

THE POLITICS OF ANIMAL EXPERIMENTATION

DAN LYONS



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Dan Lyons

Centre for Animals and Social Justice and University of Sheffield, UK

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Foreword © Wyn Grant 2013

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Foreword

Issues relating to animal protection can prove highly politically controversial as the arguments surrounding the pilot badger culls show. Animal experimentation is undoubtedly the most emotive and controversial area of the animal protection debate. Hence, the need for an authoritative, well-written and well-structured treatment of the kind that Dan Lyons has provided.

The book is written from a particular perspective, but the arguments are made in a logical fashion and consider alternative explanations. Use is made of as much evidence as possible to support the arguments advanced, although as is pointed out there are limitations in terms of both the availability of archival documents and opportunities for élite interviewing. However, a major source of originality is found in the utilisation of historically unprecedented confidential primary data relating to a major animal research programme: pig-to-primate organ transplantation. This information became available following the settlement of legal proceedings between the author and the research company. It forms the core of a critical case study that facilitates a new approach to the research area.

The book fills a gap in the literature as there is only one major earlier study of animal experimentation from a political science perspective. Unfortunately, this area of public policy, and animal protection more generally, have been relatively neglected by political scientists, in terms of either research or the coverage of standard texts on public policy. This is unfortunate, given that it helps to shine light on the actual practice of regulation and how it is influenced by changes in knowledge, technology and public opinion. It has implications for the study of public policy more generally. An examination of animal protection issues can help us to better understand the nature of the contemporary 'regulatory state', including its European dimension, and its limitations as a means of achieving stated policy goals. In the particular case, the adverse effects suffered by animals were found to exceed the level posited by regulatory assessment.

The primary focus of the study is the impact of the Animals (Scientific Procedures) Act 1986, which shifted the framing of policy from an 'animal use' discourse to one of 'animal welfare'. This does not proceed

from the assumption that the interests of animals may be sacrificed for those of humans, but requires a cost-benefit analysis of animal research proposals involving the weighing of adverse effects likely to be experienced in animals used in procedures against the likely benefits for humans, animals and the environment. The central hypothesis examined in the book is that the interests of animals have been given relatively little consideration in a policy process that is characterised by the predominance of research interests and the exclusion of animal protection groups.

However, the book does not just provide an analysis of the particular policy area but also makes a significant contribution to a continuing debate about relevant analytical frameworks in political science. Very effective use is made of the policy community/policy network model, and the literature review in Chapter 2 is one of the most comprehensive and authoritative I have seen. In particular, I thought that important and novel insights were offered on the roles of peripheral insiders.

This literature has evolved over time, and this has led to the emergence of a more dynamic conception of policy networks. However, a core insight remains: Relatively closed policy communities tend to produce policy outcomes that favour network members at the expense of excluded groups. Weaker groups that challenge insider interests find themselves excluded or limited to a token role. Policy communities are characterised by a dynamic conservatism in which the co-option of new actors legitimises existing power structures rather than changing them. Policy networks with a broad membership and relatively low entry barriers tend to produce outcomes that do not consistently favour one set of interests.

The book is based on a clearly articulated critical realist epistemology and methodology. This is consistent with a dialectic approach to policy networks that seeks to reflect and explore the relationship between structure and agency. This involves a mixture of quantitative and qualitative methodology, in line with the current consensus in favour of a mixed methods approach to political science that does not privilege particular research techniques. It recognises the variety of institutional forms that shape power relationships and that reflexive actors' interpretations of structures affect their behaviour and hence outcomes, interpretations that are influenced by social constructions of reality. The nature of UK animal research policy-making clearly reflects a persistent policy community rather than an issue network.

There is considerable scope for further research both in terms of cross-national comparison and the impact of the 2010 EU directive in

different member states, a directive that offers an interesting example of Europeanisation in terms of uploading the UK approach to the EU level. However, this book represents a major contribution to the literature in terms of theory, methodology and empirical evidence. It significantly enhances the literature on animal protection issues but also deserves a wider audience among those interested in issues of public policy-making, interest representation and regulation.

