher who uses the terminology of process dynamics should explicitly reflect not only on why a specific dynamic emerged but also on why the countervailing dynamics have not set in.

Causal-process observations and process dynamics

Furthermore, we can specify the roles that the different kinds of causalprocess observations play to put empirical flesh on the logical bones of these process dynamics. The comprehensive storylines are necessary to identify which kind of dynamics has actually occurred. Once again, it becomes obvious how important it is within a CPT approach to justify the period of time that we take into account in our empirical study. It is possible that a process that exhibits strong features of path dependency, based on mechanisms that provide positive feedback loops in a shorter period of time, is much more accurately described as a cyclical process, if we take a more long-term perspective.

Identifying the process dynamics with the help of comprehensive storylines is only the first step in a causal explanation that focuses on these dynamics. The next step is to trace the causal mechanisms that lead to positive and/or negative feedback loops. For this task, we rely on the kind of empirical information that smoking-gun observations and confessions represent.

3.6 Examples

In the following, the basic features of CPT will be described and illuminated with the help of three examples. Henry Brady's analysis (2004) of the electoral consequences of TV stations' early declaration of Al Gore as winner of the 2000 presidential election in Florida will be recapitulated because it shows best that the observations that form the bases for drawing causal inferences within a CPT approach are not isolated. Instead,

think that these observations are still underestimated. 11 First, we restate Brady's arguments in terms of necessary and sufficient conditions; then we have a closer look at the empirical information and the temporal and theoretical foundations that form the basis for drawing causal inferences.

Brady argues that only those people in the Florida Panhandle who were planning to vote during the last 10 minutes could have been influenced by the TV stations. In other words, having the right to vote in the Panhandle counties, having not voted until the last 10 minutes and having the intension to vote are necessary conditions for being influenced by the call of the election. Yet, these conditions are not yet sufficient for actually being influenced. Being exposed to the media and being open to external influence are further necessary conditions for determining the call of the election to be effective. All five conditions must have been fulfilled to be sufficient to determine that the voting behavior of individuals was affected.

Now, we turn to the ways in which Brady combined (implicitly) empirical information with temporal laws and mechanisms to make convincing calculations on the number of people who were actually swayed by the premature call of the election.

The first and most important step in Brady's line of argumentation is based on the assumption that those who had already voted could not have been influenced by the media reports. The conclusion is convincing because this assumption is based on the natural law of temporal succession. It is not merely improbable but rather impossible that the media influenced their voting behavior. Brady adds information about the overall voting process (the 'big picture' or 'comprehensive story') to draw a first important conclusion: only 4,200 people could have been influenced. In other words, a cluster of empirical information on the overall process and the laws of temporal succession are necessary and together sufficient bases for drawing strong causal inferences.

The second step in Brady's argumentation is convincing because the empirical information is not 'isolated', but rather his information addresses precisely the necessary steps within a multilevel model of causation. The various pieces of information are gaining explanatory power because they specify the social mechanisms that work together to make the media influence effective: the average media exposure rate can be interpreted as the relevant specification of a situational mechanism; the information about the average percentage of people who are swayed by the media call of the election does the same for the action-formation mechanism, and the assumption that the distribution between Bush and

Gore voters is the same among those who voted in the last 10 minutes as among those who had previously voted might be viewed as the relevant specification of the relevant transformation mechanism.

Overall, the Brady study should not only be recognized by case study researchers because of the explicit comparison between a CPT approach and a statistical analysis but also because it contains all the ingredients that are necessary to make a causal-process analysis compelling.

