2 How many approaches in the social sciences? An epistemological introduction

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Paradigms in the social sciences

Partisans articulate their positions with passion and intensity, yet the nature of what divides them is hard to pin down. At times we hear of a stand-off between 'qualitative' scholars, who make use of archival research, ethnology, textual criticism, and discourse analysis; and 'quantitative' scholars, who deploy mathematics, game theory, and statistics. Scholars in the former tradition supposedly disdain the new, hypernumerate, approaches to political science as opaque and overly abstract, while scholars of the latter stripe deride the 'old' ways of studying politics as impressionistic and lacking in rigor. At other times the schism is portrayed as being about the proper aspiration of the discipline – between those who believe that a scientific explanation of political life is possible, that we can derive something akin to physical laws of human behavior, and those who believe it is not . . . at still other times the rivals are portrayed as 'rational choice theorists,' whose work is animated by the assumption that individuals are rational maximizers of self-interest (often economics, sometimes not), and those who allow for a richer range of human motivations (Shapiro, Smith and Masoud 2004a: 1).

This quotation from the introduction to a recent volume on *Problems and Methods in the Study of Politics* addresses a core methodological issue for the social sciences in general: how many approaches/methods are available for students in the discipline? And what are the main cleavages along which they are divided?

In *The Structure of Scientific Revolutions*, Thomas Kuhn (1962) suggested that mature scientific disciplines rely upon a paradigm that defines what to study (relevance of social phenomena), why to study (formulating explanatory hypotheses) and how to study (through which methods). In normal times the presence of a paradigm, based upon previous acquisitions in a discipline,

allows for the accumulation of knowledge. In times of turbulence, scientific revolutions produce changes of paradigm. An important element of a paradigm is that it is accepted by the whole community of scientists active in a certain discipline. According to Kuhn, in the 1960s the existence of a paradigm in the social sciences was an open question; in the 2000s, it remains so.

Some social scientists insist that there is only one approach (and thus one paradigm) in the social sciences. King, Keohane and Verba (1994: 6) synthesized the 'ideal to which any actual quantitative and qualitative research' should aim in the following definition of 'scientific research':

1 The goal is inference. Scientific research is designed to make descriptive or explanatory inferences on the bases of empirical information about the world . . .
2 The procedures are public. Scientific research uses explicit, codified, and public methods to generate and analyse data whose reliability can therefore be assessed . . .
3 The conclusions are uncertain . . .
4 The content is the method. . . . scientific research adheres to a set of rules of inference on which its validity depends.

Not all social scientists, however, share all these assumptions or even believe in the possibility of a common definition of scientific research. Some think that social science is pre-paradigmatic, still in search of a set of unifying principles and standards; others believe that it is post-paradigmatic, having shed a set of scientistic assumptions tied to a particular conception of modernity (the post-modern approach). Yet others believe that it is non-paradigmatic, in that there can never be one hegemonic approach and set of standards, but that the social world is to be understood in multiple ways, each of which may be valid for specific purposes; or even that it is multiparadigmatic, with different paradigms either struggling against each other or ignoring each other.

Some social scientists are specifically concerned with this issue, specializing in the philosophy of social science and the theory of knowledge. Others take the basic issues for granted and concentrate on empirical research. We agree that not all social scientists need to be philosophers, and certainly most social science research would never get off the ground if we had first to resolve the fundamental questions about being and knowing. Nevertheless, some reflection on the foundations of knowledge is necessary as a preliminary to all research.

We argue that it is possible to encompass much of the field, not by imposing a single truth, but by setting certain standards of argumentation and debate while recognizing that there are differences in approaches and types of

evidence. Although these do not inevitably constitute fundamentally different world-views, they are not necessarily all compatible. Researchers need to be aware of the various approaches, the differences among them, and the extent to which they can be combined.

Disputes over approaches are often presented in a rhetorical form based upon a dualist opposition of two main approaches (usually positivistic versus humanist, or quantitative versus qualitative) (Cresswell 1994). Others follow a more nuanced 'two-plus-one' approach, with two more extreme positions and a more moderate version of one of them (as in Corbetta 2003). In what-follows, we have constructed some simplified ideal types of rival approaches in order to explore their inherent logic. Such devices are inescapable if we are to understand clearly the main issues at stake, although in practice social science research is more complex and different approaches are mixed in various ways. We do not claim that any social scientists follow precisely these formulations, but many of the issues discussed below provide relevant guidelines for the methodological choices we often have to make in our research.

What can we know and how? Ontologies and epistemologies in the social sciences

Usually, competing approaches in the social sciences are contrasted on (a) their *ontological* base, related to the existence of a real and objective world; (b) their *epistemological* base, related to the possibility of knowing this world and the forms this knowledge would take; (c) their *methodological* base, referring to the technical instruments that are used in order to acquire that knowledge (Corbetta 2003: 12–13).

