Contents

PART 1

Theory and Approaches

Introduction to Part 1

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Part 1 of the book introduces the dominant approaches to understanding politics. As noted in the general introduction to our book, political science is about a hundred years old as a focus for a separate academic discipline. The discussion below focuses on domestic politics but a parallel argument could be made about the broadening out of international relations theory from an initial dispute between the liberal internationalist and realist schools at the beginning of the twentieth century to a subsequent expansion in the range and variety of theories and approaches (Brown and Ainley, 2005). But sticking to a domestic focus and looking back from the standpoint of the early years of the twenty-first century, we can argue that the debate in political science has moved from a focus on three broad paradigms to a wider set of approaches. Three paradigms dominated debate for much of the twentieth century: institutionalism, pluralism and elitism. These paradigms reflected to a degree different ontological and epistemological positions in the study of politics but the focus of their difference – what they disagreed about – was more directed at the level of analytical divisions. For institutionalists the analytical effort was to be directed at constitutions and institutions, for pluralists the focus was to be on groups and bargaining and for elitists the focus was on elites and power.

The institutionalist school is referred to by Lowndes in her chapter as the 'old institutionalist' school, in order for her to direct attention to the emerging approach of new institutionalism. The 'old' school was characterized by a focus on formal rules and organizations rather than informal conventions and on official structures of government rather than broader institutional networks of governance. The approach was structuralist, in the sense that it held that structures determine political behaviour, historicist, in that it took the influence of history as central to the explanations that it offered, legalist, in that law was seen as having a major role in governing, and holistic, given its concern with describing and comparing whole systems of government. It also had a strong functionalist tendency – that is, an assumption that particular institutions are present because they help the political system work well.

Some of the work in this tradition offered a simplistic, commonsense understanding that tended to assume the superiority of certain forms of government institutions and structures (usually those of the United Kingdom or the United States) for achieving good government. There was a tendency within the approach to express disappointment for others that did not operate under such benign conditions for rule. Yet some of the literature was often insightful and valuable despite the difficulties of the approach. However, it did tend to air its ideological preferences in a taken-for-granted way. Sammy Finer's powerful study of comparative government (1970) provides an example of this form of analysis. It has many strengths but does divide the governments of the world up into liberal democracies, totalitarian states and third world; a division which a student colleague in political science summed up – at a time when we were both postgraduates in the late 1970s – as those we like, those we don't like and those we don't know that much about. Understanding the constitutional and institutional basis of different forms of government is not a bad starting point for political science but it has increasingly found itself rightly under challenge.

The pluralist challenge emerged first with the publication of Bentley's *The Process of Government* in 1908. That book challenged the institutional paradigm in two ways (Cerny, 2009) by arguing that formal structures were not the key to understanding politics but rather that informal practices and the dynamics of play between groups were. To understand politics you need to look not at formal structures but the doing of politics, a call to intensify empirical analysis that has been heeded by many political scientists in the subsequent century. Pluralism also placed bargaining and aggregation at the centre of analysis. Politics was enacted through the building of coalitions of influence through the competition between a pluralist range of interests. Politics was about a battle between groups for influence. Pluralism became by the 1950s the dominant paradigm in political science but a range of different types of pluralism began to emerge. Table 0.2 lays out the key characteristics of three variants: classical pluralism, policy network pluralism and neo-pluralism (see Smith, 1995, 2006).

Classical pluralism took up the themes of Bentley's work. The state was a site of group conflict. Groups were relatively free to compete with one another to influence policy. Power as such was dispersed leading to a government that was responsive to the organized wishes of its citizens and able to predict what demands from the unorganized might be in order to create in practice a working democracy. The policy network approach added the complication that the state was a site of multiple players that had special relationships with some outside groups networked into some parts of the government machine. The policy communities that formed around a whole array of policy issues could at times be very tight and effectively exclude other interests. The interests of democracy were there-

Table 0.2 *Varieties of pluralism*

	Classical pluralism	*Policy networks*	*Neo-pluralism*
View of state	A site of group conflict	A differentiated institution offering differential access	Biased towards particular interests, especially business
Nature of groups	Easily formed and in open competition	Some groups on the inside with good access, other groups with more limited access	Business has a structural advantage in group competition because of its centrality to economic and social welfare
Understanding of power	An observable phenomenon and generally widespread	Generally observable but some groups able to strongly influence state actors through their presence in tight networks	Less easily observable and reflected in structural advantages of business and associated ideological assumptions in favour of business
Example of relevant studies	Bentley (1908); Truman (1951); Dahl (1961)	Richardson and Heclo (1978) Jordan (1979)	Lindblom (1977)

fore threatened by 'iron triangles' and power was not as dispersed as assumed by the classical pluralist model. The third variation of pluralism – called neo-pluralism – took an even more jaundiced view of the state. Over many big issues it was in the hands of big business, not necessarily because of close ties created by networks but rather because the economic significance of business success to the welfare of society meant that governments of all persuasions had to listen to the demands of business. The neo-pluralist idea of an uneven competition between different interests sustains a great deal of support among analysts of politics at both domestic and international level.

Pluralism in turn found itself challenged by elitism. Again, it is possible to identify three variations of the argument (see Table 0.3) that politics tends to be dominated by elite groups (Evans, 2006). Classical elitism rejected the viability of prospects for democratic control over states and institutions. The weakness and lack of organization of the wider collective is always going to be trumped by the oligarchic control exercised through bureaucracy and technological domination by those at the top of decision-making structures. Elites tend to be cohesive and self-perpetuating in this classical framing of the issues and elite domination is seen as an inevitable

Table 0.3 *Varieties of elitism*

	Classical elitism	*Power elite perspective*	*Regime elitism*
Domination of elite over state and society	Total	Substantial	Partial but strategic
Cohesiveness of the elite	Strong and unified	Unified but with distinctive branches	Divided but can be reinforced through emergence of a regime
Understanding of power	Observable and formal	Hidden but observable	Power to make things happen rather than overweening direct control
Driving force behind elitism	Inevitable feature of human society; reflects weakness of non-elites	Power of business and social intermingling	The drive to get things done draws together those with relevant resources
Examples of relevant studies	Michels (1911); Mosca (1896)	Mills (1956); Hunter (1963)	Stone (1989); Stoker (1995)

feature of large-scale societies. Elite domination was obvious and relatively easy to observe from the standpoint of classical elitism but a second and later version of elitism suggested that the processes took a more subtle form. C. Wright Mills (1956) argued that the mistake of the pluralists was to assume that what could be easily observed – the organized politics of lobbying and interest group conflict – was the be-all-and-end-all of politics. Rather, from his view there were two other levels of politics. One much lower in power capacity, where even there some disadvantaged groups lacked organization and the ability to join in the lobbying, and another much higher level of power where all the key decisions were taken leaving lobby-style and open politics to deal with relatively minor issues. The power elite at the top of the system were the dominant group exercising control over most substantial issues and in most systems it was possible to discover a combined elite at work with economic, political and military branches. The group acted ultimately to sustain common interests because they shared similar outlooks and social origins and sustained that cohesiveness through social and personal intermingling. Alongside the national elite identified by Mills, other studies showed at the local level in towns and cities the domination of similar arrangements, although usually without the direct engagement of the military and driven by a growth coalition committed to expanding and re-developing an area (Hunter 1953; Moltoch, 1976).

