3

Concept Specification in Political Science Research

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> The need for *reconstruction* results from *destruction*, from the fact that our disciplines have increasingly lost all ‘discipline’. Amidst the resulting state of noncumulability, collective ambiguity, and increasing incommunicability, it is imperative to restore or attempt to restore the conceptual foundations of the edifice. This is not to say that an exercise in conceptual reconstruction will restore consensus – we are far too disbanded for that. However, if the exercise succeeds, it will restore intelligibility – and, with intelligibility, an awareness of the enormous intellectual waste brought about by our present-day indiscipline (and methodological unawareness). (Sartori, 1984, p. 50)

Introduction

Political scientists seek to derive general statements from their empirical observations. For that purpose they make causal and descriptive inferences. The goal of inference is to produce reliable descriptive information, to test existing theories, and to formulate new theories (King, Keohane and Verba, 1994). The validity of empirical and causal inference, however, depends crucially on properly specified concepts. First of all, the clear definition of a concept allows others to understand the meaning of what we write. In addition, the content of concepts determines the content as well as the explanatory and the empirical scope of our theoretical hypotheses. For other steps in the process of designing research, unambiguous concepts are most obviously important in the design of an empirical strategy and the subsequent development of adequate measures (for a discussion of measurement, see Miller, Chapter 5). The reason for this is obvious: How are we to evaluate a measure's adequacy if we are not sure what to measure in the first place?

A number of articles and book chapters have been devoted to theoretical discussions of concepts and concept specification (Collier and Mahon, 1993; Gerring, 2001; Sartori, 1970, 1984). My aim in this chapter is much more modest and instrumental: I would first of all like to draw the reader's attention to the centrality of concepts in political science research, by discussing how the quality of concepts affects the clarity of theoretical arguments and the empirical scope of theories. In line with the other chapters of this volume, in section three, I will then provide practical guidelines for how to get most out of the concepts we wish to apply in our research projects. The fourth section applies this chapter's recommendations to the concept of 'supranationality' which I frequently struggle with in my own research on the European Union (EU). A brief discussion concludes this chapter.

Design problem: concepts and concept specification in political science research

There are three components which make up a concept and have to be distinguished analytically (Gerring, 2001; Sartori, 1984): a *term* assigns a name to a concept. Attributes which define a concept's meaning fill the term with substance. All attributes taken together constitute a concept's *intension*. A concept's intension is not only important because it defines its meaning. The intension of a concept should demarcate this concept from other concepts. Otherwise overlaps in meaning will lead to confusion. Finally, a concept's defining attributes relate the concept to real world phenomena. The empirical scope of a concept is regularly referred to as its *extension*. Analytically useful concepts draw distinct boundaries between the real world phenomena denoted by themselves and those denoted by other theoretical concepts. Figure 3.1 summarizes the above and puts it into the broader research design context: We start with a theoretical statement, that is, a hypothesis (see De Bièvre, Chapter 11; Dür, Chapter 10). To make sure that anyone is able to understand the statement's meaning, we specify the concepts contained in the statement. This is done by explicating the concepts' defining attributes. Finally, the concept has to be operationalized in order to systematically relate it to real world phenomena (Miller, Chapter 5) – and to test the empirical plausibility of our theoretical statements.

Concept specification then is the process by which a researcher defines and explicates the attributes of the concepts she uses in her

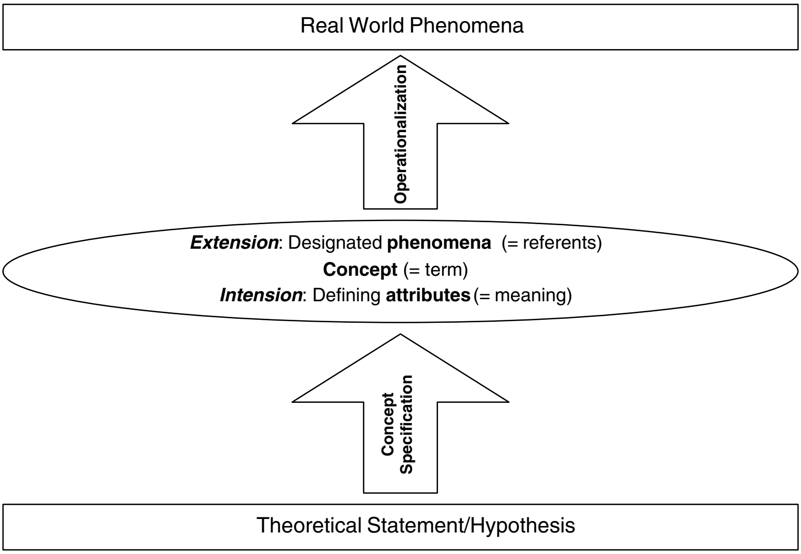
Real World Phenomena
Operationalization
Extension: Designated **phenomena** (= referents)
Concept (= term)
Intension: Defining **attributes** (= meaning)
Concept Specification
Theoretical Statement/Hypothesis