The ontological question is about *what* we study, that is, the object of investigation. Disputes about the existence of a physical world go back to the ancients. This is not the point at issue here, since few people now bother to dispute the existence of physical objects.[1] Rather, the question is how the world fits together and how we make sense of it. The natural sciences are still home to arguments about how we identify natural phenomena, for example whether taxonomies of species really exist in nature or are the product of scientific classification. For *nominalists*, categories only exist because we arbitrarily create them. For *realists*,[2] the categories are there to be discovered. Again, we should not overstate this point. There are certain categories that are unchallenged and others that everyone accepts are the product of convention.

Almost everyone accepts a distinction between living forms and inert objects, and most accept a distinction between human beings and other animals. On the other hand, there was an argument in 2006 about the definition of a planet following the discovery of objects in the solar system smaller than Pluto, which had been accepted as a planet for years. This was not an argument about facts (the existence or size of the new body), but a purely nominalist argument about definitions (Kratochwil, ch. 5, uses the same example).

Most disputes between nominalists and realists in the natural sciences are at the margins, where conventional categories and labels can be challenged on the grounds that they are misleading or that they reify what should properly be seen as concepts rather than objects. In the social sciences there are much wider differences about the degree to which the world of social phenomena is real and objective, endowed with an autonomous existence outside the human mind and independent of the interpretation given to it by the subject (Corbetta 2003). For some, the only 'real' object is the individual person, with all other units being mere artefacts. This is the basis for 'methodological individualism' and for most, but not all, rational choice approaches.[3] Most social scientists, however, use larger categories such as class, gender or ethnicity, provoking disputes about the extent to which these are real objective distinctions, the product of our own categorization, or just concepts.[4]

Epistemology is about *how* we know things. It is a branch of philosophy that addresses the question of the 'nature, sources and limits of knowledge' (Klein 2005). Knowledge here is *propositional* knowledge – distinct from 'belief' in that it requires that we give reasons for saying that something is so and can potentially convince others. Again, the question arises also in the natural sciences; but they have shared standards of evidence, argument and logic. This is not so in the social sciences, with some social scientists calling for objective evidence akin to that of the natural sciences, while others insist that other forms of knowledge are possible. For example, a common device in positive social science is to contrast 'myth', as widely shared belief, with 'reality', revealed by empirical research; the task of the social scientist is to expose this falsehood and discard what is not empirically verifiable or falsifiable. Many anthropologists, however, would reject this way of proceeding, on the grounds that myths and beliefs are data as valid as any other and that we have no business telling other people (especially in other cultures) that their construction of the world is wrong, as opposed to merely different. Less radically, many social scientists would agree that myths are important factors in themselves and their role in social behaviour is independent of whether they are true or false. Of course, social science itself can be charged with existing on myths, for example the

Table 2.1. How many ontologies and epistemologies in the social sciences?

	Positivist	Post-positivist	Interpretivist	Humanistic
Ontological issues				
Does social reality exist?	Objective; realism	Objective, critical realism	Objective and subjective as intrinsically linked	Subjective: science of the spirit
Is reality knowable?	Yes, and easy to capture	Yes, but not easy to capture	Somewhat, but not as separate from human subjectivity	No; focus on human subjectivity
Epistemological issues				
Relationship between the scholar and his/her object	Dualism: scholar and object are two separate things; inductive procedures	Knowledge is influenced by the scholar; deductive procedures	Aims at understanding subjective knowledge	No objective knowledge is possible
Forms of knowledge	Natural laws (causal)	Probabilistic law	Contextual knowledge	Empathetic knowledge

myth of rationalized institutions that – according to neoinstitutional analysis of organizations – dominates in modern societies (Meyer and Rowan 1983: 27). As in other domains, this modernist myth is challenged by other discourses stressing the post-modern character of contemporary societies.

Taking these two dimensions together, we can identify four broad approaches (Table 2.1). Again, these should not be taken as hard categories (or fixed labels), but rather as positions on a spectrum from the most positivistic to the most humanistic.

The traditional approach in *positivism* (as represented in the work of Comte, Spencer and, according to some, Durkheim)[5] is that social sciences are in many ways similar to other (physical) sciences. The world exists as an objective entity, outside of the mind of the observer, and in principle it is knowable in its entirety. The task of the researcher is to describe and analyse this reality. Positivist approaches share the assumption that, in natural as in social sciences, the researcher can be separated from the object of his/her research and therefore observe it in a neutral way and without affecting the observed object. As in the natural sciences, there are systematic rules and regularities governing the object of study, which are also amenable to empirical research. In the

words of Emil Durkheim (1982: 159), 'Since the law of causality has been verified in other domains of nature and has progressively extended its authority from the physical and chemical world to the biological world, and from the latter to the psychological world, one may justifiably grant that it is likewise true for the social world.'

In *neo-positivism* and then *post-positivism*, these assumptions are relaxed. Reality is still considered to be objective (external to human minds), but it is only imperfectly knowable. The positivist trust in causal knowledge is modified by the admission that some phenomena are not governed by causal laws but, at best, by probabilistic ones. This does not represent a sharp break with the natural sciences but follows modern scientific developments (Delanty 1999). If positivism closely resembles the traditional scientific method (or Newtonian physics) in its search for regularities, post-positivism is closer to modern scientific approaches, which accept a degree of uncertainty. *Critical realist* epistemology holds that there is a real material world but that our knowledge of it is often socially conditioned and subject to challenge and reinterpretation.[6] There are mechanisms governing human affairs that may be unobserved and unobservable, but these are not therefore to be discounted. Again, this is also true in the natural sciences, where theories have often been formulated and applied before the underlying causal mechanisms have been explicated.