A further version of elite theory takes the view that powerful groups tend to emerge to influence decisions but that the process is not inevitable and is driven not so much by an intermingling of leading actors but rather by the sheer complexity and challenge of getting things done which in turn requires leading players to blend their capacities and resources in order to form effective regimes. The theory finds its strongest application in urban settings (Stone, 1989; Stoker, 1995). Regime analysis views power as fragmented, and regimes as the collaborative arrangements through which state and private actors assemble the capacity to govern. Stone describes the political power sought by regimes as the 'power to', or the capacity to act, rather than 'power over' others or social control (Stone, 1989: 229). Achieving the capacity to act is by no means certain; cooperation needs to be created and maintained (Stone, 1993). Regimes overcome problems of collective action and secure participation in the governing coalition through the distribution of selective incentives such as contracts and jobs. Collaboration is achieved not only through formal institutions, but also through informal networks. There are parallels between this regime version of elite theory and neo-pluralism. The two sides of an established great debate in political science would appear to have moved closer to each other.

There has been a coming together around the two central 'revolutionary' claims of Bentley's initial pluralist critique of formal constitutionalism which provide a core manifesto for political science. All the authors in this book argue that we need to look beyond the formal arrangements of power to understand politics (including and indeed most particularly the new institutionalist work outlined in Chapter 3). All the authors in this book could accept that power is central in political study but not many would share the optimism of classical pluralism about its relatively equal distribution according to intensity of preferences.

In the 1970s, when I first started to study politics in an academic setting, a focus of the three paradigms of institutionalism, pluralism and elitism would have provided a good starting point for dividing up the field. But even by the time of the first edition of *Theories and Methods* in 1995 it was already clear that the divisions within political science had got more varied and also more profound. They had moved beyond the status of analytical differences to take into account different ontological and epistemological positions. There were differences about what to study, how to study it and why study. Is the purpose of political science to reveal meaning, capture causal paths between actions and events or reveal the deep substructures that drive society and politics? In order to explore this world we needed to step between a focus on three paradigms and instead explore the broad approaches that political scientists adopted in their work. That is what this book offers in Part 1: a review of the most prominent and dynamic ways of doing political science today.

Part 1 begins with the behavioural approach to political science in Chapter 1, written by David Sanders. It is appropriate to start with this approach since the behavioural revolution can perhaps be seen as constituting the key development in the establishment of modern political science against which all other approaches have to situate themselves. Above all, the behavioural movement confirmed the earlier pluralist call to decisively shift attention away from the formal, legalistic study of political institutions and constitutions. As noted earlier, that shift remains an accepted part of the terrain for all political scientists. All empirically oriented political science shares with the behaviouralists a concern with the way politics operates in practice. Sanders offers a subtle account of how the behaviouralist approach has evolved and provides a convincing and powerful account of where modern behaviouralism stands now.

The second approach to be considered is rational choice theory (Chapter 2). It too claimed to bring a revolutionary new approach to the discipline. There can be little doubt about the impact of this approach within the discipline. Some of its advocates argue that it constitutes the key approach for delivering a political science, which is cumulative in its knowledge production and a powerful member of a wider social science practice, unified in their approach in axioms and methods initially derived from economics. While some emphasize the overweening virtues of an approach which favours formal theory and mathematical rigour, others now see the rational choice approach as one among a variety of paths that can be taken. That second option is certainly the position taken by Andy Hindmoor in his chapter and one shared with the editors. The way of thinking and the challenge posed by rational choice analysis has something to offer all in the discipline but its claim to be a high priest is rightly regarded with scepticism.

The third style of political science that is a focus of attention in the book is institutional analysis. As Vivien Lowndes points out in Chapter 3, those interested in institutional studies may have found themselves out of favour as first behaviouralists and then rational choice advocates looked to blaze a trail for a new political science unencumbered by the old interest in institutions and constitutions. However, a new institutionalism has emerged, as a check to the under-socialised accounts of political action offered by behaviouralism and rational choice, that shares a core view that institutions significantly structure political relationships. There are many ways in which that interest in institutionalism has been expressed. As Goodin and Klingemann (1996: 11–12) suggest, the new interest in institutions has indeed provided a basis for a rapprochement within the discipline with both behaviouralists and rational choice students giving recognition to the importance of institutions in recent decades.

In Chapter 4 Craig Parsons gives full coverage to constructivist theory and in so doing challenges the approaches outlined in the previous chapters, although as he notes, some institutionalists make constructivist arguments. What is distinctive about this approach is the claim that people act due to the presence of certain 'social constructs': ideas, beliefs, norms, identities. These interpretive filters work through affecting the way people see the world and human action is in turn structured by the meanings that particular groups of people attach to themselves and their circumstances. Non-constructivist scholarship, by contrast, like that surveyed in Chapters 1 (Behaviouralism), 2 (Rational Choice), and 7 (Marxism), suggests that our interpretive filters do not greatly affect how we act. But Parsons' core message, which the editors fully endorse, is that these different approaches have much to learn from each other. Constructivism can offer a distinctive, plausible means of understanding why people act the way they do. Constructivists should think about and engage non-constructivist alternatives to their claims, but non-constructivists should also routinely consider constructivist competitors in their own research.

In Chapter 5 we remind readers of the importance of political psychology. As Paul 't Hart argues, although it has long historical roots, the political psychology perspective is still somewhat marginal to the discipline of political science. But we agree with him that this situation makes little sense, not least because of its theoretical wealth and creativity. Political psychologists tap into a reservoir of concepts, propositions and paradigms about human and social behaviour that all in mainstream political science should be willing to consider. Furthermore, its methodological sophistication and commitment to careful research design provides lessons for us all.

Political science remains in need of challenge from all quarters. As Vicky Randall points out in Chapter 6, feminist analysis has challenged political science on two fronts: first it calls for a full rounded account of the role of women in politics and second it raises fundamental questions about the way that politics is conceptualized, including the conventional distinction between public and private, and as such has major implications for the scope and boundaries of political science as a discipline.