Figure 3.1 Concepts and concept specification in the broader research design context

research. As such, concept specification can mean both the adaptation of an existing concept to actual theoretical or empirical needs and the formation of a completely new concept, which has to be specified from scratch. The (instrumental) goal of both kinds of concept specification is the same: We want to have analytical instruments at our disposal, which allow us an unambiguous theoretical discourse as well as the clear denotation of the empirical phenomena relevant for our research project. Therefore we have to be clear about what the terms mean with which we operate and confront other researchers. In political science the term 'democracy', for example, refers to a specific form of organizing the relationship between those that govern and those governed in a given territory. The term could be specified by the following defining attributes: (1) the guarantee of citizens' basic rights; (2) the rule of law; and (3) regular competing elections for political offices. This specification of the concept of democracy then extends to all states whose organization of political power exhibits these attributes.

Some political scientists may oppose this chapter's postulate that unambiguous concepts are a prerequisite for meaningful (empirical) research. They take vague concepts and associative discussions as an inspiration and thus deliberately operate with vague concepts. They mistake conceptual vagueness for creativity. I hope that the arguments in this chapter convince the reader that, rather than promoting inventive political science research, vague concepts inhibit it.

Another reason why concepts often have an ambiguous meaning is that the same term is used with different defining attributes. As a consequence, many concepts lurk under the same term. In 1942, Baudin made this observation with respect to corporatism: 'The army of corporatists is so disparate that one is led to think that the word, corporation, itself is like a label placed on a whole batch of bottles which are then distributed among diverse producers each of whom fills them with the drink of his choice. The consumer has to look carefully' (Baudin, quoted in Schmitter, 1979, p. 10).[1] As this example makes clear, scientific discourse based on ambiguous concepts is at least confusing, more likely unproductive and definitely not cumulative.

Yet another reason for conceptual ambiguity is that political science concepts often originate outside the academic discourse. Researchers might take them from politicians' discourse or from everyday speech. The already discussed concept of 'democracy' is an appropriate example, as is 'freedom', 'justice', or 'happiness'. Such concepts are regularly laden with historical and political connotations and carry a backpack of meanings. As a result, they are often highly ambiguous.

To avoid such ambiguity, one could argue that only 'scientific' concepts should be employed in research. In the extreme case, such advice would amount to the exclusive reliance on a strictly formalized artificial language, out of touch with popular discourse. Is such advice reasonable when taking into account the costs of such a proceeding? I do not think so. Relying on formalization will definitely exclude problems which arise from a concept's popular use. In addition, it is unlikely that an artificial concept created for a specific scientific purpose will acquire different meanings over time. At least that is what we know from other scientific disciplines. Think, for example, about chemistry's table of elements. Yet, the costs of proceeding in this manner are considerable: Anyone who wants to use such concepts or interact with researchers using them will have to resort to the formalized language. Existing concepts would eventually have to be translated. It is unrealistic that political scientists in general will acquire these skills and that formalization therefore will be the cure for conceptual ambiguity in our discipline. In addition, concepts which originated in popular discourse might be the most interesting and socially relevant. Political scientists have the professional skills to inform public discourse on popular concepts such as, for example, 'democracy'. Yet, the exclusive reliance on an artificial language would severely limit our ability to communicate our results to a non-academic audience and to contribute productively to public discourse (see Lehnert, Miller, Wonka, Chapter 2). The most important reason, which speaks against the reliance on using artificial language to arrive at unambiguous concepts, is much simpler, however: The *sine qua non* for a concept's unambiguity is the explication of its defining attributes. Our natural languages are sufficient for this purpose, as the example of 'democracy' above shows.[2]

The definition of concepts must take place in the early phases of designing a research project. The effort that has to be invested in this step of designing a research project might vary. If no specification of a concept is available in the literature, we have to come up with our own definition. This definition should not contradict the meaning usually associated with the term, because such a proceeding would give away the 'everyday-analytical' leverage of the term which it owes to its non-scientific use. In most instances, however, we will be able to rely on a concept's specification in the literature. This is not least because we usually choose to embed our research projects in specific scientific discourses. The choice of the scientific discourse will most likely be based on the fact that we deem the concepts it deals with appropriate for our research purposes. In case we can rely on already specified concepts, our task is to make the respective concepts' definition explicit. If, for example, one plans to work with the concept of 'corporatism', one should be explicit about which of the many variants of the concept (Siaroff, 1999) one is working with.

(Re-)specification of a concept has to be considered if the original concept does not fully cover a researcher's theoretical interest, or if the concept will be applied to a different spatial or temporal context. If the concept is applied to a different context, the fit between the cases investigated and the original concept might be lost. Thus, to make the concept fit for traveling to a new empirical context, it might be necessary to respecify it (see Rathke, Chapter 6). Otherwise, concepts are stretched to empirical cases which the concept does not cover due to a misfit between the latter's defining attributes and the former's empirical characteristics. This might eventually lead to an erroneous theoretical classification of empirical cases. Descriptive as well as causal inferences drawn from such a basis would then be erroneous as well.