3.6.2 Skocpol's States and Social Revolutions

Theda Skocpol's study on social revolutions (1979) is not by accident the case study on which almost all case study methodologists exemplify their analytical approaches, as she uses many techniques to make her descriptions and explanations plausible - not merely cross-case comparisons (1979: 37-8). We will return to this example in Chapter 5, where we describe case studies that combine different analytical approaches. Here, we focus on the narrative analysis that she applies. For many observers, it is the crucial element that makes her book a compelling treatment of revolutionary processes (Mahoney 1999: 1157; Sewell 2005: 97). Mahoney's recapitulation of her argumentation reveals that she draws heavily on the logics of causal conjunctures and causal chains (Mahoney 1999: 1164-8). Skocpol's explanation of the three revolutions in France, Russia, and China is primarily based on a conjunctural argument. She claims that two general factors had to come together to lead to a social revolution: state breakdown and peasant revolts. Only the fact that both factors came together at the same time made social revolutions possible – in other words, state breakdown and peasant revolts are individually necessary and jointly sufficient conditions for social revolutions. To bolster this claim, Skocpol not only compares the three cases but also takes into account five 'possible cases' (cases in which some of the those conditions exist that were viewed as preconditions for social revolutions, for example, relative deprivation) that did not experience social revolutions (for example, England and Prussia). On the most aggregated level, Skocpol primarily applies Mill's method of agreement (first for the positive cases and then for the negative cases), but she treats the combination of the two causes as a single (configurational) factor for the purpose of using Mill's method (Mahoney 1999: 1158).

On a less aggregated level, Skocpol identifies the same set of further preconditions that lead to state breakdown and to peasant revolts in France, Russia, and China. To produce a state breakdown, the following factors are considered relevant: (a) agrarian backwardness, which reduces the competitiveness of the countries; (b) a non-autonomous Equipped with the terminology of necessary and sufficient conditions, we can identify, for example, three individually necessary and jointly sufficient conditions for the backwardness of French agriculture: (a) property relations that prevent new agricultural techniques; (b) a tax system that discourages innovation; (c) and the fact that sustained growth discouraged innovation (Figure 3.6: nos. 1–3). These factors are considered independent, additive factors that contributed to the backwardness of French agriculture (4). For Skocpol, the backwardness in agriculture itself was not responsible for the inability to compete successfully with England. Nevertheless, it is responsible for the failure to achieve an industrial breakthrough (8) because it meant that there was a weak domestic market for industrial goods (5).

A comparison between Skocpol's original description and Mahoney's recapitulation in Figure 3.6 gives us an opportunity to reflect on the relationship between necessary and sufficient conditions. In Mahoney's recapitulation, points 4 and 5 represent a causal chain of sufficient conditions that lead to the failure to achieve the industrial breakthrough. Skocpol uses the following wording: 'At this stage in world history, the progress of industry necessarily rested mainly upon prosperity in agriculture. But French agriculture, though advanced by Continental standards, was "backward" relative both to English agriculture and to French commerce and industry' (Skocpol 1979: 55), providing many references to historical studies for this claim. Because prosperity in agriculture is considered a necessary precondition for industrial breakthroughs, the non-existence of agricultural prosperity in France is a sufficient condition for the failure of the industrial breakthrough.

In Figure 3.6, point 25 is an example of a causal conjunction. At a specific point in time, the financial problems of the French state culminated because four factors came together: (a) failure to sustain economic growth (9); (b) inability to compete successfully with England (10); repeated defeats in war (16); and obstacles of the state to generate loans (19). Skocpol argues that these factors were individually necessary and

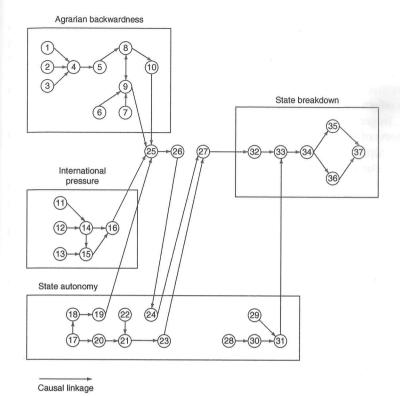


Figure 3.6 Causal chains and conjunctions in the process of state breakdown in France