A further element of challenge comes from Marxism. Diarmuid Maguire in Chapter 7 makes a compelling case for the continuing relevance of this approach. He argues that Marxism has created a rich research programme around the political and economic links between nation state, international and city levels whilst theorizing around the agency of cultural intervention. Our understanding of the globalized world we live in would be the poorer if it lacked the insights from this approach.

We should also not forget that normative political theory continues to play a key role in political science and Buckler in Chapter 8 provides an overview of that theory. He illuminates the great debates in political theory over liberty, equality and community and shows how they are relevant to the challenges to political science today.

Chapter 1

Behavioural Analysis

DAVID SANDERS

The behavioural approach to social and political analysis concentrates on a single, deceptively simple, question: Why do people behave in the way they do? What differentiates behaviouralists from other social scientists is their insistence that (a) *observable* behaviour, whether it is at the level of the individual or the social aggregate, should be the focus of analysis; and (b) any explanation of that behaviour should be susceptible to empirical testing. Behavioural scholars take the view that, whatever theoretical categories any analysis uses, social enquiry is fundamentally about trying to understand what it is that (some) people do, think or say.

Scholars working in the behavioural tradition have investigated a wide range of substantive problems. Behaviouralists have extensively analyzed the reasons that underlie the main form of mass political participation in democratic countries: voting (for example, Heath *et al.*, 1994; Clarke *et al.*, 2009). They have also examined the origins of participation in other, more unconventional, forms of political activity such as demonstrations, strikes and even riots (for example, Barnes and Kaase, 1979; Parry *et al.*, 1992; Anderson and Mendes, 2006). At the elite level, behaviouralists have analyzed leadership behaviour, placing particular emphasis on the connections between the way in which leaders view the world (their attitudes and values) and the particular actions that they take (for example, Allison, 1971; King, 1985; Sanders, 1990; Dunleavy and Jones, 1993; King, 2002). In terms of social aggregates, behavioural analysis has examined the actions of interest groups (for example, Grant and Marsh, 1977; Nownes and Lipinski, 2005) and political parties (for example, Budge and Fairlie, 1983; Budge and Laver, 1992; Dalton, 2002; Ezrow, 2008). At the international level, behavioural analysis has also focused on the actions of nation states (for example, Rosenau 1969), as well as on the behaviour of non-state actors such as multinational corporations, international terrorist groups and supranational organizations like the EU (for example, Keohane, 1984; Baldwin, 1993; Plümper and Neumayer, 2006). In all these diverse contexts, the central questions that behaviouralists seek to answer are simple: What do the actors involved actually do? How

can we best explain why they do it? These are obviously not the only questions that can be asked about individual and social actors. Behaviouralists simply believe that they are the most important ones.

This chapter is divided into four sections. The first provides a brief outline of the origins of behaviouralism and summarizes the core analytic assertions that underpin it. The second section reviews the main criticisms that, with varying degrees of justification, have been levelled at the behavioural approach. The third part describes one major study – Plümper and Neumayer's analysis of the effects of violent conflict on women's life expectancy rates – which illustrates some of the more positive features of behavioural analysis. The final section considers the influence that behaviouralism continues to exert on contemporary political researchers.

The rise of the behavioural movement and its core characteristics

The behavioural movement assumed an important position in the social sciences in the 1950s and 1960s. Its philosophical origins were in the writings of Auguste Comte (Comte, 1974) in the nineteenth century and in the logical positivism of the Vienna Circle in the 1920s. Positivism, which was popularized in Britain by Alfred Ayer and in Germany by Carl Hempel, asserted that analytic statements made about the physical or social world fell into one of three categories. First, such statements could be useful tautologies: they could be purely definitional statements that assigned a specific meaning to a particular phenomenon or concept. For example, we might define families living on less than one-third of the average weekly wage as 'living below the poverty line'. Second, statements could be empirical, that is to say, they could be tested against observation in order to see if they were true or false. Third, statements that fell into neither of the first two categories were devoid of analytic meaning. For the positivists, in short, meaningful analysis could proceed only on the basis of useful tautologies and empirical statements: metaphysics, theology, aesthetics and even ethics merely introduced meaningless obfuscation into the process of enquiry.

It would not be correct, of course, to assume that behaviouralism accepted all the philosophical precepts of positivism. Even as behaviouralism was gaining increasingly wide acceptance among social scientists in the 1950s, positivism itself was being subjected to ferocious philosophical criticism – not least on the grounds that it was unclear whether positivism's assertion that there were only three types of statement was itself tautological, empirical or meaningless. This said, behaviouralism's view of the nature of empirical theory and of explanation were

strongly influenced by the positivist tradition. Although there are many definitions of these two critical terms, most behaviouralists would probably accept something along the following lines:

- An *empirical theory is* a set of interconnected abstract statements, consisting of assumptions, definitions and empirically testable hypotheses, which purports to describe and explain the occurrence of a given phenomenon or set of phenomena.
- An *explanation* is a causal account of the occurrence of some phenomenon or set of phenomena. An explanation of a particular (class of) event(s) consists in the specification of the minimum non-tautological set of antecedent necessary and sufficient conditions required for its (their) occurrence.

The importance of these definitions of theory and explanation lies in the implications that they have for theory evaluation. For positivists, the crucial question that should always be asked about any purportedly explanatory theory is: how would we know if this theory were incorrect? Behaviouralism's endorsement of the central importance of this question is precisely what demonstrates its intellectual debt to positivism. For both positivists and behaviouralists there are three main ways in which explanatory theories can be evaluated:

1. A 'good' theory must be internally consistent: it must not make statements such that both the presence and the absence of a given set of antecedent conditions are deemed to 'cause' the occurrence of the phenomenon that is purportedly being explained.
2. A 'good' theory relating to a specific class of phenomena should, as far as possible, be consistent with other theories that seek to explain related phenomena.
3. Crucially, genuinely explanatory theories must be capable of generating empirical predictions that can be tested against observation. The only meaningful way of deciding between competing theories (which might appear to be equally plausible in other respects) is by empirical testing. This testing can be conducted either at the level of the individual social actor or at the level of the social aggregate – whichever is appropriate given the nature of the theory that is being tested.

It is this emphasis on empirical observation and testing that produces the two characteristic features of the behavioural approach to social enquiry.

The first – and less contentious – of these is behaviouralism's commitment to the systematic use of all the relevant empirical evidence rather

than a limited set of illustrative supporting examples. This commitment simply means that, when a particular theoretical statement is being investigated, the researcher must not limit her/himself to a consideration of only those observed cases that provide 'anecdotal' support for the theoretical claims that are being made. Rather, the researcher must consider all the cases – or at least a representative sample of them – that are encompassed by the theoretical statement that is being evaluated.