Reducing the number of defining attributes is one way to re-specify a concept to adapt it to a different empirical context: 'The rules of climbing and descending along a ladder of abstraction are thus very simple rules – in principle. We make a concept more abstract and more general by lessening its properties or attributes. Conversely, a concept is specified … by augmenting its attributes or properties' (Sartori, 1970, p. 1041). Making a concept more abstract might allow for a valid application to a wider empirical context. Yet, it does not come without costs, because such a strategy is very likely to reduce a concept's analytical leverage. An abstract concept of corporatism defined as 'a political system in which private interest groups and public actors interact on a regular basis' is applicable to a large number of political systems. At the same time it offers little analytical leverage, because it does not allow us to empirically discriminate between systems of interest intermediation with different structural and behavioral properties. Theoretically, such a definition is nonsense since it blurs the differences between the theoretical concepts of 'pluralism' and 'corporatism' and thereby causes ambiguity. As an alternative to decreasing the theoretical distinctiveness and the analytical leverage of 'corporatism' by increasing the level of abstraction, one could revert to a different, even more abstract concept, which satisfies the theoretical as well as the empirical needs. To capture interest intermediation between private and public actors, one could for example revert to 'governance'. Now, whether such a strategy is reasonable depends first of all on the theoretical interests pursued. If one is interested in studying 'corporatism', operating with 'governance' is no viable option. If the application of a more abstract concept is not precluded for substantive reasons and if the abstract theoretical concept gives the researcher analytical leverage nothing speaks against using it.

Another strategy for adapting concepts to different empirical contexts is based on the premise that a concept consists of one or a few central attributes and a number of non-central attributes. Collier and Mahon call such concepts 'radial concepts' (Collier and Mahon, 1993). While the 'prototype' radial concept contains all defining (central and non-central) attributes, variants of the concept may contain only the central attribute and one of the prototype concept's non-central attributes. To designate the different meanings of the respective variant terminologically, an adjective is added to the prototype concept (Collier and Mahon, 1993, p. 848). Consequently, not all cases covered by one of the concept's variants have to exhibit all of the prototype concept's attributes. All variants nevertheless share some of the prototype concept's attributes. Thus, to allow for empirical variations of the prototype of 'corporatism', many variants have been formulated by adding an adjective. 'Sectoral' corporatism, for example, has been introduced to apply the concept to countries in which the structure of interest representation in some economic sectors is corporatist while in others pluralist patterns might prevail. Theoretically such a refinement might be of interest to reflect on how such 'mixed' systems perform macroeconomically. Empirically the refinement of the concept is instrumental to avoid overgeneralizations in describing countries' structures of interest representation. This strategy might preserve the basic meaning of the (prototype) concept, while its substantial and terminological qualification as a variant of the concept guarantees its valid empirical application. Thus, radial concepts allow the flexible adaptation of a concept to a wider context without necessarily having to make it more abstract or eventually having to resort to the use of a different concept. Yet the formulation of ever more variants of the prototype concept might negatively affect this concept's original appeal by reducing its distinctiveness and its analytical leverage by blurring clear demarcations between the different variants. Another lesson learnt from the dazzling conceptual history of 'corporatism'.

Which of the above discussed strategies one applies to adapt a concept to its research employment very much depends on the researcher's theoretical goals and the theoretical state in the respective field. In a conceptually highly fragmented context, the researcher might not only strive for more abstract concepts for empirical reasons, but also to achieve theoretical integration by cutting through the conceptual jungle. A researcher with such an interest should follow Sartori's advice and define abstract concepts with relatively little properties or attributes. In the opposite case – that is, if the concepts in a given field are highly abstract and ambiguously employed – the researcher will very likely opt for a radial concept, because increasing the level of abstraction would run counter to the researcher's intention. In addition, one might want to preserve the original concept to the largest extent possible and simply qualify it for an extended application, because it has thus far been meaningfully applied in the literature and has gained considerable prominence.

Finally, instead of respecifying existing concepts, there is always the option of forming completely new concepts. However, the benefits of forming new concepts should always be carefully weighed against potential costs. If well-specified concepts exist which already serve our theoretical interests, the temptation to form a new concept should be resisted. A pragmatic reason for this is to save energy affiliated with promoting a new concept and arguing for its usefulness. A substantive reason is that the creation of ever new concepts bears the risk of ever smaller research communities developing their own conceptual languages. This inhibits intelligible discourse across those communities and risks making intellectual cross-fertilizations among sub-disciplines increasingly difficult to achieve. If the goal of a research project is the innovation of a completely new theory, however, then concept formation will be one of its central tasks. The same holds if one aims at replacing a highly fragmented and ambiguous concept with a new one. This is what Siaroff (Siaroff, 1999) did with his proposal to capture countries' differences in their systems of interest intermediation through his concept of 'integration' instead of the established concept of corporatism. If none of the above is the goal of a research project, the formation of new concepts should be treated with care.