Similar ideas are present in *(social) constructionism* (sometimes called constructivism[7]). This approach does not, as is sometimes thought, argue that the physical world itself is the product of the imagination of the social scientist; rather, it is he/she who puts order onto it. As Hacking (1999: 33) explains: 'Social constructionists tend to maintain that classifications are not determined by how the world is but are convenient ways to represent it.' Theories are not descriptions to be evaluated by their literal correspondence to some discoverable reality, but partial ways of understanding the world, which should be compared with each other for their explanatory power (Kratochwil, ch. 5). The world is not just there to be discovered by empirical research; rather, knowledge is filtered through the theory the researcher adopts.

These ontologies and epistemologies shade into the *interpretivist* approach. Here, objective and subjective meanings are deeply intertwined. This approach also stresses the limits of mechanical laws and emphasizes human volition. Since human beings are 'meaningful' actors, scholars must aim at discovering the meanings that motivate their actions rather than relying on universal laws external to the actors. Subjective meaning is at the core of this knowledge. It is therefore impossible to understand historical events or social

phenomena without looking at the perceptions individuals have of the world outside. Interpretation in various forms has long characterized the study of history as a world of actors with imperfect knowledge and complex motivations, themselves formed through complex cultural and social influences, but retaining a degree of free will and judgement.[8]

Historians also recognize that the interpretation is often dependent on the values and concerns of the historian him/herself and that reinterpretation of the past (revisionism) is often stimulated by the political agenda of the present. Such traditional forms of interpretation have been joined by a newer school of interpretivism derived from post-modernist premises (Bevir and Rhodes 2003). This school casts doubts on the epistemological constants of much social science, which it sees as unduly influenced by modernist assumptions about order, causation and progress (themselves in turn derived from nineteenth-century natural science). Interpretation works at two levels. The world can be understood not as an objective reality, but as a series of interpretations that people within society give of their position; the social scientist, in turn, interprets these interpretations. In a further reflexive turn, social scientists' interpretations feed back to the people through literature and media, influencing them yet again in what Giddens (1976) calls the 'double hermeneutic'. This is one reason why relationships that may have held in the past might not hold in the future (Hay 2002).

The *humanistic* approaches shift the emphasis further towards the subjective. In this perspective, what distinguishes human science from natural sciences is that human behaviour is always filtered by the subjective understandings of external reality on the part of the people being studied and the researcher him/herself. Social science is therefore, in the often-quoted definition proposed by Clifford Geertz (1973: 5), 'Not an experimental science in search of laws but an interpretative science in search of meaning'. In the most radical versions of this approach, reality does not exist beyond the (relative and partial) images the various actors have of it. Knowing the reality is therefore impossible, and scholars should focus on the meaning through empathetic knowledge.

How many methodologies in the social sciences?

The methodological question refers to the instruments and techniques we use to acquire knowledge. At one level, this is independent of the ontological and epistemological questions just discussed, since there are multiple ways of

acquiring each type of knowledge. In practice, they tend to be linked, since positivistic social science lends itself naturally to 'hard' methods, seeking unambiguous data, concrete evidence and rules and regularities, while more interpretive approaches require 'softer' methods allowing for ambiguity and contingency and recognizing the interplay between the researcher and the object of research (but see below). All these differences are linked with the differing final scope of the research.

In the positivist tradition, research aims at singling out causal explanations, on the assumption of a cause–effect relationship between variables (see Héritier, ch. 4). Researchers aim at an explanation that is structural and context-free, allowing generalization and the discovery of universal laws of behaviour. Such laws may be discovered in two ways. The *inductive* approach, which is associated with pragmatism or behaviourism (Hay 2002), involves deriving generalizations from specific observations in a large number of cases. Positivists in the more scientific tradition, however, would insist that one start with a theory, which then generates hypotheses (an expected state of affairs) which are then subjected to the test of hard facts and only accepted if they survive the ordeal (see Héritier, ch. 4).[9] This is the *hypothetico-deductive* (deductive-empirical) method,[10] in which the study of social reality utilizes the conceptual framework, techniques of observation and measurement, instruments of mathematical analysis and procedures of inference of the natural sciences (Corbetta 2003: 13). Since it is rarely possible in the social sciences to conduct experiments, large datasets and statistical analyses are used in order to identify and isolate causes and effects in a rigorous manner and arrive at a single explanation. This is not to say that positivists use only quantitative methods; but where they use other (qualitative) methods, they follow the same logic of inference. The main aim is 'identifying, assessing and eliminating rival explanations' (Collier, Brady and Seawright 2004a: 229).