Note: 1. Property relations prevent introduction of new agricultural techniques. 2. Tax system discourages agricultural innovation. 3. Sustained growth discourages agricultural innovation. 4. Backwardness of French agriculture (esp. vis-à-vis England), 5. Weak domestic market for industrial goods. 6. Internal transportation problems. 7. Population growth. 8. Failure to achieve industrial breakthroughs. 9. Failure to sustain economic growth, 10. Inability to successfully compete with England. 11. Initial military successes under Louis XIV. 12. Expansionist ambitions of state. 13. French geographical location vis-à-vis England. 14. Sustained warfare. 15. State needs to devote resources to both army and navy. 16. Repeated defeats in war. 17. Creation of absolutist monarchy; decentralized medieval institutions still persist. 18. Dominant class often exempted from taxes. 19. State faces obstacles generating loans. 20. Socially cohesive dominant class based on proprietary wealth. 21. Dominant class possesses legal right to delay royal legislation. 22. Dominant class exercises firm control over offices. 23. Dominant class is capable of blocking state reforms. 24. Dominant class resists financial reforms. 25. Major financial problems of state. 26. State attempts tax/financial reforms. 27. Financial reforms fail. 28. Recruitment of military officers from privileged classes. 29. Military officers hold grievances against the crown. 30. Military officers identify with the dominant class. 31. Military is unwilling to repress dominant class resistance, 32. Financial crisis deepens. 33. Pressures for creation of the Estates-General. 34. King summons the Estates-General. 35. Popular protests spread. 36. Conflict among dominant class members in the Estates-General; paralysis of old regime. 37. Municipal revolution; the old state collapses. *Source*: Mahoney (1999: 1166), ¹² extracting and visualizing Skocpol (1979).

jointly sufficient. Whereas point 4 (backwardness of French agriculture) represents a typical structural factor and is usually built up over long time periods, point 25 (major financial problems of the state) is a situational factor directly connected to the action of important actors. In this case, the financial problems triggered the state officials to attempt a reform of the tax system (26).

In general, Skocpol draws on a broad array of sources, mainly publications of historians, to buttress her many factual and causal claims. For example, she draws heavily on the work of J.F. Bosher as a source for her claim that the financial problems of the state could not be solved anymore because of the fact that a socially consolidated dominant class was capable of blocking tax reforms (Skocpol 1979: 63-4). Skocpol does not discuss every step in her causal narrative in methodologically reflective terminology.¹³ What makes her stories compelling is the fact that she is able to combine cogent narratives within each case with the same overall theoretical framework for all three cases of social revolutions. This is a first hint that CPT is most convincing if it is embedded within an abstract theoretical framework. This is especially important for the causal mechanism-centered approach, for which we scrutinize an example in the following.

3.6.3 Tannenwald's The Nuclear Taboo

Our third example represents a mechanism-centered type of the causalprocess tracing approach. Nina Tannenwald (1999, 2007) explains how the habit of not using nuclear weapons has become expected and required behavior in the US after World War II. She outlines how the taboo evolved and identifies not only its effects but also traces the causal mechanisms and various causal pathways through which ethical norms influence the behavior of the US administration.

Tannenwald begins by stressing the importance of the 'outcome' that she is investigating: 'The non-use of nuclear weapons [since the bombing of Hiroshima and Nagasaki] remains the single most important phenomenon of the nuclear age' (Tannenwald 1999: 433). Next, she makes clear that this outcome cannot easily be explained by the conventional account of the non-use of nuclear weapons: deterrence. There have been many wars in which states with nuclear weapons did not use nuclear weapons, although they did not fear nuclear retaliation because the adversary state had no nuclear weapons. She provides further 'empirical anomalies' with respect to deterrence theory: nonnuclear states have attacked nuclear states (for example, Argentina attacked Britain in the Falklands in 1982), and many states have not developed nuclear weapons, although realist deterrence theory would

predict this as the only means for states to maintain security and autonomy in an anarchic international system. In other words, Tannenwald begins with observations that are 'puzzling' from the perspective that dominates the thinking of practitioners and theorists. Furthermore, she claims that these puzzles cannot be solved without taking into account the role of ethical norms that became habitualized and institutionalized as taboo.

In her book, Tannenwald traces the consequences as well as the sources of the taboo. In other words, the nuclear taboo is treated as a factor of influence (cause) as well as the outcome. For each major step in the causal chain - norm development and norm consequences -Tannenwald develops a specific explanatory framework. Furthermore, she dedicates specific chapters in her empirical story to the question of how the taboo mattered and other chapters to the questions of how it arose and how it developed into its specific from. Nevertheless, it is important to recognize that she assumes recursive causality and identifies positive feedback loops that lead from norm development through norm consequences toward the stabilization of the norm (Tannenwald 2007: 64). In consequence, the positive feedback loops transpose the causal chain into a causal spiral.