To this point this chapter has made clear that in order to validly apply a theoretical concept it must be properly defined in the first place, must have an unambiguous meaning and, moreover, the empirical domain it covers should correspond to the concept's defining attributes. What has not yet been addressed, though, is how to handle a concept validly in heterogeneous empirical contexts (van Deth, 1998, Rathke, Chapter 6). An extreme position would be to argue that no concept can be meaningfully applied across different contexts. One could arrive at such a position by arguing that real world objects designated by a concept relate to and affect their social, political and economic environment differently in different empirical contexts.[3] Thus, they play different roles in different contexts. For instance, the concept of parties designates reasonably similar organizations in democratic political systems. Yet, with respect to the role they play in democratic and autocratic political systems, respectively, parties differ considerably. For empirical inferences, this is not a problem, since the aim then is not to relate a concept to others, but to describe its occurrence across contexts. Yet, for causal inference it might be a problem. Thus, we may use the concept 'party' to denote equivalent (in terms of their attributes) organizations across democratic and autocratic political systems. We should not, however, automatically make causal inferences on the equivalence of the role parties play in all these contexts based on the label itself.

I will finish this section with a short remark on concepts which cannot be directly observed. It is a truism that something which cannot be observed constitutes a particular challenge in empirical research. Should political scientists therefore stop using concepts such as power, influence or legitimacy? Of course every empirical researcher wishes to operate with observable concepts, which can be validly and reliably measured. If we have the choice between a concept which is directly observable and one which is not and both fit our purpose, we should definitely go with the former. In addition, if a particular specification of a concept allows us to observe it directly, we should specify the concept accordingly. This greatly facilitates the operationalization and valid measurement of the respective concept and allows for a straightforward decision whether a particular case can be subsumed under a concept. If our theoretical and substantive interests lead us to use concepts which are not directly observable, everything which has been said so far applies as well: Specifying a (unobservable) concept properly prevents unobservability equaling unintelligibility. Particular effort must then be spent in arguing for the adequacy of a particular way of measuring a given concept (Miller, Chapter 5).

To summarize: Concepts are the building blocks of our theories. For a productive and cumulative scientific discourse among the participants of a research community it is necessary for the meaning of concepts to be clearly understood. The whole purpose of concept specification is to define and explicate a concept's meaning to avoid ambiguity with respect to a concept's (theoretical) meaning. At the same time, a concept's specification analytically demarcates it from other concepts. In addition, a properly specified concept allows the researcher to deal with the empirical vagueness inherent in any theoretical concept and constitutes a proper base on which empirical operationalization and measurement can take place (Collier, Brady and Seawright, 2004b). Thus, a concept properly specified is not only imperative for intelligible theoretical discourse but also to design an inter-subjectively comprehensible and methodologically justifiable research strategy, which serves as a sound bridge between social science theory and the 'real world':

> Let it be stressed, therefore, that long before having data which can speak for themselves the fundamental articulation of language and of thinking is obtained logically – by cumulative conceptual refinement and chains of coordinated definitions – not by measurement. Measurement of what? We cannot measure unless we know first what it is that we are measuring. (Sartori, 1970, p. 1038)
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> … It should be understood, therefore, that operational definitions implement, but do not replace, definitions of meaning. Indeed there must be a conceptualization before we engage in [empirical] operationalization. As Hempel recommends, operational definitions should not be 'emphasized to the neglect of the requirement of systematic import'. This is also to say that definitions of meaning of theoretical import, hardly operational definitions, account for the dynamics of intellectual discovery and stimulation. (Sartori, 1970, p. 1045)

Of course, the presentation of this way of proceeding is ideal-typical. Each empirical researcher will and should think about the (im-)possibilities of operationalizing a concept, while working on the theoretical specification of the concept (Gerring, 2001). Otherwise she risks finding out that, after having invested considerable effort in the specification of her theoretically highly interesting concepts, the project does not fly empirically. Yet, concept specification and the operationalization of concepts must be treated separately! If, during the research process, we recognize that it is difficult to measure a concept, it is hardly conceivable to go back and change the concept's specification with a view on data availability. Concept specification is foremost guided by a particular theoretical interest. This theoretical interest is unlikely to change due to measurement problems. Thus, when facing difficulties in measuring a concept, instead of re-specifying it to make it fit the data, one should rather discuss potential problems with the validity of the measure applied (Miller, Chapter 5). The presentation in this chapter is intended to remind researchers of the often neglected but nonetheless constitutive function well-defined concepts have in our research.

The consequences of improper concept specification can be summarized in three distinct points. Concepts whose meaning is ambiguous due to insufficient specification hamper the collective and cumulative effort of (political) scientists by leading to:

1. *Theoretical infertility*. Lack of precision in the meaning of theoretical concepts renders an intelligible and critical theoretical discourse impossible and constrains improvement on purely intellectual grounds.
2. *Empirical arbitrariness*. Not clearly specified theoretical concepts have a vague empirical denotation and their operationalization and measurement is vulnerable to criticisms of arbitrariness.
3. *Invalid (empirical and theoretical) inferences*. Concepts without a clearly defined meaning risk being stretched to empirical objects with overly heterogeneous properties and/or extended to temporal and/or spatial contexts, in which the roles of the objects covered by the respective concept are far too different to subsume them meaningfully under one concept.