By contrast, interpretive/qualitative research aims at understanding events by discovering the meanings human beings attribute to their behaviour and the external world. The focus is not on discovering laws about causal relationships between variables, but on understanding human nature, including the diversity of societies and cultures. More specifically, following Weber, this type of social science aims at understanding (*verstehen*) the motivations that lie behind human behaviour, a matter that cannot be reduced to any predefined element but must be placed within a cultural perspective, where culture denotes a web of shared meanings and values (see della Porta, ch. 11, and Keating, ch. 6). Theory is important, but is not always established prior to the research as in the deductive-empirical approach. In the form of

'grounded theory', it may be built up in the course of the research, but then be available for further research and the study of other cases. Cases are not broken down into variables but considered as interdependent wholes; generalization is achieved by assigning cases to classes and approximating them to ideal types. Context is considered as most important since research on human activity must consider an individual's situational self-interpretation (Flyvbjerg 2001: 47). Predictability is impossible since human beings change in time and space and, in the words of Bourdieu (1977: 109), 'practice has a logic, which is not that of logic'. The outcome of the research then takes the form of specific explanations of cases, but also of refined concepts for the analysis of future cases.

This type of research, like the positivist approach, seeks explanations for social outcomes but does not expect to derive these from universal rules. Rather, explanation comes from the interpretation of people's motives for their actions. Ferejohn (2004: 146) clarifies this distinction by contrasting 'externalist' and 'internalist' explanations:

> Externalists explain action by pointing to its causes; internalists explain action by showing it as justified or best from an agent's perspective. Externalist explanations are positivist and predictive; internalist explanations are normative or hermeneutic. Externalists tend to call themselves political scientists; internalists, political theorists. And, both externalists and internalists agree, if they agree on little else, that they are engaged in different enterprises.

Sometimes this difference is presented as a contrast between quantitative (positivist) and qualitative (interpretive) methods (Creswell 1994; Corbetta 2003). This is a source of considerable confusion, conflating ontology and epistemology on the one hand with methods and methodology on the other. The quantitative method refers to sophisticated data analysis using large numbers; there is certainly a stream in social science that is both positivist and quantitative in approach. Brady, Collier and Seawright (2004) describe a 'mainstream quantitative method' as an approach based upon the use of regression analysis and related techniques aiming at measuring causal inference; but note that work in the positivist tradition also makes use of non-quantitative material such as case studies, paired comparisons, interview records and even ethnographic approaches in field research and interpretation. King, Keohane and Verba (1994), leading exponents of the positivist approach, accept that qualitative methods may be used as a supplement to quantitative methods as long as they follow the same logic. The chapters in Brady and Collier (2004) argue that qualitative methods can tackle questions

that quantitative methods cannot encompass, but remain within the same positivist epistemological framework. Even participant observation is often used within 'theory-driven' research designs (Lichterman 2002). Laitin (2003) likewise admits to the validity of narrative approaches but only as part of a tripartite approach in conjunction with statistics and formal modelling. For Laitin, narratives can provide plausibility tests for formal models, mechanisms that link dependent and independent variables, and ideas for searching for new specifications of variables that have yet to be modelled.

There is, however, another rather different, more specific meaning often given to the term qualitative methods, linked to the interpretive approach derived from ethnography and anthropology and which has now arrived in other areas of the social sciences. As defined by Denzin and Lincoln (2000: 3):

> Qualitative research is a situated activity that locates the observer in the world. It consists of a set of interpretive practices that make the world visible. These practices transform the world. They turn the world into a series of representations, including field notes, interviews, conversations, photographs, recordings and memos to the self. At this level, qualitative research involves an interpretive, naturalistic approach to the world. This means that qualitative researchers study things in their natural settings, attempting to make sense of, or to interpret, phenomena in terms of the meanings people bring to them.

Favoured methods for this are unstructured interviews, focus groups, textual analysis and content analysis (see Bray, ch. 15). However, just as positivists may make use of interviews, case studies and even participant observation, so interpretivists sometimes use quantitative techniques. Sophisticated computer software is available for analysis of the content of speech and texts to identify key words, patterns of symbols, codes and references. This shows once again that we should not confuse issues of epistemology with those of methodology or research technique.

From methodology to method

It would therefore be a great simplification to say that there is a distinction between quantitative and qualitative methods corresponding to the distinction between positivist and interpretivist epistemologies. Methods are no more than ways of acquiring data. Questions about methods do, however, come together with epistemology and theory in discussions about *methodology*, which refers to the way in which methods are used. Here we face choices

pointing in the direction of more or less formally structured approaches and 'harder' or 'softer' methods.[11] To explore them, we first present a simplified set of choices to be made in research design and in method selection (see also della Porta, ch. 11).

The first choice is in the framing of the research question. Positivists will usually start with a hypothesis deductively derived from theory and previous knowledge. Typically, this will postulate some expected state of affairs or causal relationship and be empirically falsifiable. By this we do not mean that it is actually false, merely that the conditions under which it can be rejected are specified. If it is not falsified, then it can be taken as true, not only for the cases in question but for all cases with the same characteristics. Interpretivists (or qualitative researchers in the restricted sense) work more inductively, build up the research question in the course of the research and are prepared to modify the design while the research is in progress. There is thus no clear time distinction between the research design and its implementation, as they are interlinked with continuous feedbacks. Positivists take care to operationalize their concepts and hypotheses in scientific and general terms, while interpretivists let the concepts emerge from the work itself.