In addition, Tannenwald is able to show that, over time, other causal mechanisms became more prevalent in the working of the taboo. Whereas, at the beginning, the taboo worked primarily as an external restricting force for realist decision-makers, later on, the taboo was internalized and institutionalized and influenced the identity and perceived interests of the US administration. In consequence, Tannenwald's book is an excellent example of what we have proposed in our introductory chapter: case studies are able to include very different theoretical approaches and build bridges between Rationalism and Constructivism!

Let us more closely examine her explanatory approaches and the specific techniques that Tannenwald applies. The conceptual elements of Tannenwald's explanations are presented ex ante in separate sections (in her article) or chapters (in her book) before the full-fledged empirical storyline. Tannenwald (2007: 64-6) differentiates between five causal pathways that lead to the nuclear taboo14: societal pressure, normative power politics, the role of individual state decision-makers, iterated behavior of non-use over time, and institutionalization. Furthermore, she stresses the importance of 'historical contingency' - the relevance of temporal conjunctions and sequences - and applies counterfactual reasoning: 'If Eisenhower [who had not internalized the taboo; JB and MH] had been president before Truman [who had internalized the taboo; JB and MH], or if nuclear weapons had been used in the Korean War, the development of the nuclear taboo might have proceeded quite differently, or not at all' (Tannenwald 2007: 66-7).

In her description of these pathways, she refers to more theory-based mechanisms: instrumental adaptation of political leaders to public opinion; the boomerang effect of strategic social construction; moral persuasions, cognitive assumptions, and learning processes - mechanisms that all are elements of the behavioral assumptions that are traditionally associated with the 'homo sociologicus' and have been popularized as the 'logic of appropriateness' (March and Olson 1989) in the Anglo-Saxon literature; habitualization or customization; and institutionalization, which provides a system of formal rules and roles, compliance procedures, and standard operating procedures (Tannenwald 2007: 64-6). Quite typically for the less theory-oriented causal-process tracing approach (at least in comparison to congruence analysis), Tannenwald does not exert much effort in laying out the theoretical basis of her causal concepts and pragmatically uses very broad understandings of concepts such as 'institutionalization' (thereby following the tradition of the Historical Institutionalism in contrast to the more specific sociological and economic strands within the Neo-Institutionalism; see Hall and Taylor 1996).

Tannenwald differentiates the following effects of the nuclear taboo and specifies the theoretical bases and mechanisms that lead to these effects: (a) the 'regulative effect', which is based on a rationalist theory and assumes that norms constrain individual behavior; (b) the 'constitutive effect', which is based on constructivist theorizing and assumes that norms do not only shape the identities of actors and define their roles and appropriate behavior but also shape the perception and categorization of topics such as weapons; and (c) the 'permissive effect', which is conceptualized as a non-intended side effect of the cognitive processes by which norms focus the attention on specific issues and unavoidably divert attention from other issues (in this case, from the fact that the US military has developed non-nuclear weapons with similar destructive force and has used these weapons in the Gulf War of 1991). Next, she identifies three pathways and the corresponding mechanisms that lead to specific effects: (a) domestic public opinion constrained political leaders; (b) world opinion, which is also perceived as an external constraint and works through the behavioral mechanism that political leaders care about their reputations because they do not want to become isolated; and (c) the personal moral convictions of individual state decision-makers. There is a clear affinity of these pathways and mechanisms with the three dominant theoretical approaches in IR: Rationalism, Realism, and Constructivism. However, Tannenwald does not make this link explicit nor is it a point-to-point relationship. Especially in her description of the world opinion pathway, she oscillates between realist and constructivist reasoning (Tannenwald 2007: 49).

After having laid out the conceptual elements of her explanations, Tannenwald briefly describes her methods (Tannenwald 2007: 69-71) and subsequently presents the empirical information in chronological order. She examines domestic and international discourses in the media and in the diplomatic arena, statements, and decisions of US presidents and top advisers in the US military and administration as well as the process of institutionalization, mainly on the basis of other academic literature and also with the help of primary sources, such as protocols, letters, and diaries (very important sources for 'confessions').