Practical guidelines: six rules of concept specification

In the previous paragraphs I have argued that concepts are of prime importance for doing empirical social science research. Unfortunately, however, social science concepts often leave the reader puzzled about the concept's exact meaning and its theoretical status in the author's argument. In this section I provide six practical guidelines which help to avoid conceptual problems.

1 Search the literature for specifications of the concepts you will use in your research project!

The early phase of the research process should be spent searching the relevant literature for specifications of the concepts which will eventually be used in the research project. We might recognize that we work in a field with properly specified concepts. If applying one of these well specified concepts in our own research, we have to make sure that the specification fits our theoretical and empirical purpose – and that we explicate the definition of the concepts (Rules 2 to 6). Yet, a researcher might as well discover that her field is full of dazzling concepts which do not come with specifications. She then has to come up with such definitions herself. In order to avoid contradictory terminology, the definition should be in line with the meaning normally associated with the concept.

2 Explicate clearly and exhaustively the attributes you ascribe to the concept(s) used in your theoretical framework!

Concepts are important in empirical research, because they allow for a systematic look at the objects of investigation. To exploit a concept's full potential, the attributes one ascribes to a concept must be explicated. The explication of a concept's attributes makes sure that the researcher herself as well as potential readers becomes fully aware of the concept's meaning. We thereby avoid ambiguities, which again is a prerequisite to having a meaningful scientific discourse. When a concept's intension is explicated, existing definitions in the literature must be taken into account. This saves you energy and helps to avoid terminological babble as well as concepts that increasingly lose their distinctive meaning and analytical leverage due to cross-cutting specifications.

When I state that corporatist arrangements have a positive effect on a country's macroeconomic performance, I have to state what I mean by corporatism. This is important to allow others and myself to understand the exact content of the concept and the causal hypotheses for which it is used. It also allows us to clearly demarcate an argument from other arguments which operate with the same concepts. Corporatism is defined, among other things, by interest group concentration. It will make a difference whether concentration is located at the sectoral or the national level. Knowing this will greatly help us make sense of an author's causal hypotheses. If various studies using the same concepts come to different conclusions, checking their respective concept specifications will eventually tell us why this is the case.

3 Think hard about how the attributes of the concept relate to each other – and to the concept's overall meaning!

Since the attributes ascribed to a concept define its meaning, it is important that they add up to a coherent meaning. A concept is coherent if a logical relationship between its attributes is clearly discernible. In other words: If it makes intuitive sense to group these things under one label. Thus, it makes sense to define corporatism as a 'system of interest representation in which the constituent units are organized into a limited number of singular, compulsory, noncompetitive, hierarchically ordered and functionally differentiated categories' (Schmitter, 1979, p. 13). Adding 'networked' to this list of attributes would be confusing and adding 'competitive' would be plainly contradictory. Adding attributes whose relationship with other attributes is confusing or even contradictory decreases the coherence of a concept's meaning and thus limits its analytical purchase.

4 Try to keep your concept's level of abstraction low (if it is theoretically reasonable)!

A concept's level of abstraction should correspond to the theoretical and empirical needs of a research project. It should not be formulated in an unnecessarily abstract way. An important reason for avoiding abstract concepts in empirical research is their empirical vagueness. As the level of abstraction increases, concepts loose direct reference to a concrete set of real world phenomena. As a consequence, it becomes much more difficult to choose and argue for an indicator which allows for the valid measurement of the concept. If an abstract concept is needed, the problems of operationalization and measurement are traded against the concept's theoretical generalizability. When facing such a trade-off, we should keep in mind that a concept which cannot be reasonably operationalized and measured does not allow for empirical and causal inferences.

5 Relate the concept's attributes to the units of analysis you empirically investigate!

The attributes of a concept have to be explicitly related to the units of analysis to which the respective concept refers and which are the objects of the empirical investigation. The clarification of the relationship between a concept's attributes and its empirical referents not only prevents us from inadequately stretching concepts to objects for which they are inaptly suited. The explication of the units of analysis also contributes considerably to the comprehensibility of a concept's meaning. It allows the reader to form a concrete idea about that to which the author refers with his concept. If, for example, someone hypothesizes about a public actor's supranational preferences in EU decision-making, it will help our substantive understanding to know whether the person talks about decisions in general, legislative decisions or constitutional decisions. In addition, explicating the units of analysis to which a concept refers facilitates the assessment of the validity of a concept's empirical operationalization. A researcher who argues about the European Commission's supranational preferences in EU legislative decision-making and empirically investigates the European Commission's behavior in the bargaining on the European Constitution will not be able to convince us with her empirical results.

6 Be aware that in empirical research any concept eventually needs to be operationalized and measured!

Before one can think about the operationalization of a concept, the concept needs to be properly specified. Only after the full meaning of the concept has been determined is it then possible to make an adequate choice about a concept's operationalization and measurement. Yet, when designing a research project, one should from the very beginning take into account potential problems: Data might not be easily available and it will almost certainly prove difficult to get an empirical grip on a theoretical concept. Thus, while the proper theoretical specification is the fundamental precondition to theoretical intelligibility, the practical problems in measuring a concept (Miller, Chapter 5) will finally determine whether an empirical research project is feasible.