Another difference refers to the number of cases analysed, as well as the criteria for selecting them. Positivists will often choose a large number of cases to achieve the maximum generalizability and capture most sources of variation. Alternatively, they will choose a small number of cases, but rigorously select them in such a way that their differences can be specified precisely. In J. S. Mill's (1974) classic formulation, two cases should be chosen such that they share only one attribute in common, or so that they differ in only one attribute. In this approach, numbers are not necessarily used, and cases can be few: the logic is, however, the approximation to a statistical type of analysis, with concerns with (statistical) representativity, validity and reliability. Non-quantitative techniques must thus follow the same logical structure and rules for scientific inference (King, Keohane and Verba 1994).[12] Interpretivists, on the other hand, will select cases on the basis of their inherent interest (for example, paradigmatic cases), not because they are typical of a category but for what they tell us about complex social processes.

Positivists usually employ the language of variables. That is, they are not interested in cases as such, but in the properties of those cases that cause them to differ. Since they are concerned with general or universal laws, they want to know what factors cause which outcomes in social life, for example what is the causal relationship between economic growth and democratization. This requires that they develop an operational definition of economic growth and

of democratization and ways of measuring them. These then become the variables in the analysis, with economic growth as the 'independent' or causal variable and democratization as the 'dependent' or caused variable. Of course, it is rarely the case that one independent variable will everywhere and always produce the same effects on the dependent variable, but this merely means that more variables need to be added so that, eventually, all variation is accounted for. In the words of Przeworski and Teune (1970), the aim is ultimately to 'eliminate proper names' – that is, to account for social processes by reference to general rules without talking about individual cases, since these will all be accounted for within the general rules (Corbetta 2003). Context for these social scientists merely consists of variables that have yet to be specified adequately (Laitin 2003).

Neo-positivist approaches have relaxed the assumption that knowledge is context-free and that the same relationships among variables will hold everywhere and at all times. Instead, there is more emphasis on the particular and the local, and on the way in which factors may combine in different circumstances. To capture this contextual effect, researchers have increasingly resorted to the idea of institutions as bearers of distinct patterns of incentives and sanctions, and on the way that decisions taken at one time constrain what can be done later. These institutional factors may be expressed in the form of variables, but an important role is played by comparative study of a small number of cases, where the variation is the institutional structure and its historical evolution (see Steinmo, ch. 7). Neo-positivists seek to express the effect of context in the form of institutional structures and try to avoid the concept of culture as impossible to operationalize and inimical to general theorizing. Others, however, have moved from institutions into culture, providing a bridge between interpretivist and positivist approaches (see Keating, ch. 6).

Interpretive analyses keep a holistic focus, emphasizing cases (which could be an individual, a community or other social collectivity) as complex entities (della Porta, ch. 11) and stressing the importance of context. Concepts are orientative and can be improved during the research. The presentation of the data is usually in the form of thick narratives, with excerpts from texts (interviews, documents and ethnographic notes) presented as illustration. The assumption of mutual influence among the many factors at work in any case discourages any attempt to reason about causes and effects or to generalize. Understanding reality implies 'immersing ourselves in information about the actors in question, and using both empathy and imagination to construct credible accounts of their senses of identity' (Smith 2004: 43). In such an enterprise, methods generally labelled as qualitative – such as interpretative

textual analyses, ethnographic fieldwork, biographical studies or participant observation – are key (see Bray, ch. 15).

Another difference is in the relationship of the researcher to the research object: how much participation is permissible in the situation to be observed? How much of a stranger should the researcher be? And how sympathetic towards the point of view of the object of his/her research? The positivist sets up a complete separation between the observer and what is observed, taking care not to 'contaminate' the research by becoming part of it. S/he will prefer standardized questionnaires and interview schedules, anonymized surveys, rigorous coding of responses and, often, quantitative techniques. The interpretivist will tend, on the contrary, to immerse him/herself in the situation to be studied, to empathize with the population and to see things from their perspective. Anthropologists spend long periods in the field seeking to gain an inside knowledge. The sociology of intervention (as pioneered by Alain Touraine) involves the researchers working with social movements and the activists they study in a common path, with the aim of helping the latter to interpret the situation and engaging in mutual learning. In the most radical understanding, all statements about the external world have such strong subjective elements that no shared observation can exist. The acknowledgement of the role of interactions between researchers and the object of the research poses many ethical issues; among others, whom to accept as a sponsor, how much to reveal about the research to the interviewees, how to protect their privacy, how to compensate them for their collaboration, how to keep them informed about the results of the research and how to avoid manipulation.

Another critical question that differentiates approaches concerns value-neutrality. In the positivist perspective, the researcher brings no normative, ideological or political perspectives to bear on the research. S/he is merely seeking the unadorned truth. Critics would argue that this often conceals a normative agenda and indeed that the founding assumptions of positivism themselves reflect a value choice.[13] Positivists counter that, if this is the case, then all such normative tendencies should be declared in advance. Normative work as such is, according to this perspective, a separate endeavour, which belongs in the field of ethical philosophy. Interpretivists would tend not to make such a sharp distinction between empirical and normative work; taken to its fullest, this approach denies the distinction between facts and values altogether. More moderate versions argue that most language and speech acts have both descriptive and normative elements within them, that concepts themselves usually have some normative content, and that the researcher should be aware of this. Recently, there have been conscious efforts to pull

Table 2.2. How many methodologies in the social sciences?