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1

Introduction

Animal protection, animal research and political science

Since the mid-1970s, increasing public concern about the treatment of animals and a growing animal protection movement have contributed to the evolution of public policy regulating aspects of human/nonhuman animal interactions. However, the politics of animal protection has been largely overlooked by political science, particularly in the field of public policy research. Robert Garner's 1998 work *Political Animals: Animal Protection Politics in Britain and the United States* remains the sole study of animal protection public policy. This book aims to help remedy this neglect.

Of all the animal protection issues, animal experimentation is arguably the most emotive and contentious. On the one hand, Garner (1993: 118) notes that laboratory experimentation on animals 'provides some of the most severe examples of animal suffering'. Furthermore, some critics argue that research on animals is scientifically flawed and hence detrimental to human well-being: 'In medical research animal experiments are generally bad science because they tell us about animals, usually under artificial conditions, when we really need to know about people' (Sharpe, 1989: 111). Deeply-held moral positions on the necessity of animal rights and the perception of a policy process dominated by groups with a vested interest in animal research have contributed to 'direct action' outside the policy process – some of it illegal and aggressive – by some sections of the animal protection movement (Garner, 1998: 4–5).

On the other hand, proponents of animal research insist that the practice has been and continues to be essential to the achievement of major public health benefits, particularly in terms of the development

of medical therapies (Paton, 1993: 4). Moreover, it is claimed that, in response to public concern for the welfare of animals, animal experiments are subject to a strict regulatory regime which ensures that the perceived benefits of such research outweigh any animal suffering, which is minimised (Matfield, 1992: 335).

This apparently acute conflict between the interests of human and non-human animals, and the fact that anti-vivisection pressure group activity also challenges the legitimacy of powerful economic and professional interests, makes for controversial politics with the potential to affect core public policy areas such as the economy, health, science and technology, consumer and environmental protection, and law and order.

From a political science perspective, UK animal research policy is especially significant because of the introduction in 1986 of an innovative legal framework that appeared to represent a fundamental change in the way that animals' interests are considered. Previously, under the regime established by the Cruelty to Animals Act 1876, licenses for animal research were granted without any regulatory scrutiny of the potential value of the proposals or the potential pain likely to be caused to animals (Garner, 1998: 187). However, the putative regulatory system introduced by the Animals (Scientific Procedures) Act 1986 is based on a cost-benefit assessment involving the weighing of adverse effects likely to be experienced by animals used in procedures against the likely benefit to accrue to 'man, animals and the environment' (Hampson, 1989: 240–1; APC, 1998: 43). This cost-benefit assessment is supposed to be the core determinant of whether proposals to conduct animal research projects should be legally permitted and, if so, the level of officially-sanctioned animal suffering. In January 2013, a new EU Directive (2010/63/EU) was transposed into UK law¹ which retains this fundamental decision-making framework, meaning that, other things being equal, case studies of this policy area under the 1986 legislation remain relevant today.

Advancing knowledge of British animal research policy

The single study of animal research public policy to date (Garner, 1998) concludes that animals' interests are given significant consideration as a result of the assent of the 1986 legislation. On this reading, the animal research policy process is 'relatively open and pluralistic'; both animal researchers and animal protection groups have access to and influence over policy-making, overseen by Home Office actors who adopt the role of neutral arbiters between the conflicting groups (Garner, 1998: 231).

However, until now, research into this policy field has been severely constrained by a lack of available empirical evidence regarding the operation of the 1986 Act and policy outcomes, as well as being influenced by a method involving comparison with US animal experimentation regulation. So, the description 'relatively open and pluralistic' may not illuminate the true state of the British situation. Moreover, concerns have been raised regarding whether the implementation of the 1986 statute has given animals' interests the level of consideration indicated by the formal legislative and administrative framework (FRAME Trustees, 1996). These considerations indicate the need to explore an alternative hypothesis regarding UK animal research policy: **the interests of animals are given scant consideration in an elitist policy process characterised by research interests' domination and the effective exclusion of animal protection groups.**

One of the major sources of this study's originality is its utilisation of historically unprecedented confidential primary data relating to interactions and policy outcomes concerning a recent major animal research programme: pig-to-primate organ transplantation conducted between 1995 and 2000.² This information has been legitimately disclosed following the settlement of legal proceedings involving the author (in his capacity as an animal protection lobbyist) and the research company (Townsend, 2003). Normally, such sources are prevented from entering the public domain due to commercial confidentiality and Section 24 of the Animals (Scientific Procedures) Act 1986 (and as amended in 2012), which prohibits the disclosure of information related to the regulation of animal research. This therefore forms the core of a critical case study that enables the previous research constraints to be partially overcome, thus facilitating a novel re-examination of this policy area.