Application: underspecified and overextended? The concept of supranationality in European Union research

When reading academic as well as journalistic accounts on European Union (EU) politics, one frequently comes across the concept of 'supranationality'. Most often in its adjective form 'supranational'. The term 'supranational' is usually used in opposition to national. Applied to EU decision-making, which will be the main subject of this section, the 'supranational scenario' (Tsebelis and Garrett, 2000) conceptualizes political conflicts in EU decision-making as struggles about more 'national' or more 'supranational' policy solutions with actors positioning themselves according to their national or supranational policy preferences respectively.

Rule 2 of this chapter's practical recommendations states that the use of a concept should always be accompanied by the clarification of the concept's meaning. 'Supranationality' as used in the literature is defined by two dimensions: An institutional and a motivational. The meaning of the institutional dimension is straightforward: The EU's institutional-legal system is supranational, since it is a system independent of the institutional-legal orders of the member states. In addition, its supranational quality results from its superiority to member state law in the sense that in cases of conflict between national and EU law, the latter dominates the former. A supranational public actor, accordingly, is one which is constituted by the EC treaty and draws its competences from it. The meaning of the institutional dimension of supranationality is thus clearly defined by the institutional-legal quality of the political system of the EU. Its defining attributes are independence and superiority *vis-à-vis* member state law.

The motivational dimension of supranationality, on the other hand, denotes actors' interests or ideas driving their actions in EU politics. The meaning of this dimension is much less clearly defined. Usually it is taken to mean that actors with supranational preferences want 'more Europe' (cf. Pollack, 2003, p. 36). Yet, how can we conceive of an actor's preferences for 'more Europe' in EU politics, that is, when the units of analysis are individual policies (Rule 5)? For constitutional politics the answer is clear: Supranational constitutional preferences are defined by the desire to further integrate policy areas, for which the member states have exclusive or predominant policy-making competences up to this point. When bargaining about further institutional integration during EU Treaty negotiations, an actor with supranational constitutional preferences wants more competences to be transferred from the member state to the EU level. In EU constitutional politics, supranational constitutional preferences thus have a clear meaning and can in principle be unambiguously identified in empirical research (Moravcsik, 1998).

At this point it becomes obvious why the two dimensions of supranationality I explicated above, should be separated analytically: The British government might have a strong preference for the (constitutional) integration of further policy areas in the EU Treaties. Yet this does not make it a supranational actor in institutional terms. At the same time, the European Commission might strongly oppose the integration of a policy area, while being a supranational actor in institutional terms. Automatically inferring from the institutional to the motivational dimension of supranationality, and vice versa, would lead to false inference. Rule 3 of the practical recommendations shall help us avoid such false inferences by clarifying the relationship between the attributes of a concept. It is of course possible to define supranationality in terms of both dimensions – in other words, to extend the concept from the institutional to motivational dimension. The analytical usefulness and validity of such a definition, however, must be empirically established.

During the last decade, EU scholars increasingly turned their attention to the everyday politics of EU legislative decision-making. Thus, the unit of analysis changed from constitutional to legislative decisions. As stated in the practical recommendations, when extending a concept to new units of analysis, the validity of such a strategy and its meaningfulness should be carefully considered (Rule 5). According to the 'supranational scenario' the pro-integrationist European Commission and European Parliament (EP) side with pro-integrationist governments to legislatively realize 'more Europe' (Hörl, Warntjen and Wonka, 2005; Tsebelis and Garrett, 2000). Thus, in the case of the European Commission and the EP the institutional and the motivational dimension are said to coincide. According to the above definition, this is clearly not the case with respect to the so called pro-integrationist member state governments.

How then can we conceive of supranational legislative preferences? If there has not been any EU legislation and a decision will establish such legislation, those actors preferring EU legislation could be conceptualized as having supranational preferences: they want to replace national with European legislation. Such a definition would then be a direct analogy to the constitutional preferences discussed above. But how can legislative decisions be conceptualized along the national-supranational continuum, which are embedded in a policy area for which extensive European legislation already exists? In these policy areas the question is not whether to replace national policies with EU policies, but rather which form and content further EU regulations shall take. The meaningfulness and accordingly the empirical usefulness of conceptualizing the EU political space along the national-supranational continuum can be seriously questioned in such a context. Thus, when the concept of supranational preferences is extended to cover legislative politics, researchers should explicate the meaning of the concept applied to the new subject matter (Rule 5). Otherwise, concepts which proved highly meaningful and useful in one context – that is, supranational preferences in EU constitutional politics – are stretched to contexts in which their meaningfulness can be questioned and should be seriously debated by the research community. The ex post imposition of old concepts to new contexts might otherwise seriously handicap rather than facilitate our understanding of decision-making processes in the EU (Hörl, Warntjen and Wonka, 2005).