	Positivist	Post-positivist	Interpretivist	Humanistic
Which methodology?	Empiricist, aiming at knowing the reality	Mainly empiricist, recognizing context	Relative focus on meanings, context	Focus on values, meaning and purposes
Which method/s?	Imitating the natural method (experiments, mathematical models, statistical analysis)	Based upon approximations to the natural method (experiments, statistical analysis, quantitative interviews)	Seeking meaning (textual analysis, discourse analysis)	Empathetic interactions between researchers and object of research

together normative work derived from philosophy with empirical research (see Bauböck, ch. 3). While in one sense new, this also represents a return to the classical era of social thought. Flyvbjerg (2001) has controversially suggested that, since the social sciences can never gain the explanatory power of the natural sciences because of the nature of the world, they should return to this earlier age and seek to provide reflexive analysis and discussions of values and interests aimed at praxis, that is, to contribute to the realization of a better society. This in turn has sparked some critical rejoinders (Laitin 2003).

Returning to our fourfold classification, and with the caveats already mentioned, we can summarize some main methodological assumptions (Table 2.2).

How many ways to knowledge?

How exclusive must be our methodological choices? Should we leave space for epistemological anarchism, and trust exchanges with scholars working within the other 'paradigm'? Even switching between the two? Or is the building of knowledge only possible within one paradigm? Is the combination of approaches/methods useful to overcome the limits of each methodology? Or would it risk undermining the soundness of the empirical results?

Three approaches to these issues can be singled out in the social sciences:

(a) *Paradigmatic, exclusive approach.* In the light of Kuhn's conception of the role of paradigm, some social scientists aim at a paradigmatic science,

where only one paradigm is considered as the right one, combining theory, methods and standards together, usually in an inextricable mixture (Kuhn 1962: 109). Those who see the social sciences as paradigmatic stress the importance of converging on (or imposing) one single way to knowledge.

(b) *Anarchist, hyper-pluralistic approach.* At the other extreme, there is an 'inclusive' position that combines scepticism about a 'true' knowledge with enthusiasm for experimentation with different paths to knowledge. Those who subscribe to this position to various extents support Feyerabend's anarchism and his belief that:

> the world we want to explore is a largely unknown entity. We must therefore keep our options open . . . Epistemological prescriptions may look splendid when compared with other epistemological prescriptions . . . but how can we guarantee that they are the best way to discover, not just a few isolated 'facts', but also some deep-lying secrets of nature? (Feyerabend 1975: 20).

(c) *The search for commensurable knowledge.* Between those two extremes, there are positions that admit the differences in the paths to knowledge and deny the existence of a 'better one', but still aim at rendering differences compatible.

Within this third perspective – which we tend to follow in this volume – it is important to compare the advantages and disadvantages of each method and methodology but also be aware that not all are compatible. Goals that cannot be maximized at the same time include seeking precise communication as opposed to fertility in the application of concepts, parsimonious explanations as opposed to thick descriptions, and generalizability as opposed to simplicity (Collier, Brady and Seawright 2004a: 222). It may therefore be necessary to trade off one advantage against another. This choice will be made on the basis of the fundamental question the researcher is trying to answer – for example, whether he/she is trying to explain a particular case; to gain nomothetic knowledge (discovering general rules); or seeking ways to achieve a better society. It depends on the preferences of the researcher, and on the sorts of data that are available, including reliable statistical data or detailed field data requiring long immersion in the field.

The choice of approach is linked to another choice in social science research: whether to start with a theory, a method or a problem. Those aiming at a paradigmatic social science will often start with a theory, seeking to test it with a view to proving, disproving or modifying it and so contributing to universal knowledge. This is often tied to a particular methodology to allow studies to be reproduced and compared. Those interested in a specific

problem, on the other hand, will tend to look for the method and approach that seems to offer more by way of understanding of the case. Exponents of the first approach are accused of studying methods for their own sake and choosing only issues that are amenable to that method – summed up in the old adage that if the only tool you have is a hammer, every problem starts to look like a nail (Green and Shapiro 1994; Shapiro 2004). Those who focus on problems, in contrast, are accused of adding nothing to the writings of historians and journalists (Shapiro, Smith and Masoud 2004a).

Ways of combining knowledge can be characterized as synthesis, triangulation, multiple perspectives and cross-fertilization. Synthesis involves merging elements of different approaches into a single whole and can be done at various levels. Synthesizing different epistemologies is virtually impossible, since they rest on different assumptions about social reality and knowledge. Methodologies may be easier to synthesize since, as we have seen, they are not necessarily tied to specific epistemological assumptions. Techniques and methods are most easily combined since, as we have noted, many of them can be adapted to different research purposes. So comparative history and historical institutionalism have adopted and adapted techniques from comparative politics, history and sociology to gain new insight into processes of change.