The case study, and in particular, the primary data, provides new insights into the way that the potential costs and benefits of animal research are measured, weighed against each other and controlled in policy-making. Furthermore, this research programme was subject to relative close regulatory scrutiny, and so it would be most likely to support the pluralist description rather than the hypothesis proposed here. This means that if the case study supports the hypothesis, its generalisability is enhanced. For these reasons, this data is more reliable and relevant than any hitherto available in relation to the hypothesis addressed in this book.

The analysis of this data reveals that the 'costs' – i.e. adverse effects – suffered by animals significantly exceeded the level posited by the

regulatory assessment. The severity assessments required that the vast majority of the primate recipients of pig organs had to be euthanased before they suffered systemic illnesses or significant discomfort. But in reality, many were left to deteriorate until they were found dead or in a collapsed state. On the other hand, the benefits that accrued fell considerably short of the scientific and medical advances that were predicted and formed the justification for the research. The project was permitted on the basis that Imutran were likely to achieve progress that would allow human trials of pig organ transplants. In reality, Imutran and Home Office regulators had overlooked the precipitous immunological barriers to cross-species transplants. Consequently, the research failed to make significant headway in four and a half years of experimentation. The implication of this case is that, when the Home Office assesses licences to conduct animal experiments, animals' interests in not being subjected to pain and suffering – and the related concerns of sympathetic members of the public and cause groups – are afforded little effective weight relative to researchers' interests and their claims for potential medical and scientific benefits. Furthermore, the practical operation of the cost-benefit assessment is revealed to be inconsistent with formal policy requirements and official statements on the implementation of the legislation. These outcomes reflect a policy process monopolised by pro-animal research interest groups to the exclusion of animal protection actors, which remains the case to the present day.

Improving public debate and democratic accountability

However, advancing knowledge of animal research policy-making not only brings academic benefits, but may also facilitate positive social impacts in terms of animal protection, biomedical research and democratic accountability. Public debates about animal experimentation tend to be conducted in rather ideal, absolute terms: is the practice justified, or should it be abolished? While framing the debate in this way does, indeed, reflect vital ethical arguments about the moral status of human and other animals and the current utility of animal experimentation, it has actually had merely marginal, indirect effects on policy outcomes. As this study will demonstrate, since 1876 the prospects of achieving the abolition of animal experimentation within a definable timeframe have diminished from slim to negligible. That is not to denigrate the ethical argument for the cessation of such practices insofar as they represent the knowing infliction of pain, suffering and harm

on sentient individuals. Rather, it reflects the inescapable reality of the huge, historically entrenched power advantages enjoyed by animal research interests.

Therefore, if the only option proposed for short-term practical change is abolition, then change is rendered unfeasible. This should be a matter of concern not only to anti-vivisectionists, but to the majority of the public for whom cruelty to animals involves, at least, significant ethical costs. Moreover, animal researchers' statements of commitment to the 'Three Rs' (House of Lords, 2002: 37) – the reduction, refinement and replacement of animal experiments in order to minimise animal suffering – give the impression that the practice is deemed a source of moral regret even by those engaged in it.

Consequently, a public discourse dominated by absolute and highly generalised policy positions is likely to obscure the questions which are of most practical relevance. Instead, it is through attention to questions surrounding the severity of animal suffering and the manner in which such 'costs' inflicted on animals are compared with predicted benefits – and, crucially, who makes those decisions – that animal research regulation can become publicly accountable and implemented in a way that honours the apparent consensus in favour of the reduction and eventual elimination of harm to animals.