The empirical storyline begins with the bombing of Hiroshima and Nagasaki as the crucial point of reference for the emerging taboo. In the following chapters, she covers the Korean, Vietnam, and 1991 Gulf Wars. Each war is treated as a 'case', but Tannenwald does not draw causal inferences by comparing the cases. Instead, she discusses intensively in each case how far the decision (not) to use nuclear weapons can be explained with reference to the realist deterrence theory and how far ethical norms played a role. Furthermore, she uses many sources to trace specific pathways and reflects intensively on the concrete working of specific mechanisms. Furthermore, in chapters alternating with the chapters that focus on the decisions in the four wars (showing the causal consequences of the taboo), Tannenwald focuses on the emergence and institutionalization of the taboo. The period from 1945 to 1962 is characterized by discursive struggles between taboo promoters (social movements, UN diplomacy, the Soviet Union, and Third World states) and those who wanted to conventionalize or normalize the use of nuclear weapons (the US administration and military). During this period, the taboo emerged as a dominant public opinion (domestically and internationally), but the US government considered it an external restriction and tried to fight it. That changed in the period from 1962 to 1989, when the taboo was not only institutionalized in international treaties but also internalized and accepted to a certain extent by the US administration. Tannenwald describes and explains these developments in a pro-typical way for the CPT approach: she points to four (slow-moving) structural and material changes that facilitated these developments (for example, the expanding 'club' of states with nuclear weapons) and complements this by highlighting the crucial role

of the Cuban missile crisis in October 1962 as an 'important turning point in the development of the taboo' because it raised the awareness of the potential catastrophic consequences of nuclear weapons for the US (Tannenwald 2007: 253).

A mechanism-centered approach is clearly the most theory-oriented application of CPT and exhibits strong overlaps with the congruence analysis approach (see Chapter 4). Nevertheless, those who trace causal processes and, especially, causal mechanisms usually apply a less-broad spectrum of theoretical approaches than is the case in a small-N study that applies the method of congruence analysis. Their research goals are to further clarify the working of mechanisms within their specific field of research - not so much to contribute to the overall struggle between divergent theoretical paradigms for recognition or dominance. Therefore, they are usually taking into account only one paradigmatic approach. Prominent examples are the 'Analytic Narratives', which combine historical narratives with the analytic models of Rational Choice and Game Theory (Bates et al. 1998), and Jeffrey T. Checkel's analysis of the socializing power of the EU, a project that aimed to provide stronger micro-foundations for social constructivist accounts in IR (Checkel 2006).

3.7 Direction of generalization

Some advocates of case study research argue that case studies should concentrate on the unique features of a case and believe that inferences beyond the investigated cases can only be drawn by the readers when they compare the findings and contexts of the case studies with their own experiences or cases - a process that is called 'natural generalization' (for example, Stake 1995). We will argue at the beginning of this section that it makes more sense to distinguish between implicit and explicit generalizations.

Nevertheless, most proponents of causal-process tracing argue that we can use case studies not only for revealing the specifics of a single historical event but also for drawing generalizing conclusions beyond the case under investigation. In contrast to the statistical understanding of generalization in large-N studies, the kind of generalization that is most appropriate for a CPT approach can be called 'configurational' or 'possibilistic' generalization. 15 In the remaining sections of this chapter, we will show how possibilistic generalizations can be drawn toward sets of causal configurations or toward sets of causal mechanisms.

- a CON approach is based on a holistic understanding of theories as a consistent set of concepts that are linked together in a coherent way. Consequently, a purely technocratic approach of comparing individual observations with single expectations is not adequate. For the interpretation of observations that fit both theories at first sight, it is helpful to examine the set of connected observations. The internal consistency of a cluster of observations serves as a second (horizontal) point of reference when deciding whether an empirical observation is evidence for one or another theory.
- Finally, Table 4.3 reveals that a sound congruence analysis also takes into account observations that are important for explaining the case but are in line with neither theory A nor theory B. The first possibility, that an observation contradicts the expectations of both theories, is an important piece of evidence that leads to strong theoretical conclusions (conclusion E). If an observation cannot be connected (positively or negatively) to both theories, we can conclude either that a theory has to be expanded or that another theory is needed (conclusion I). Note that such a conclusion is based on the assumption that these observations have been identified as 'important' for explaining the case(s) under investigation. Because they fall outside the expectations that we can identify from the theoretical starting points, this identification can only be based on the 'natural foundations' of causal-process observations (see Chapter 3). In Chapter 5, we provide an example (Blatter 2009) that shows how causal-process observations provide the empirical foundation for arguing that a new theory is necessary to explain the outcome of interest.