Triangulation is about using different research methods to complement one another. Again, it is difficult to triangulate distinct epistemologies, easier with methodologies and very common with methods. So positivists can incorporate interviews and textual analysis into their research designs, although using these as hard data rather than in the manner of interpretivists. Case studies are frequently used to complement large-N statistical analyses as ways of opening the 'black box' of explanation (see Héritier, ch. 4). Survey research may be complemented by ethnographic work, which explores the way in which questions are understood and the meanings of the responses.

Multiple perspectives implies that a situation may have more than one interpretation according to how we view it. De Tocqueville (1999) wrote that in his life he had met theorists who believed that events in the world owed everything to general causes, and practical people who imagined that daily events and actions were those that moved the world – he added that both were mistaken. Allison's (1971) study of the Cuban Missile Crisis examined the same events using different frames to come up with different explanations.

It has been said that everyone is born either an Aristotelian or a Platonist (Hacking 1999: 84), yet hardly any social scientist now is a naïve empiricist who believes that the world represents itself to us without interpretation.

Conversely, nobody in mainstream social science denies the existence of the physical world or maintains that reality is entirely subjective and in our minds. This encourages a cross-fertilization in a large middle ground.

Concepts often arise in the social sciences by different tracks, derived from slightly different starting points but ending in similar places. For example, the concept of 'framing', widely used in policy analysis to indicate the different ways in which people will define and conceptualize a policy issue or problem, can be derived from an anti-positivist and interpretivist position (Fischer 2003) but also from a positivist one. It has been used in social movement research since long before the so-called 'cultural turn' by scholars interested in strategic action by collective actors (such as David Snow), but also by others more interested in the micro-dynamics of cognition (such as William Gamson). In all cases, the idea is that situations can be interpreted differently and presented differently to evoke different reactions from the same set of facts. The differences are in exactly how much weight is given to the objective world and how much to its interpretation. The concept of culture, much used by interpretivists, is rejected by positivists and rational choice analysts but then often brought back in as normative institutionalism or shared meanings and understandings that underpin policy communities (see Keating, ch. 6). Context is central to ethnographic and interpretivist approaches, where it is deeply textured and rich, but is also used in neoinstitutionalist analysis and even features in the hardest regression analyses (where difficult whole cases are expressed as dummy variables). New institutionalism has come into the social sciences through several doors: in political science, where it is a response to decontextualized rational choice approaches; in sociology, where it draws on organizational theory; and in economics, where it draws on economic sociology. The result is a set of concepts that are very similar but, because of their distinct origins and vocabulary, never quite identical.

There is also a large crossover in ways of developing and using theory. As mentioned, *grounded theory* does not start with a deductively produced hypothesis but with experience; nevertheless, it does then go on to build up general theory of wider applicability. It owes a lot to the American pragmatist tradition, with roots in a 'realist' ontology, but it has been extended and elaborated in more interpretivist approaches. Meanwhile, in the United States, that same realist ontology has evolved into varieties of rational choice approaches, based supposedly on the solid foundation of the individual person, but in practice using an ideal-type construct and models derived from deductive reasoning. Indeed, rational choice approaches themselves seem to be compatible both with determinism (on the assumption that preferences are

knowable and outcomes predictable from individual self-maximization) and with free will (in that the individual does choose). A great deal of social science proceeds by going back and forth between theory and cases, using the one to develop and deepen understanding of the other.

Sometimes the cross-fertilization is explicitly acknowledged. In a contribution to a volume significantly titled *Rethinking Social Inquiry. Diverse Tools, Shared Standards*, Collier, Seawright and Munck (2004) stress the importance of good theories and empirical methods, but also appreciate the contribution of interpretive work to concept formation and fine-grained description. Many of the classic works in sociology and political science have taken the form of interpretive case studies from which general theories have been developed by example, replication and extension (Van Langenhove 2007). Examples are Alexis de Tocqueville's *De la démocracie en Amérique* and *L'ancien régime et la révolution*, but also more recent historical sociology in the school of Barrington Moore Jr. Qualitative analysis has also been used to highlight causal effects by focusing on striking cases where the impact is clearest and the detailed mechanisms can be examined. In this way, social scientists can proceed from correlation, where the same causes are associated with the same effects, to explanations of why and how.

Influences come not only from within the discipline but also from other areas of science. Newtonian physics, with its search for laws and constants, has been an inspiration for positivist social science, while its opponents have drawn attention to the uncertainties underlying modern physics and the huge epistemological assumptions among which scientists have to choose (such as the existence of one or parallel universes). Evolutionary biology now provides inspiration for historical institutionalists (see Steinmo, ch. 7).[14] Rational choice scholars are inspired by neoclassical economists, while institutional economists learn from sociology. History long provided the model and tools for the study of politics in Britain, while law was its basis in many European countries. After a period in which the social sciences insisted on their own specificity, many scholars are now turning back to history, while developments in legal scholarship (including law in context, critical legal theory and constitutionalism) are linking back to concerns in political science and sociology. Literature has helped inspire the 'sociological imagination' by portraying dramatic situations that need to be explained and resolved and drawing attention to the conflicts within the individual mind.