Outline of chapters

In order to establish a theoretical framework for this study, the next chapter reviews the policy network approach to political science. The policy network approach focusses on the relationships between interest groups and the state in particular policy areas in order to understand the policy process and policy outcomes. In addition to its widespread use in public policy research (Marsh and Smith, 2000: 4), another reason why this tool is adopted is that it is the approach that guides Garner's analysis of animal research policy. Therefore, by gaining an in-depth understanding of policy networks, a critical review of the existing analytical framework underpinning the current understanding of animal research policy will be facilitated.

Chapter 2's examination of the policy network approach focuses on the dominant Marsh/Rhodes typology (Marsh and Rhodes, 1992b). The analytical utility of the Marsh/Rhodes schema – and of policy networks in general – is based on the idea that variations in the dimensions of policy networks affect policy outcomes. Thus, policy networks with a broad membership, fluctuating access for different groups, distant

state-group relationships and high levels of conflict – ‘issue networks’ in the Marsh/Rhodes terminology – will tend to produce outcomes that fluctuate and do not consistently favour one set of interests. On the other hand, policy networks characterised by exclusive membership, close integration between state actors and certain group members, and consensus – known as ‘policy communities’ – will tend to produce outcomes that consistently favour network members at the expense of excluded groups. The explication of the policy network framework means that a key question can be posed based on the hypothesis addressed in this study: Is animal research policy made in a policy community environment?

The review of the policy network literature also identifies a shift from a static approach to a more dynamic conception of policy networks (see Marsh and Smith, 2000; Hay and Richards, 2000). In particular, it is necessary to understand the process of change and continuity in networks and outcomes, which involves iterative – or ‘dialectical’ – interactions between political actors and structures, and between the network and both the actors within it and its structural context. In other words, networks are said to be constrained by broader patterns of power distribution and other exogenous factors such as public opinion and changes in knowledge and technology. However, although networks and outcomes are constrained, they are not determined because of the ineluctable role of agency. Chapter 2 concludes by trying to overcome a perceived hiatus in the network literature: it presents a table which postulates variability in the way that issue networks and policy communities mediate different exogenous dynamics and facilitate agency. For example, whereas issue networks are susceptible to changes in public opinion or the governing party, policy communities are thought to be relatively resistant to such perturbations. This table is then used as a heuristic device in subsequent chapters to assist understanding of the evolution of the animal research policy network.

Chapter 3 applies these insights to review Garner’s case for an animal research policy network with issue network characteristics: the ‘issue network’ thesis. Garner’s inference is based significantly on his perception of the circumstances surrounding the formation of the animal research policy network in 1876, and indicates his implicit adoption of a historical institutionalist approach and the concept of path dependency. This emphasises the need to reconstruct the evolution of this policy process in order to understand its present operation, which gives rise to four chronologically-ordered research questions:

1. Which group(s) interests were served by the assent of the Cruelty to Animals Act 1876?
2. Did the policy network that emerged during the passage of the 1876 Act evolve into a policy community in the subsequent years?
3. Did the passage of the Animals (Scientific Procedures) Act 1986 signify a core change in policy?
4. Does the implementation of the Animals (Scientific Procedures) Act 1986 reflect an issue network or a policy community model of policy-making?

These questions point to a further research question related to the core hypothesis – that the nature of UK animal research policy-making reflects a persistent policy community rather than an issue network – which can be comprehensively addressed through these four questions. They also provide the framework for the empirical parts of the book, which are covered from Chapter 5 through 8.

The review of the animal research policy literature raises important methodological questions. Therefore, Chapter 4 begins with an examination of Garner's meta-theoretical assumptions which underpin his use of historical institutionalism, path dependency and policy networks. Through this analysis, a critical realist epistemology and methodology is outlined that provides the foundation for this work. This is consistent with the dialectical approach to policy networks that seeks to reflect the relationship between structure and agency. The critical realist epistemology also implies that a suitable methodology for this study involves a mixture of qualitative and quantitative methods, and the use of a case study. Moreover, the constraints on, and opportunities for, obtaining relevant data indicates that it is appropriate to utilise secondary and tertiary data to address the first three research questions relating to the historical background to animal research policy, while the primary data provides a suitable basis for a detailed case study of recent practices that are relevant to the fourth research question.