4.5.3 Examples: Applications of the congruence analysis proper The following examples demonstrate that scholars proceed with the congruence analysis proper in different ways.

Owen's Liberal Peace, Liberal War

John Owen (1997) begins the congruence analysis proper with the presentation of empirical observations and performs a two-step comparison of these observations with the expectations that he deduced from theories. In his theoretical chapter, Owen deduces three hypotheses from three theories to consider what shapes liberals' perceptions of foreign states: (a) Idealism: liberal ideology, (b) Realism: balance of threat, and (c) Rationalism: parochial interest (Owen 1997: 58-61). Nevertheless, in the empirical section of his book, Owen begins by describing 10 political crises between the US and foreign states that (potentially could have) led to war in the nineteenth century. For each crisis, he draws on a large

set of primary and secondary sources to detail how the liberal elites in the US (and their major factions, for example, Federalists versus Republicans) and in the other country perceived the adversary country. For each case, Owen structures the historical reconstruction by answering the following questions: (a) How liberal was the US, and how liberal was the other country? (b) How did the US perceive the other state, and how did the other state perceive the US? Furthermore, Owen describes the actions, interpretations, and reactions during each crisis and closes each case study chapter with a short summary, in which he draws initial conclusions from the crises regarding the adequacy of the hypotheses. In other words, Owen aggregates the plurality of observations in a non-formal way and provides an initial judgment with respect to the congruence of the observations with the theories. Often, he finds that the information provides evidence for more than one theory.

In the third part of his book, Owen 'engages in a structured, focused comparison of the cases to see if two crucial expectations of [his] argument are borne out' (Owen 1997: 185). By drawing on the findings of the case studies, he discusses for each case whether the perceptions and the causes of these perceptions are in line with the idealist, the realist, or the rationalist theory. Because he applies this kind of congruence analysis for both countries, each crisis actually consists of two cases. Owen (1997: 208) sums up the findings of the comparative congruence analysis in a table that reveals that there is evidence for the 'idealist theory' in 17 of the 19 cases, 6 cases contain evidence for the 'realist theory', and observations point to the 'rationalist theory' in ten cases.

It is important to note that, when Owen is formulating the overall findings of his small- to medium-N study, he does not simply draw on the larger number of cases in line with the 'idealist theory' in comparison with the cases that exhibit observations congruent with the other theories. He acknowledges that for two cases, Realism is indeed a better explanation than his idealist account, and for two other cases, Realism best explains the perceptions of many actors. Owen interprets all other cases as confirming the core of his 'idealist theory', that liberal ideology shapes the perception of the other country. He counts not only cases for which he has found evidence for the 'idealist theory' but also cases for which he has found evidence for the idealist and for alternative theories. He uses different kinds of evidence and logic to argue that ideology is the crucial factor shaping perceptions. For a first group of cases, Owen uses causal-process observations and shows that changes in perceptions closely follow institutional changes. For other cases, Owen convincingly shows that ideology clearly shapes self-interest. Actors perceive their interests in a way that other actors and external observers would find irrational, and they do this in line with their ideology.9

Owen primarily uses evidence that confirms one of the three theories. and he draws the corresponding types of conclusions (types C and G in Table 4.3). His analysis is not geared toward detecting disconfirming evidence. Accordingly, the summary table in his study contains no negative scores for the theories. Because he is aggregating the individual observations and conclusions on the level of cases, he ends up with many cases that show some congruence with multiple theories. He uses discriminatory observations (close temporal connections between institutional and preference change, interests that are more consistent with ideology than with rational calculation) and the corresponding kinds of conclusions (types B and D in Table 4.3) only at a late stage in the data analysis.