It is in this context that the use and development of statistical techniques is justified by behaviouralists – as a vehicle for analyzing large amounts of 'relevant empirical evidence'. It should be emphasized in the strongest possible terms, however, that behaviouralism is not synonymous either with quantification or with the downgrading of qualitative research. Certainly, behavioural researchers have frequently used quantitative techniques as heuristic devices for handling evidence. There is nothing intrinsic in behaviouralism's epistemological position, however, that requires quantification. On the contrary, quantitative and qualitative forms of empirical analysis are equally acceptable to behavioural researchers. What matters for them is not whether evidence is qualitative or quantitative but (a) that it is used to evaluate theoretical propositions; and (b) that it is employed systematically rather than illustratively.

The second characteristic feature of behavioural analysis is slightly more subtle in its implications – but no less important. It is simply that scientific theories and/or explanations must, in principle, be capable of being falsified. Note here that the reference is to 'scientific' rather than simply to 'empirical' or 'explanatory' theories. This usage reflects behaviouralism's commitment to Karl Popper's revision of traditional positivism in which he (a) substituted the principle of falsifiability for that of verification; and (b) simultaneously identified the falsifiability criterion as the line of demarcation between 'scientific' and 'pseudo-scientific' enquiry (Popper, 1959).

In order fully to appreciate the import of this statement, a brief digression is necessary. We need to consider precisely what is meant by a theory or an explanation being 'falsifiable'. Consider the familiar statement that Popper himself used as an example: 'All swans are white'. Suppose that we observe a black swan. What does this tell us about the statement? One interpretation is that observing the black swan shows the statement to be empirically false: the statement was in principle *capable* of being falsified and it has been falsified. But there is another way of interpreting the statement in the light of a black swan being observed. The statement says that all swans are white. It follows that the black swan that we have observed cannot be a swan because it is not white: the statement, therefore, is not false.

Can both of these interpretations be correct? The answer is 'yes'. Each

interpretation makes a different set of assumptions about the definition of a swan. The first assumes that a swan is a large bird with a long neck that looks very pretty when it paddles through water; it says nothing of the bird's colour. In these circumstances, the definitions of 'swan' and 'colour' are *independent:* there is no overlap between them. In other words, it *is possible* to observe something that has all the characteristics of a swan regardless of its colour. We have observed a black swan and, therefore, the initial statement must have been false. The second interpretation assumes that a swan is a large bird with a long neck that looks very pretty when it paddles through water *and that it is also white*. In other words, this second interpretation assumes that whiteness is part of the *definition* of being a swan. In these circumstances, when a black 'swan' is observed it cannot be a swan, because part of the definition of it being a swan is that it is white.

What is clear from this discussion is that the status of the statement depends upon whether or not its constituent terms are independently defined. With the first interpretation, the terms 'swan' and 'white' *are* independently defined. As a result, the statement is an empirical or falsifiable one: it is possible to test it against the world of observation. With the second interpretation, however, the terms 'swan' and 'white' are not independently defined. As a result, the statement is (partially) tautological: it is simply an untestable assertion that one of the defining features of a swan is that it is white.

This problem of interpretation is common in the social sciences. Consider the following statement: 'In general elections, people vote against the incumbent government if they are dissatisfied with its performance.' Without further information, we cannot tell whether this is a testable empirical statement or merely a definitional tautology. The statement can, in fact, be interpreted in two completely different ways. First, we can interpret the statement in purely tautological terms. Looking at a particular election, we could say: (a) that every voter who voted for the government must have been satisfied with its performance (otherwise s/he would not have voted for it); and (b) that every voter who did not vote for the government could not have been satisfied with its performance (otherwise s/he would have voted for it). With this interpretation, we can always 'believe' in the statement but we have not *demonstrated* that it is empirically correct; we have treated it purely as a tautology. The second interpretation is to regard the statement as an empirical one – but this is possible only if we provide a definition of dissatisfaction with the government that is independent of the act of voting. If we were to devise some independent way of measuring dissatisfaction, then we would obviously be able to test our initial statement against any available empirical evidence. We might find that all those who voted for the government were

satisfied with its performance and that all those who voted against it were dissatisfied – in which case we would have corroborated the statement. Crucially, however, by providing independent definitions of 'voting' and of 'dissatisfaction' we create the possibility that the statement might be empirically incorrect: we render the statement *falsifiable* – even though we might hope that it will not be falsified.

Having distinguished between falsifiable and non-falsifiable statements, Popper (1959) goes on to suggest that theories can only be regarded as 'scientific' if they generate empirical predictions that are capable of being falsified. Theories that do not generate such predictions are merely sophisticated tautologies that explain nothing – no matter how elegant and elaborate they might appear. Many behaviouralists are unconcerned as to whether or not their research should be described as 'scientific'. Crucially, however, they are unequivocally committed to the principle of falsifiability. Behaviouralists do not deny that there are other ways of evaluating the adequacy of a particular theory. They none the less insist that a genuinely explanatory theory must engender falsifiable propositions of the form 'if A, then B; if not A, then not B'; and it must specify causal antecedents that are defined independently of the phenomenon that is supposedly being explained.

All this is not to suggest, however, that behaviouralists believe that all aspects of their theories must be capable of being falsified. As Lakatos (1970) has argued, most theories in the physical and social sciences contain a non-falsifiable set of core propositions. These core propositions often take the form of highly abstract assumptions that are not susceptible to empirical testing. The non-falsifiability of the core propositions, however, does not necessarily mean that the theory itself is non-falsifiable. Provided that a series of testable predictions, which can be examined in the light of empirical observation, can be derived logically from the core, then the theory as a whole can be regarded as falsifiable. It does represent something more than sophisticated tautology; it does provide the analyst with an opportunity to specify the conditions under which s/he would know that the theory was 'incorrect'.

Behaviouralists, then, emphasize the twin notions that theories should: (a) seek to explain something; and (b) be capable, in principle, of being tested against the world of observation. For behaviouralists, non-falsifiable theories are not really theories at all. They are merely elaborate fantasies of varying degrees of complexity that scholars can choose to believe or disbelieve as they wish. For behaviouralists, theory evaluation must proceed beyond merely examining a theory in order to assess its internal consistency and the nature of the 'puzzles' that it seems to resolve: theory evaluation must also involve subjecting theoretical propositions to empirical test.

Criticisms of the behavioural approach

As with any other general approach in the social sciences, behaviouralism has been the target of a number of important criticisms. These criticisms can be grouped under three broad headings and each will be examined in turn below.