Empirical results and theoretical interpretations generated by two papers affiliated to the most encompassing and systematical large-n empirical research project on EU decision-making help to point out the conceptual problems with the application of 'supranationality' in the study of EU legislative decision-making (Kaeding and Selck, 2005; Thomson, Boerefijn and Stokman, 2004). Both studies operate with the concept of supranationality and both employ similar methodological tools with which they identify comparable empirical patterns. Comparing the theoretical inferences of these two studies allows for a discussion of the importance of investigating the fit between a concept and the empirical units of analysis to which it is applied. Michael Kaeding and Thorsten Selck analyze positional data[4] of 70 EU legislative proposals which comprised 174 controversial legislative issues (Kaeding and Selck, 2005; Thomson, Boerefijn and Stokman, 2004). Their goal is to find out how the European Commission, the EP and member state governments position themselves in EU legislative decision-making. Having identified their empirical pattern, Kaeding and Selck conclude that: 'the supranational institutions seem to be largely ideological actors taking extreme positions outside the clusters. Their policy positions are significantly different from the member states … The Commission and EP are much more pro-integrationist than any member state, a fact which our three-dimensional solution demonstrates more clearly than the existing two-dimensional studies by Selck (2003) and Thomson *et al.* (2004)' (Kaeding and Selck, 2005, pp. 282–3). From their empirical results the authors infer that the Commission and the EP are indeed institutionally and motivationally supranational actors. They thereby support the two dimensional concept of supranationality commonly used in the literature to characterize the EU's supranational institutions (Pollack, 2003, p. 36; Tsebelis and Garrett, 2000, p. 16).

Robert Thomson and his colleagues analyze exactly the same data. They employ very similar methodological tools and also rely on the concept of supranationality. With respect to the positions taken by the member state governments, the European Commission and the European Parliament in EU legislative decision-making processes, the authors conclude as follows:

> Two dimensions on which the preferences of the actors can be placed were identified. On the first dimension, the Commission and European Parliament's position are located at one end, and the reference point (the outcome if no decision is taken) at the other. The Member States are clustered at the centre of this dimension. This clustering of the Member States indicates that there are no Council members that are consistently closer to the Commission's position than others. Their support depends on the proposal at stake at any particular time. (Thomson, Boerefijn and Stokman, 2004, p. 256)

Again, the common assumption about the Commission's and the European Parliament's supranational policy preferences seems to be supported.

Yet, in scrutinizing the empirical pattern they identified and in searching for a theoretical interpretation of their empirical finding, Thomson and his colleagues did not only stretch the supranational scenario to their empirical results. Instead they checked whether the concept of supranationality can be meaningfully extended to their empirical cases. After having done this, they elaborate that '[a]lthough the ordering of actors on this dimension resembles that posited in the Integration-Independence dimension [i.e., the 'supranational' scenario, AW], we found that this ordering is neither confined to, nor even concentrated in, issues that contain choices between European harmonization versus national solutions' (Thomson, Boerefijn and Stokman, 2004, p. 256). Yet, the units of analysis of a legislative decision-making process must allow for a choice between a more 'European' and a more 'national' policy solution in order to meaningfully apply the (motivational dimension of the) concept of supranationality. If they do not, an actor's actions in the respective decision-making process cannot be driven by her preference for a more 'European' solution. Such an interpretation would amount to saying that someone who has chosen between two dishes – fruit salad and potato salad – and went for the latter was driven by her preference for meat. Specifying what the units of analysis in this case were – in other words, fruit and potato salad – excluded the 'meat preference' as a logically possible explanation for that actor's action as well as the outcome, that is, her eating potato salad. Applied to the less tasty topic of EU legislative decision-making this means that to interpret an actor's behavior in EU decision-making as supranational when 'more

Europe' is not on offer in the policy decision under investigation, one infers a wrong motive from an actor's action and erroneously proposes this motive as the cause for the political dynamic leading to the observed outcome. Such an inference is theoretically misleading.

Had Thomson and his colleagues (2004) applied the concept of the 'supranational scenario' to their empirical findings without checking the quality of their units of analysis, they would have extended the concept to referents in a theoretically misleading way. Following this strategy, they would have concluded that political dynamics in EU legislative decision-making are decisively shaped by the EP and the Commission taking 'supranationalist' positions – just as Kaeding and Selck concluded in their paper. Yet analysing the same empirical data and employing similar data analysing methods, the two studies drew quite different theoretical inferences. These differences result from Thomson and his colleagues' careful examination of their study's empirical referents. In order to interpret the pattern they identified as supranational, they checked whether the decisions in their sample involved a choice between more or less European harmonization. If it did, the expectation of the 'supranational scenario' is that the Commission – which is conceptualized to want 'more Europe' (harmonization) in the supranational scenario – positions itself on the harmonization end of the scale. Yet what they do find is that '[o]f the remaining 130 issues, we find the Commission and the reference point at opposite ends of the issue scale on 60 (46 percent) of the cases. Most importantly, these 60 issues are not concentrated in the group of 40 issues classified as harmonisation issues. Of the 60 issues on which we find the reference point and Commission at opposite extremes of the issue scales, only 16 (27 percent) referred to such harmonisation issues. Moreover, on issues involving clear choices between more or less harmonisation, the reference point and Commission were not significantly more likely to be at opposite extremes than on other issues' (Thomson, Boerefijn and Stokman, 2004, p. 253). By their close examination of their empirical data and by clear concept specification, the authors avoided the extension of the concept to units of analysis not covered by the concept. Accordingly they conclude that 'a more detailed inspection of the actor alignments does not support the supranational scenario' (Thomson, Boerefijn and Stokman, 2004, p. 252). The authors' attentive application of the concept is in line with Rule 5 of this chapter's practical applications and demonstrates how careful investigation of the units of analysis helps to avoid concept misapplication and misleading theoretical inference.