Wilson and Wilson's 'Degrees of Freedom' in Case Research of Behavioral Theories of Group Buying

Wilson and Wilson's approach (1988) to data analysis proceeds differently. For each concept (an element of the organizational decisionmaking process), the empirical data are compared to the predictions derived from all four theories, and confirming or disconfirming conclusions are drawn for all applied theories (see Table 4.2). In other words, these authors draw conclusions according to types A, B, and D in our typology. Wilson and Wilson take a more quantitative approach to the aggregation of individual results from the congruence analysis. and they apply statistical techniques when comparing the congruence between empirical data and expectations derived from different theories. As we have explained (Section 4.4.2), these authors developed a 'prediction matrix' by deducing the expected answers to 14 questions from four theories of organizational decision-making. They collected data on decision-process activities in four buying centers in different departments of their university. The major source of information was semi-structured interviews, and this information was complemented by documents from the buying centers (purchase order requests). The transcripts of these interviews formed the major source of empirical information. The research team compared the statements of the interviewees with the deduced expectations from the theories. Three 'judges' (members of the research team) independently searched for answers to the formulated questions in the empirical material and decided whether the empirical evidence was fully, partly or not at all in line with the predictions of the theories. Each judge made 56 evaluations (seven

phases x two statements each x four cases), and the team tested the inter-judge reliability of the evaluations. Next, for each case, the number of 'hits' (congruence between reality and prediction) for each theory was counted. In three of the four cases, the bounded rationality model clearly received the most hits. The authors conducted a chi-square test to determine whether the number of hits was significantly higher than the number that could be expected by chance, and they applied a z-test to determine whether the number of matches for 'bounded rationality theory' was significantly greater than the hits for the other three theories. These statistical techniques were applied for each individual case and for the results of all cases (Wilson and Woodside 1999: 222).

In the original study, Wilson and Wilson not only compared the level of correct predictions between the four theories, but also formulated hypotheses concerning the level of congruence they expected for each theory given the characteristics of the decision-making process under investigation (buying decisions for copier machines). Consequently, the conclusions drawn by Wilson and Wilson (1988) were quite different from those in the revised study presented by Elizabeth J. Wilson and Arch G. Woodside (1999). The high level of congruence for 'bounded rationality theory' was in line with their theoretical expectations. However, they were surprised by the lower, but still significant congruence between the empirical results and the expectations derived from the political model and the garbage can model. These findings were not what they expected given the context conditions (Wilson and Wilson 1988: 592-3). The difference between the original study (Wilson and Wilson 1988) and the reconstruction of the study (Wilson and Woodside 1999) nicely illustrates the difference that a Bayesian approach to case study research makes. Formulating specific expectations based on the context conditions of the investigated cases leads to quite different interpretations of the same results of the congruence analysis proper than a simple comparison of the level of congruence between the theories. Nevertheless, Wilson and Wilson did not reflect on the position of the four theories they applied in the theoretical discourse. This reduced their ability to draw conclusions from their findings for the broader theoretical discourse beyond the cases under investigation (see Section 4.6).

Another way to proceed with the congruence analysis proper can be found in the studies of Schimmelfennig (2003) and Blatter (2009).¹⁰ In contrast to Wilson and Wilson, these authors do not simultaneously compare the empirical data with expectations from different theories.

However, evidence that is not in line with theoretical expectations plays a much more important role in their analytical proceedings.

Schimmelfennig's The EU, NATO, and the Integration of Europe

Schimmelfennig (2003) takes up the propositions that he formulated in his theoretical sections and painstakingly explains the extent to which they are in line with the empirical data in his two case studies. For NATO enlargement, Schimmelfennig (2003: 37-44) shows that all of the conditions deduced from the security approach in the rationalist paradigm (see Section 4.4.1) were fulfilled for the Central and Eastern European Countries (CEEC), but this was not the case for the formulated conditions for the NATO member states. After demonstrating that the empirical reality is not in line with the security approach with respect to member states, he compares the congruence between the propositions of the power approach and the empirical evidence and comes to the same conclusion: none of the rationalist approaches can explain why member states accepted the NATO enlargement (2003: 43-51). He proceeds in the same way for his second case - EU enlargement and produces the following finding: Rationalist Institutionalism can explain the interest of the CEEC in joining NATO and the EU, but it cannot explain the willingness of the member states of these two organizations to accept their bid because the preconditions deduced from rationalist approaches are not in line with the empirical findings. After showing that the empirical findings are not sufficiently in line with rationalist expectations, Schimmelfennig turns to an evaluation of the propositions that he deduced from Sociological Institutionalism. This chapter is structured according to the theoretical propositions. First, Schimmelfennig refers to primary and secondary sources to show that NATO and the EU are international communities with a liberal political culture. Second, with reference to databases like POLITY and Freedom House, he tests the sociological institutionalist hypothesis that only states that exhibit a certain level of liberal culture are accepted as new members. Overall, this kind of data shows a high level of congruence with the formulated propositions on the relationship between causal conditions and outcomes.