(a) Objections to the positivist claim that statements which are neither definitions (useful tautologies) nor empirical are meaningless

It was noted earlier that behaviouralism has its philosophical roots in positivism and that starting point could appear to make it vulnerable to any weaknesses inherent in positivism. But as we shall argue, that line of reasoning may not apply. Among the many criticisms that have been levelled at positivism, perhaps the most important one is the simple proposition that the large class of statements that positivism labels as 'meaningless' contains, in fact, many ideas that can add very significantly to our understanding of social behaviour and the human condition. In strict positivist terms, there can be no role for normative theory for the investigation of what ought to be – because normative discourses are not restricted to definitional and empirical statements. Similarly, there can be no role for aesthetic or moral arguments, for the same reason. And there can be no role for the sort of hermeneutic analysis that seeks to understand social behaviour through deep reflection about the nature of human perceptions, thought processes and motivations. If positivism seeks to exclude these forms of reflection, the argument runs, it must be in error.

The extent to which positivists ever genuinely denied the value of non-empirical analysis need not concern us here. It is important to point out, however, that most contemporary researchers who continue to work in the behaviouralist tradition would almost certainly reject the notion that there can be no role for normative theory, aesthetics or hermeneutics in political and social analysis. They would argue, instead, that these approaches yield a different form of knowledge or understanding – not that they are 'meaningless'. In essence, modern behaviouralists openly acknowledge this particular criticism of positivism. They deflect it from themselves by recognising that other, potentially useful, forms of knowledge can be acquired by scholars working in other intellectual traditions. Modern behaviouralists simply prefer to subject their own theoretical claims to empirical test. They also suspect that scholars working in non-empirical traditions are never able to provide a satisfactory answer to the crucial question: 'How would you know if you were wrong?'

(b) The tendency towards mindless empiricism

One of the claims of the early positivists was that theoretical understanding could be obtained only through a process of enquiry that began with theory-free observation of 'all the facts up to now' and which then derived law-like generalizations inductively from the empirical regularities that were observed. Later positivists, notably Hempel and Popper, strongly rejected this 'narrow inductivist' view of the nature of scientific enquiry, arguing that enquiry could only proceed if the researcher's efforts to observe 'relevant facts' were guided either by clear theoretical expectations or, at a minimum, by some kind of explanatory 'hunch'. Hempel (1966: 11–12) is worth quoting at length in this context:

> [A narrow inductivist investigation] ... could never get off the ground. Even its first [fact gathering] phase could never be carried out, for a collection of all the facts would have to await the end of the world, so to speak; and even all the facts up to now cannot be collected since there are an infinite number and variety of them. Are we to examine for example, all the grains of sand in all the deserts and on all the beaches, and are we to record their shapes, their weights, their chemical composition, their distances from each other, their constantly changing temperature, and their equally changing distance from the centre of the moon? Are we to record the floating thoughts that cross our minds in the tedious process? The shapes of the clouds overhead, the changing color of the sky? The construction and the trade name of our writing equipment? Our own life histories and those of our fellow investigators? All these, and untold other things, are, after all, among 'all the facts up to now'.

In spite of positivism's moves away from inductivism, there can be no doubt that, between the early 1950s and the mid-1970s, a number of scholars working within the behavioural tradition did still appear to be committed to an inductivist approach to research. It would be unnecessarily invidious to isolate particular examples of this tendency. It is nonetheless fair to say that, during this period, many behaviouralists acted as if law-like scientific generalizations could be constructed purely by identifying the statistical regularities evident in large quantities of empirical data. This emphasis on data and the concomitant downgrading of *a priori* theoretical reasoning in turn produced two undesirable tendencies in behavioural research.

The first of these was a tendency to emphasize what can be easily measured rather than what might be theoretically important. This sort of criticism is always easy to make, in the sense that one person's triviality may be another's profundity. Nonetheless, the tendency to play down the

potential importance of phenomena that are intrinsically difficult to measure has always been a matter of concern to both critics and advocates of behavioural research. This has been especially true in relation to the analysis of electoral behaviour. Since the explosion of behavioural research in the 1950s, voting studies have concentrated primarily on electors' social profiles, partisan identifications, ideological positions, policy preferences and economic perceptions. Complex models have been devised – and tested empirically – which show the relative importance, and causal ordering, of different aspects of these various phenomena in the determination of the vote (see, for example, Sarlvik and Crewe, 1983; Heath *et al*., 1985; Heath, 1991).

Yet despite the considerable contribution that behavioural analysis has made to our understanding of a voter's decision calculus, it has often been argued that, somehow, an important part of what it means to vote – as well as part of the calculus itself – may have been omitted from behavioural analyses. There has perhaps been insufficient attention paid to inconsistencies and contradictions in voters' political perceptions and to the possibility not only that many voters change their political preferences frequently, but also that their preferences vary, quite genuinely, with the social context in which they are expressed. There are other areas – relating to the way in which individuals reflect, to a greater or lesser degree, upon themselves – where behavioural electoral research has simply not dared to tread. What sort of person do I think I am? What aspirations and expectations do I have about my future life? What sort of life do I think I am capable of leading or should lead? How do I relate my notions of personal morality to the moral stances of the major political parties? The answers to questions such as these may have no bearing on the way in which political preferences are formed and transformed. Within the behavioural frame of reference, however, it is very hard to envisage how the responses to such questions – given the difficulty of measuring those responses systematically – could ever be incorporated into formal analysis. As a result, they are largely excluded from the analytic frame.

A second, and related, undesirable feature of behavioural research that arises from its overly empirical focus has been a tendency to concentrate on readily observed phenomena – such as voting – rather than the more subtle, and perhaps deeper, structural forces that promote stability and change in social and political systems. One obvious concept that has been neglected by behavioural research in this context is that of *interests*. The notion of interests has played an important part in a wide variety of social and political theories ranging from Marx, Max Weber and Vilfredo Pareto in the domestic field to Hans Morgenthau and E. H. Carr in the field of international relations. In all these contexts, social actors – whether they are individuals, groups of individuals or even nation states –

are seen as pursuing strategies that are aimed at maximising their 'interests'. Yet, as scholars working in the behavioural tradition have found repeatedly, it is extraordinarily difficult to observe the 'interests' of a particular individual, group or state directly. In consequence, behavioural research has tended to shy away from the theoretical and empirical analysis of interests – preferring to leave the field clear for scholars working in other, non-empirical, traditions.

(c) The assumed independence of theory and observation

The early behaviouralists proclaimed their approach to social enquiry as being both 'scientific' and 'value-free'. They claimed not to be seeking to justify any particular ethical or political stance. Rather, they sought simply to uncover 'the facts' through impartial observation and to offer politically-neutral theories that would explain them in the most parsimonious way. As the passage from Hempel quoted earlier shows, the degree of inductivism thus implied – in which 'explanatory theory' emerges only after all the relevant facts have been surveyed impartially – was always impossible. Some sort of initial theoretical understanding is necessary before the researcher can decide what it is that should be observed.