Obviously, the empirical cases analyzed by the authors of both papers show a difference in the positions taken by the Commission and those taken by the member state governments. Yet the scrutiny of the units of analysis showed that (at least in these cases) the concept of supranationality should be restricted to the institutional dimension. Extending it to the motivational dimension leads to erroneous or at least contradictory theoretical inferences. The explication of both dimensions of the concept at the beginning of this section (Rule 2, practical guidelines) allowed us to identify this restriction in the concept's applicability to EU legislative decision-making. This opens the possibility to re-specify the concept accordingly. It might as well lead to the abandonment of the concept when studying actors' behavior in EU legislative decision-making processes and lead to the application of a different concept or the formulation of a new concept – and thus to a potentially different understanding of the political dynamics governing the successive legislative integration of EU member states.

One conceptual option is to abandon the concept of 'supranationality' in order to avoid any confusion between its institutional and its behavioral dimension. Thus, one could refer to a less EU specific and more abstract concept such as 'centralization' in order to capture political dynamics leading to the harmonization of policies across EU member states. The use of this concept might invite theoretical discourse with political scientists already working with this concept, yet dealing with empirical objects other than the EU – such as for example international organizations in general (e.g., Koremenos, Lipson and Snidal, 2001). Yet the decision to abandon 'supranationality' – instead of just specifying it properly – and replacing it with 'centralization' also involves considerable costs: Instead of using the established concept – although perhaps with a slightly different specification – to relate one's argument to the rest of the literature, one first of all has to establish the new concept and relate this to the rest of the literature. Whether one takes on these costs might as well be influenced by a researcher's general interest in theoretical work. Again, these costs might be worth the effort, if the expected payoff is high enough – that is, if the chances are good that the respective scholarly community will welcome the new concept because it provides them with superior analytical leverage over their empirical field of interest.

Ideally, Kaeding and Selck had taken up the argument by Thomson and his colleagues that the concept of supranationality, defined by the institutional and the motivational dimension, cannot be meaningfully applied to the legislative cases which they analyzed to kick off a debate clarifying the concept's limits. Both studies' partly contradictory theoretical interpretations, and the careful conceptual analysis by Robert Thomson and his colleagues improve our conceptual understanding of political processes in the EU. Taking this knowledge into account when re-specifying the concept of supranationality to apply it to EU legislative research or when forming new concepts will improve our inferences from empirical analyses.

Conclusion

The aim of political science research is to add to our systematic knowledge about political facts, events and processes. To be able to achieve this we need appropriate theoretical and methodological tools. In this chapter I have argued that to profit most from the theoretical and analytical potential of concepts, their meaning has to be clearly specified. It has to be specified with respect to a concept's (unambiguous) meaning – that is, its intension – as well as its empirical referents (extension). If theoretical concepts are properly specified they serve as solid bridges between social science theory and the 'real world' social processes in which we are interested.

Ambiguous concepts not only hamper intelligible theoretical discourse, thus frustrating the improvement of social science theory. Ambiguous concepts also lend themselves to misleading theoretical ex post rationalization of empirical findings. This merely confirms perspectives on a given subject of which we grew fond, rather than revealing new insights. Thus, they are also stumbling blocks on our way to valid empirical and causal inferences. Having said all this, this chapter's final comment on ambiguous concepts is: Avoid them by all means!

Notes

1. Schmitter's (1979) article is a brilliant discussion of an overly ambiguous concept – that is, corporatism – and an outstanding illustration of how to overcome such ambiguity by concept specification.
2. However, to express the relationship between concepts – that is, to formulate causal hypotheses – formalization allows much more precise statements than does a non-formalized language.
3. Note that what I discuss here is the theoretical equivalence of a concept in different contexts. This is different from a discussion of the empirical equivalence of indicators to measure the same concept. While my discussion addresses the question whether the same concept has the same theoretical status across different contexts, the latter discusses which indicators are most

suitable to measure the same concept in different contexts (for such a discussion, see van Deth 1998 and Rathke, Chapter 6).

4. In interviews, experts positioned the EU legislative actors on a continuum from 1 to 100 on each of the 174 issues. The end points of the scale represent the extreme solutions for a respective issue. For example, no animal fat allowed in chocolate vs. 50 percent of animal fat allowed in a piece of chocolate. The actors were located on the respective issue dimension according to their preferences.