Cross-fertilization, however, is inhibited by the existence or closing up of research communities, groups of scholars in regular contact and discussion, who may define their common interest by substantive topic, methodology, or

both (Sil 2004). These are reified and perpetuated by processes which themselves are worthy of sociological analysis, including the existence of journals wedded to particular approaches, the orientation of individual departments or sections, patterns of graduate supervision and discipleship, routinized assessment procedures, and routes to career advancement. When research communities are defined both by substantive topic and by method, barriers may be very high and knowledge remain limited to the problems each method is best fit to tackle, secluded from external stimuli and challenges. On the other hand, when barriers are more fluid, the problem emerges of the commensurability of different forms of knowledge, as well as 'fuzzy' and ill-defined standards (Ruggie 1998). This makes it all the more important for researchers to know the field and to be able to compare standards and arguments with those from different communities. This is what Sil (2004) suggests under the label of eclecticism, where problems of incommensurability are not absolute and comparisons can be made across fields to the advantage of both empirical knowledge and theoretical innovation.

Further problems are caused by the tendency for concepts or expressions to become fashionable and then stretched beyond their original or indeed any useful meaning. In recent years, for example, the use of the word 'governance' has exploded. For some scholars, this is a specific phenomenon distinct from government and capable of operationalization, but for others it is used interchangeably with government. Still others see it as less than government, referring to a specific way of governing through networks, alongside traditional institutional government. Others see it as a broader category of social regulation, of which government is a subcategory. Some see it as an alternative to government – that we are moving from a world of government to one of governance. 'Construction' or 'social construction' are similarly stretched to cover almost everything (Hacking 1999) as, for a while, was the term 'invention'. Discourse analysis is sometimes used as a specific methodology, with its own ontology (speech acts themselves) and its own techniques; at other times it is applied to any technique that involves using texts and interviews. Sometimes the blame for all this confusion lies with scholars thinking that they need to get inside the current paradigm in order to make their point; often it is merely a matter of publishers looking for a trendy title.

Of course, not everything is methodologically healthy, and the label of eclecticism should not be used to justify hybrids that violate, if not rules, at least codes of conduct of what we have presented here as main approaches. Although the triangulation of various methods and methodologies within the same research project often increases reliability and improves our understanding, the

different parts of the enterprise must respect internal coherence. If an 'eclectic knowledge' of qualitative and quantitative techniques enriches a researcher's curriculum, human limits, together with the increasing sophistication of most qualitative and quantitative techniques, impose some specialization. The following chapters offer differing approaches in ontology, epistemology and methodology but also indicate points of commonality and overlap.

NOTES

1 This is either because they accept the material world, or because it is a question that cannot and need not be answered and is therefore futile to debate.
2 This is one of the terms in social science that has a multiplicity of meanings. In international relations it has a rather different meaning from the one given here (see Kratochwil, ch. 5).
3 In fact, even the individualist solution, reducing the ontology to the individual human being, does not answer this question definitively, as one might argue that even the self-regarding rational individual is an artefact of social science methodology and not something that occurs naturally, since the original condition of human beings is the group. This is argued in Adam Ferguson's (1966) Enlightenment classic, *Essay on the History of Civil Society*, of 1767.
4 A classic example of this is the case of gender. While nobody denies the existence of sexual differences, there is a big dispute over the category of gender, which includes a lot of other attributes and roles which have been mapped onto sex differences.
5 Van Langenhove (2007) claims that late twentieth-century social scientists have often portrayed the classical sociologists as more simplistically positivist than they really were.
6 Critical realism has been defined as 'a philosophical view of science and/or theology which asserts that our knowledge of the world refers to the-way-things-really-are, but in a partial fashion which will necessarily be revised as that knowledge develops'. Christopher Southgate, www.meta-library.net/.
7 For a discussion of the difference, see Hacking (1999: 47–9). He recommends leaving the term 'constructivism' to the mathematicians.
8 This taps into a long-standing division in philosophy between determinists and those emphasizing free will. While for St Augustine and John Calvin, determinism was a matter of divine selection, for modern social scientists it is a matter either of genetic programming, social conditioning or a predictable response to institutional incentives. Believers in free will cannot by definition be certain about how another actor will behave, no matter what constraints they are under.
9 In practice, social scientists often go back and forth between inductive and theory-driven approaches as they seek to frame their projects.
10 This is not to be confused with the pure deductive method, in which conclusions are derived from premises by pure reasoning, with no empirical research involved. Héritier (ch.4) explains the link between induction and deduction in the positivist tradition.
11 These terms are not used in a value-laden way to suggest that one is better than the other. Hard methods correspond to the view that social science can be made to resemble the physical sciences; soft methods to the view that social reality is more elusive.

12 For example, case studies can be accepted either to disconfirm a hypothesis (since it only takes one case to disprove a rule) or as a basis for formulating hypotheses for general testing. They are not valuable in themselves.
13 This is perhaps most obviously so in rational choice analysis, which claims a strictly positivist basis but includes some strong assumptions and tends to lead to highly normative conclusions.
14 This is not to say that the unity of the natural and social sciences can thereby be restored, as many people insist that the specificity of the latter is that the objects of study are endowed with consciousness and can act on their own volition.