Modern behaviouralists, along with researchers working in other intellectual traditions, roundly reject the notion that theory and observation are independent. On the contrary, most behaviouralists would now accept the relativist view that what is observed is in part a consequence of the theoretical position that the analyst adopts in the first place.

Modern behaviouralists, however, are distinguishable from most relativists. It is one thing to allow that observations are coloured by theory; it is quite another to conclude that this means that one set of theories and observations are as good as another. For modern behaviouralists, the ultimate test of a good theory is still whether or not it is consistent with observation – with the available empirical evidence. Modern behaviouralists are perfectly prepared to accept that different theoretical positions are likely to elicit different descriptions of 'reality' – that they are likely to produce different 'observations'. They insist, however, that whatever 'observations' are implied by a particular theoretical perspective, those observations must be used in order to conduct a systematic empirical test of the theory that is being posited.

Finally, it is worth noting that behaviouralists are sometimes criticized – with some justification – for failing to comprehend the 'big picture' of social and political transformation. That is to say, by emphasizing the description and explanation of observable individual and group behaviour, behaviouralists underestimate the importance of 'more profound' social and political changes that might be taking place. For example, theo-

rists who debate the ways in which 'the state' evolves under conditions of advanced capitalism (for example, Adorno, 1976; Habermas, 1976; Jessop, 1990) tend to deride behavioural analysis as being concerned merely with superficialities and with failing to offer a theory (or explanation) of significant social or political change. Behaviouralists respond by pointing out that broad ranging social theories which purport to analyze significant social change must be based on some sort of empirical observation. If a writer wishes to argue, for example, that 'the capitalist state' is in 'crisis', then s/he must be able to specify what the observable referents of the crisis actually are. If there is a 'crisis', (some) people must be taking certain sorts of action or must be thinking certain things that enable the analyst to know that a 'crisis' exists. Similarly, if some new form of social relationship is emerging (perhaps as a result of new patterns of economic production) then that new form of relationship must have some empirical referent or referents, otherwise, how can the analyst know that the new form is indeed occurring? Behaviouralists are entirely prepared to recognize that broad-ranging social and political theories are both possible and desirable. They merely insist that, if such theories are to be credible, they cannot be couched indefinitely at so high a level of abstraction as to render them incapable of being tested empirically. For behaviouralists, social and political theories are supposed to describe and explain, what can be observed – whether it involves stasis or change. Theories of social change only start to be interesting to behaviouralists when they: (a) specify the empirical referents that are used in order to make the judgement that profound change is indeed taking place; and (b) provide the empirical evidence which shows that these referents are indeed changing in the specified direction. Behaviouralism is entirely neutral as to what the 'referents' in any theory should be – this is the domain of the social theorist her/himself. To behaviouralists, however, a social 'theory' without clear empirical referents is nothing more than mere assertion.

The strengths of the behavioural approach: an example

While it is clear from the foregoing discussion that the behavioural approach can be subjected to serious criticism, it would be very wrong to infer that all examples of behavioural research are flawed. On the contrary, behavioural research at its best can make a considerable theoretical and empirical contribution to the understanding and explanation of social behaviour.

The strengths of the behavioural approach derive primarily from its advocates' determination to pursue forms of analysis that are *capable of*

replication. Scholars working in the behavioural tradition are always concerned to establish that other researchers who make similar sets of assumptions as them and examine the same evidence would draw broadly similar conclusions. This need to ensure that research findings are capable of replication necessarily means that behaviouralists are obliged to be very clear in their specification of: (a) what it is that they are trying to explain; (b) the precise theoretical explanation that is being advanced; and (c) the way in which they are using empirical evidence in order to evaluate that theoretical explanation. The need for clarity of exposition in turn means that behaviouralists rarely enter into that most sterile area of academic debate: 'What did writer X mean when s/he argued Y?' For behaviouralists, unless X makes it clear what s/he means in the first place, then X's work is clearly not capable of being replicated and argument Y is therefore likely to be treated with suspicion in any case.

The strengths of 'good' behavioural analysis can be illustrated by reference to Plümper and Neumayer's (2006) analysis of the effects of violent conflict on the life expectancy rates of men and of women. Their analysis involves a combination of rigorous theorising, careful model specification and systematic empirical testing. It offers both a methodological advance in the way that the consequences of violent conflict can be assessed and a substantive account of the impact of war on life expectancy rates around the world between 1975 and 2005.

Plümper and Neumayer (2006) focus on a question that has concerned international policy analysts, human rights activists and feminists for many years: to what extent do wars, whether they are inter-state wars or civil wars, have a disproportionately damaging effect on women rather than men? In many conflicts around the world, although the majority of combatants are men, it often appears to be the case that many of the victims of such conflicts are women. Surprisingly, until Plümper and Neumayer's study was published, there was no clear evidence about the impact of violent conflict on women's life expectancy rates.

Plümper and Neumayer (2006) begin their study by pointing out that, in most countries most of the time, women live longer than men. The effect of violent conflict is to reduce life expectancy rates for both men and women. However, what violent conflict also does is to reduce the 'gender gap' in life expectancy rates: as a result of war, women's life expectancy falls more rapidly than men's, so that the two rates become much closer. Plümper and Neumayer identify three main mechanisms through which wars can disproportionately reduce women's life expectancy rates. The first is an *economic damage effect*. Wars destroy transport and health infrastructures and food supply chains, seriously impeding the resources available to disadvantaged groups – which, in times of war, disproportionately involve women. The second mechanism involves *displacement*.

Violent conflicts typically create large numbers of refugees, as people try to flee from combat zones in order to find safe havens elsewhere. The greater precariousness of life in such situations again affects women disproportionately, as they frequently find themselves trying to support both themselves and their children in situations where healthcare and other resources needed for survival are either in short supply or non-existent. Finally, there is also a *sexual violence effect*, which reflects the greater vulnerability of women in conflict situations to trafficking, prostitution, rape and murder.

Plümper and Neumayer's core aim is to estimate as precisely as possible the effects of violent conflict on gender differences in life expectancy rates. In order to do this, they develop a statistical model that allows them to apply 'controls' for a range of other factors (such as income levels, education and gender equality) that could also affect life expectancy. This idea of applying controls is crucial to their case. They need to take account of other potentially relevant factors in order to show that any observed correlation between violent conflict and changing life expectancy patterns is not simply a 'coincidence' – that it represents a real causal effect.