Thus, in order to address the first three research questions, Chapters 5 through 7 use policy network analysis within a critical realist epistemology to reconstruct a chronological narrative of animal research policy. However, the most salient empirical part of the book is found in Chapter 8, which presents the case study. By analysing unique primary sources, it will be possible to offer new empirical data concerning network interactions and how the cost-benefit assessment introduced by the Animals (Scientific Procedures) Act 1986 (and retained in the amended

2012 law) operates in practice. As a result, it will be possible to assess the nature of power in the network and revise the existing understanding of the nature of the network drawn from the Marsh/Rhodes typology.

Finally, Chapter 9 summarises the findings of this study and discusses its contribution to the understanding of animal research policy, power distributions in the British political system and policy network analysis. In addition, the limitations of the book's conclusions are set out as well as beneficial future research paths.

2

Towards a Dynamic Model of British Policy Networks

Introduction

This chapter explores the policy network approach as an organising framework for this study of the UK animal research policy process. The policy network approach is adopted as the principal analytical tool for the following broad reasons. Firstly, policy network analysis can be applied to the entire policy process (Smith, 1997: 15), thus corresponding to the scope of this study, which examines agenda-setting, policy formulation and implementation in animal research policy. Secondly, as explained below, it has come to occupy a prominent position in the public policy methodological canon. Thirdly, it is the approach utilised by the only significant contemporary analyst of British animal protection policy, Robert Garner (1998).

The emergence of policy network analysis as a favoured analytical tool in British public policy research (Marsh and Smith, 2000: 4) since the late 1970s (Richardson, 2000: 1006) is said to derive partly from dissatisfaction with the validity of traditional theoretical frameworks. For example, the 'Westminster model' (see below) assumed that Parliament and the Cabinet were the primary influences on the policy process (Rhodes, 1997: 5–7). In contrast, policy network analysis reflects the perception of an increasingly marginal role for Parliament and, concomitantly, an ability on the part of policy networks to resist democratic steering (Jordan and Richardson, 1987: 56).

Policy network analysis can also be seen as a reaction to established theories of the state, such as corporatism and, particularly, pluralism which, like the policy network approach, have focussed on government-interest group relations but have tended to work at a general, macro-level (Rhodes, 1997: 29–31). Instead, policy network analysis builds

on the observation that ‘...in different policy arenas a range of group/government relationships exist’ (Smith, 1993b: 76). Thus, it appears to represent a more realistic model that corresponds to the complex interactions that take place in diverse and disaggregated policy-making arenas (Parsons, 1995: 185). Hence, policy network analysis is generally conceived as seeking to understand and/or explain¹ policy outcomes by primarily focussing on the interactions between interest groups and the state in policy sectors centred on a distinct government institution or set of institutions. Thus, Rhodes (1997: 29) articulates policy network analysis as a *meso-level* approach that links and contextualises the *micro-level* of analysis, which focuses on the actions of, and relations between, individual actors and organisations as they interact over particular policy decisions, and mediates the impact of *macro-level* phenomena such as broader patterns of power distribution in society or national political institutions.

This means that policy decisions on animal research cannot be adequately explained without an understanding of the broader power structure in which they are made. Therefore, this chapter begins with a survey of competing models of power in British politics. The second section reviews the development of the policy network approach and introduces the influential typology of British policy networks developed by Marsh and Rhodes (1992b). This typology consists of a continuum upon which policy networks can be located according to the patterns of state/group relationships within them, which, in turn, can be analysed according to four interrelated variables relating to a network’s membership, integration, resource distribution and power balance. The characteristics of each variable and the corresponding policy outcome implications are explored for the ideal-type networks – policy communities and issue networks – that are predicated to represent opposite poles of the Marsh/Rhodes continuum.