Nevertheless, in the second part of the book, Schimmelfennig shows that the empirical information does not correspond to the expectations derived from Sociological Institutionalism with respect to the process of enlargement. For this argument, Schimmelfennig presents data that indicate that the preferences of many member states and the initial steps in the enlargement process do not confirm Sociological Institutionalism.

At the beginning of the final part of the book, Schimmelfennig develops two alternative theoretical mechanisms that link individual state preferences and community norms (rhetorical action and communicative action), and he deduces partly competing observable implications (2003: 193-226). He tests the partly congruent and partly competing implications by interpreting the authoritative speech acts of representatives of the major actors in the process of NATO expansion. Schimmelfennig presents many examples of statements by CEEC countries as confirming evidence for the rhetorical action hypothesis. He explicitly states why these statements are more in line with the theoretical concept of rhetorical action than with communicative action (2003: 235). The most convincing evidence for the rhetorical action proposition is presented when Schimmelfennig shows that most skeptics of Eastern enlargement did not change their preferences; they were silenced because they could not argue against the liberal community values they had previously upheld. Schimmelfennig then discusses alternative explanations. He stresses that rhetorical action is confirmed by empirical evidence, but he acknowledges that there are other plausible explanations based on materialist theories. Consequently, rhetorical action loses the status of a necessary condition to explain NATO enlargement. Thus, he embarks on another case study (sequential selection of cases!) and selects a case in which this alternative explanation is less likely - the EU enlargement process. In this case study, he focuses on the intergovernmental decision-making process and attempts to disentangle the potentially confounding effects of bargaining and shaming (Schimmelfennig 2003: 264-5). In fact, he provides considerable empirical evidence in line with Rhetorical Action Theory and uses the case study to further elaborate on the various elements of this theory: 'rhetorical commitment', 'rhetorical argumentation', and 'rhetorical entrapment'.

Overall, Schimmelfennig mainly compares empirical information with the expectations from only one theory. He shows the extent to which the data are in line with the first established theory and what gaps remain, and then he does the same with the next established theory. In his final attempt to make a case for Rhetorical Action Theory, he uses confirmatory evidence and the corresponding types of conclusions (C, G in Table 4.3).

These examples show that there are different ways to proceed with the congruence analysis proper and that, after comparing the congruence of the empirical information with the expectations deduced from theories,

scholars use different ways of reaching conclusions for the theories' adequacy to explain the investigated cases. We will show in the next chapter how further conclusions can be drawn beyond the studied cases.

4.6 Direction of generalization

A congruence analysis can be used to shed light on important social or political events, and it is a strong approach for generating systematic evidence if the explanation of these events is disputed. Nevertheless, most scholars applying a CON approach want to use the findings of their case study to contribute to the broader theoretical discourse. In contrast to statistical generalization (see Chapter 2), no claim is made that findings can be generalized to a population of similar cases. Instead, generalizing conclusions are drawn for the theoretical discourse. To highlight the fact that the theoretical discourse represents the functional equivalent of the population of similar cases in the COV approach and the set of causal configurations that enable specific kinds of outcomes in the CPT approach, we could call the entity for which we draw conclusions the 'population/set of theories' that is recognized as relevant in this discourse. The existing population/set of relevant theories and the position that specific paradigms and theories inhabit in the scientific discourse significantly shape the way scholars and practitioners perceive and approach the world. Furthermore, these theories form the primary structure of university curriculums and play a pivotal role in socializing elites. Consequently, the struggle for recognition and relevance among paradigms and theories is of crucial importance for the social sciences. The CON approach not only provides the methodological foundation to make this struggle more reflective but also for allowing a productive encounter of theories from different paradigms.

In principle, there are two major ways to use the findings of the congruence analysis for the broader theoretical discourse. The results of the empirical study can be used as munitions in the struggle for hegemony between competing theories. Alternately, the findings can be used as arguments for the adequacy and fruitfulness of new or marginalized theories or new combinations of theories. We will first provide the logical foundations for theoretical generalizations within a competing theories approach. Then, we provide some examples that show how theoretical generalization takes place within the second subtype of the CON approach, the complementing theories approach.