Plümper and Neumayer's first task is to assemble an evidential base – a dataset – that allows them to explore these various relationships, both across countries and over time. As their *dependent variable* – the phenomenon that they are trying to explain – the authors take the *annual change* in the ratio of male to female life expectancy, in each country in each year, for as many country-years as they can collect. They use the most reliable cross-national dataset available for this purpose, that provided by the US Census Department, which has been assembling comparative data on life expectancy rates since the 1970s. This gives them data for over 100 countries, covering the period between 1975 and 2005, a total of 2,956 country-years.

In order to assess the direct and indirect effects of inter-state and civil wars, which represent their core *explanatory or independent variables*, Plümper and Neumayer turn to existing conflict databases that have been assembled by teams of other researchers over many years. For information on the occurrence and extent of *civil wars*, they use Fearon and Laitin's widely-used Civil War dataset coding. An internal conflict within a state is defined as a civil war if it involved over 1,000 battle deaths and at least 100 deaths per year after the onset of the conflict. For their operational measure of *international war*, Plümper and Neumayer use the Upsalla PRIO Armed Conflict database. This defines an international war as a conflict between two or more states that involves at least 1,000 battle deaths and at least 25 deaths per year after the onset. The authors exclude those cases where conflict occurs *outside* the territory of a combatant

state (for example, NATO countries' involvement in the conflicts in the former Yugoslavia in the 1990s), since in these cases, life expectancy rates of either men or women are unlikely to be affected in the 'intervening' country.

Having specified the circumstances in which civil and international wars can be said to exist, Plümper and Neumayer go on to differentiate between civil wars where the main battle-lines are drawn between members of *different ethnic groups* and those where they are not. Their supposition here is that civil wars in ethnically divided societies – ethnic civil wars – are likely to have more damaging consequences for women's life expectancy, particularly through displacement and sexual violence effects. The Fearon and Laitin (cited in Plümper and Neumayer, 2006) database provides clear information on whether a particular civil war has an ethnic dimension or not, so Plümper and Neumayer are easily able to incorporate this distinction into their own dataset. A further effect proposed by Plümper and Neumayer is that in situations where the central authority of the state has completely collapsed, the effects of civil war on female life expectancy will be even more marked. They accordingly collect data on an additional explanatory variable, the *collapse of political order*, for which they use data derived from the University of Maryland's Polity Project. Their expectation is that women's life expectancy will be further reduced under conditions of complete state collapse.

In addition to these core theoretical claims, Plümper and Neumayer recognize that, in order to assess the effects of warfare on gendered life expectancy, they also need to take proper account of a range of *control* variables. These controls include the existing *level* of life expectancy in a country; measures of economic wealth (gross domestic product per capita); education (the literacy rate); gender equality (the percentage of the labour force that is female); the degree of autocracy as opposed to democracy; the durability of the main political institutions of the state (the latter two measures derived, again, from the Polity project); the occurrence of natural disasters; and the incidence of major health epidemics (the latter two measures based on data taken from the Emergency Disaster Database).

Plümper and Neumayer develop a simple statistical model of gendered life expectancy rates using all these explanatory and control variables. In essence, this model says that the annual *change* in the ratio of male:female life expectancy is influenced by war (civil or international); by the type of conflict (ethnic or not); by the maintenance (or collapse) of state political institutions; by wealth, education and gender equality; by the degree of autocracy; and by natural disasters. The huge advantage of the sort of statistical approach that the authors adopt is that it allows the relative

magnitudes of effect of each these 'explanatory variables' to be estimated very precisely. However, although the model itself is relatively straightforward, it turns out that considerable caution has to be used in order to estimate the sizes of these effects. This is because Plümper and Neumayer's data constitute what is called a cross-sectional-time-series *panel*. This means that, for each of the 106 countries covered in their analysis, there are multiple, annual, data observations, some of which (like literacy rates and autocracy levels) do not vary very much over time within a given country. These characteristics of panel data render the estimation of statistical effects very tricky. It would be unnecessarily tedious to explain in detail how Plümper and Neumayer address these very specific problems of panel data. It is sufficient to note that through a combination of a 'lagged dependent variable' (which means that the model in effect estimates the *change* in the male:female life expectancy ratio) and a three-stage estimation process expressly designed for dealing with panel data, they produce estimates of the effects on life expectancy of all of their independent variables that minimise bias and maximise efficiency.

Table 1.1 summarizes Plümper and Nuemayer's core empirical findings. The key to understanding results of this sort is to look at the *significance* levels, the *signs* (positive or negative), and *relative magnitudes* of the various coefficients in the model. The significance levels indicate with what degree of certainty we can be sure that a particular statistical effect operates (or not). For example, the coefficients that have three asterisks (***) next to them are highly statistically significant: we can be 99.9 per cent certain that the independent variable indicated has an effect on the dependent variable that we are trying to explain; two asterisks means we can be 99 per cent certain; and so on. The signs on the coefficients indicate whether the independent variable concerned serves to increase (a positive sign) or decrease (a negative sign) the dependent variable. Given the nature of the dependent variable here, a positive sign means that the ratio of male:female life expectancy increases; whereas a negative sign means that it falls – that women's life expectancy relative to men's is worsening. Finally, the relative magnitudes of the different coefficients indicate which variables have the largest (and smallest) effects on life expectancy rates.

Viewed in this light, we can see from Table 1.1 that both inter-state and civil wars have significant negative effects, of roughly the same magnitude, on the gender gap in life expectancy. This means that, controlling for a host of other theoretically relevant factors, violent conflicts do indeed reduce the gap between men's and women's life expectancy rates. In other words, violent conflicts of either sort (internal or external) do indeed inflict disproportionate damage on women's life expectancy. The table also shows the very important roles played by natural disasters (see the

Table 1.1 *Plümper and Neumayer's core empirical findings*

Dependent variable is ratio of men's to women's life expectancy rates in a given 'country-year'

Independent variable	*Coefficient*	*Standard error*
Lagged dependent variable (at t-1)	0.89***	0.01
Change in population life expectancy	0.06***	0.02
Interstate war/not	-0.38*	0.20
Civil war/not	-0.35***	0.06
Income per capita	0.00	0.00
Autocratic institutions	0.03***	0.01
Regime durability	-0.01**	0.00
Female labour force participation	0.04***	0.00
National disaster/not	-1.58***	0.33
HIV/Aids victims>10% of population 15-45	-0.74***	0.08
Intercept	12.18***	0.95
Observations (country-years)	1836	
Countries	106	
Adjusted R2	0.96	

*** Coefficient significant at 0.001 level; ** at 0.01; * at 0.05.
Source: Plümper and Neumayer (2006), table 1, p. 744.

significant negative coefficient, b = –1.58) and by HIV/Aids epidemics (b = –0.74), which also seriously damage women's life chances disproportionately. Plümper and Neumayer (2006) go on to investigate the roles played by ethnic divisions and by state failure in exacerbating the problems faced by women. They find that if there *is* an ethnic basis to a conflict, the damaging consequences for women's life expectancy are even more pronounced. The worst consequences for women's long-term survival rates arise if there is a combination of ethnic conflict and state collapse.

Plümper and Neumayer's findings are important because they show that violent conflict has long-term consequences for women's life chances, long after any actual fighting has stopped. The effects of violent conflict that the two authors observe take full and proper account of a range of other factors that influence life expectancy rates. Their findings have important implications for the policies and approaches adopted both by governments that contemplate the deployment of peacekeeping forces and by humanitarian aid agencies that seek simply to alleviate suffering on the ground. If women are not to be disproportionately disadvantaged by violent conflicts, then greater policy effort needs to be made to ensure that their interests are given greater priority when peacekeeping or crisis-alleviation measures are being planned.

If this seems a rather timid conclusion, then so be it. Plümper and

Neumayer (2006) begin their study with a simple empirical question: Does violent conflict disproportionately damage women's, as opposed to men's, interests? By specifying and estimating a comprehensive model of the gender gap in life expectancy rates, they are able to show, convincingly, that such damage does indeed occur, and to estimate its precise extent under different sets of conditions.

Plümper and Neumayer do not claim to have developed a definitive model of life expectancy across time and space. Their empirical analysis implies the requirement for further theoretical work – theorizing – which will in turn require further rounds of empirical evaluation. In all this, they are engaging in a process of *retroduction* (Hanson, 1958). That is to say, their research involves a continuous interplay between theory and empirical testing, in which theory acts as a guide to empirical observation, operationalization and testing and in which empirical findings are subsequently used to modify, revise and refine theory.

Crucially, however, because Plümper and Neumayer's research follows behaviouralist precepts, it is always possible for the dispassionate observer to know exactly what it is that they are arguing and to know exactly what evidence they are using to substantiate their theoretical claims. In the often vague and confused world of social science theorizing and research – in which some writers seem, almost deliberately, to deploy obfuscation as a means of preempting criticism; these are qualities to be cherished and nurtured. Plümper and Neumayer's work analysis can obviously be criticized – on the grounds, for example, that its empirical analysis does not differentiate among the three mechanisms (economic damage, displacement, and sexual violence) that connect violent conflict to women's lower life expectancy rates. But, like all good behaviouralists, Plümper and Neumayer at least present a clearly expressed target for would-be critics. For behaviouralists, it is better to be clear and (possibly) wrong than to be so impenetrable that other writers are obliged to debate the 'meaning' of what has been written.

Conclusion: the behavioural legacy in the 21st century

Among contemporary behaviouralists, it is widely accepted that theoretical analysis must almost always be the starting point for serious empirical enquiry. This is not to say that theories cannot be modified, enhanced or rejected on the basis of empirical observation. Rather, theory acts as a vehicle for distancing the analyst from the potentially overwhelming detail of what can be directly observed, so that abstract deductions can be made about the connections between different phenomena. In addition,

theory not only generates testable hypotheses but also provides guidelines and signposts as to the sort of empirical evidence that should be gathered in the first place. In short, theory plays an indispensable role in contemporary behavioural empirical analysis. Many modern behaviouralists would go even further than this in the direction of epistemological relativism. It often used to be argued that there was an objective social reality 'out there' in the world of observation, waiting to be discovered by 'scientific' analysis. This view is by no means so widely held in contemporary behavioural circles. Not only do modern behaviouralists accept that theory must play a central role in social analysis, they also recognize the possibility that different theoretical perspectives might generate different observations. Obviously, this possibility renders the task of subjecting rival theories to empirical testing rather more complicated. According to contemporary behaviouralists, however, it does not render the task any less significant. Whatever observations a theory may engender, if it is to be considered a truly explanatory theory, it must generate falsifiable predictions that are not contradicted by the available empirical evidence. A social enquiry is, by definition, about what people do, think or say. There is, ultimately, nothing else other than people doing, thinking and saying things – whatever fancy concepts analysts might use in order to characterize 'reality'. Behaviouralism allows all theories to make whatever characterization of 'reality' they like. However, if they are to be considered explanatory, they must make statements about what people will do, think or say, given certain conditions. There is no reason why each theory should not be evaluated on its own observational terms. But unless a theory can be evaluated – that is, tested empirically – on its own observational terms, behaviouralists are not prepared to grant it the status of explanatory theory in the first place.

For contemporary behaviouralists, the main purpose of social scientific enquiry is to explain behaviour at individual and aggregate levels. The central questions that behaviouralists ask are: Why do individuals, institutional actors and nation states behave the way they do? And what are the consequences of their actions? Embedded in the behaviouralist notion of explanation is the idea of causality. Although behaviouralists are aware that causality may be as much a reflection of the way we think about the world as it is of 'reality', they nonetheless insist that, unless a theory makes some sort of causal statement, it cannot be deemed to explain anything. They also insist that, if an explanation is to be believed, it must make empirically falsifiable predictions that can be tested against observations. While it is never possible definitively to establish that a particular causal relationship exists, it is possible to determine how far a particular set of empirical observations is consistent with a specific proposition that links different phenomena together. For behaviouralists,

in short, believable explanatory theories must be capable of receiving, and must receive, empirical support. Modern behaviouralists argue, with considerable justification, that nearly all social researchers who work with empirical materials in some way (which is nearly all social researchers) subscribe broadly to this view. In this sense, the legacy of behaviouralism among empirical researchers is enormous. In many respects, we are all – or should be – behaviouralists now.

Further reading

The following list provides an outline of texts that employ and offer critiques of the behavioural approach to social explanation.

- The best introduction to the philosophy of science in general, and to behaviouralism's place within it, is Chalmers (1986).
- For various critiques and related ideas, see Winch (1958), Rudner (1966) and Thomas (1979).
- On positivism and 'scientific' approaches to social explanation, more generally, see Kuhn (1970), Hempel (1965, 1966), Hanson (1958), Halfpenny (1982) and Chalmers (1990).
- On the philosophical origins of behaviouralism, see Carnap (1936, 1950), Schlick (1974) and Ayer (1971).
- For a useful explanation of some of the terms used in these studies, see Lacey (1976).
- For justifications of quantitative approaches to the analysis of empirical evidence in the social sciences, see Blalock (1964, 1969, 1970, 1972) and King (1989).
- For a summary of the ways in which qualitative data can be employed within the 'behavioural-scientific' approach, see King *et al.* (1994).

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