The third section of the chapter examines the literature that attempts to move beyond typology to model the dynamics of policy networks. It commences with a discussion of the different categories of change, particularly the distinction between minor secondary changes in instrumental aspects of policy and networks, and major changes representing systemic shifts in core beliefs and values. This important analytical distinction facilitates an examination of whether different degrees of policy change tend to be caused by certain combinations of network type and political developments. For example, does the type of network affect whether a major change in public opinion tends to lead to secondary or core policy change? Analysis is then undertaken of how networks and

policies are seen to be affected by exogenous factors and endogenous network features that include both network structures and the strategic actors within them. Thus, the ultimate aim of this chapter is to develop a model of network and policy evolution that can be applied to an analysis of UK animal research policy.

The nature of power in British politics

The broader, macro-political environment, incorporating government institutions and socio-economic structures, inevitably constrains and enables meso-level networks in a variegated manner (Daugbjerg and Marsh, 1998: 54, 61). Therefore, in order to explain policy outcomes in Britain, it is necessary to consider three different models of British governance that have various implications for power distribution across the British political system:

- the Westminster model
- the differentiated polity model (see Rhodes, 1997)
- the asymmetric power model (see Richards and Smith, 2002; Marsh et al., 2003).

The Westminster model

The Westminster model can be seen as the traditional, institution-based framework for understanding British politics, and is said to embody, among other characteristics, the ideas of the British state as a representative government where Parliament plays a central role in policy-making (Rhodes, 1997: 22; Bevir and Rhodes, 1999: 217; Judge, 2004: 687), and the neutrality or 'constitutional propriety' of civil servants (Richards and Smith, 2004: 777). Thus, the Westminster model encapsulates an optimistic and occasionally teleological view of British government as effective, legitimate and progressive (Bevir and Rhodes, 1999: 217–18; Judge, 2004: 684).

However, Marsh et al. (2003: 306) argue that the Westminster model has been an implicit organising framework underpinning an ideal of British politics, rather than an explicit, well-theorised model of the British state. In particular, it is seen as an outdated, legitimising mythology that continues to manifest itself in the discourse of political élites (Rhodes, 1997: 22), despite sustained criticism from political scientists (Richards and Smith, 2002: 48–9). In fact, while Rhodes (1997: 24) suggests a real shift in the nature of British governance away

from the Westminster model since the late 1970s, Judge (2004: 697) notes that its empirical accuracy has been consistently questioned for the last hundred years. For example, Moran (2003) develops Marquand's notion of 'club government' as a broad description of the regulatory style of the British state since the 19th century. Far from excluding groups from the policy process, 'club government' developed through a powerful ideology of self-regulation advanced by professional groups who played a key role in 19th-century economic life. Rather than all-powerful state actors adopting a neutral, 'public interest' stance untainted by the demands of special interests, small-scale Inspectorates lacked resources compared to 'regulated' professional and related economic groups. As a result, Inspectorates practiced co-operative regulation with regulatees rather than enforcing a literal interpretation of the law. Regulation was thus determined by the dominant values and interests of these elite groups, and therefore became a merely symbolic matter. Consequently, 'Not only are legally specified standards breached, the breaches are institutionalised: non-compliance with standards is thus organizationally sanctioned' (Moran, 2003: 35).

The differentiated polity model

One of the most detailed alternative organising perspectives to the Westminster model has been developed by Rhodes (1997). He argues that particularly since 1979, the predicates of this traditional perspective have been replaced by what he terms 'the differentiated polity', signified by: 'interdependence, a segmented executive, policy networks, governance and hollowing out' (1997: 7). Thus, the unified, top-down power structure envisaged by the Westminster model is said to have fragmented as the government has devolved service delivery to a 'maze' of public and private bodies, as well as the voluntary sector. In the differentiated polity, interdependent 'governance', comprising the use of markets, hierarchical bureaucracies and networks as governing structures, has replaced centralised government (Rhodes, 1997: 8, 47). Power relations are also conceived differently. Instead of the Westminster model's zero-sum, centralised notion of power, the differentiated polity exhibits power-dependence relationships where actors exchange resources in positive-sum games (Rhodes, 1997: 9). Thus, attempts by central government in the 1980s to assert executive power in the face of entrenched policy communities are said to have had the unintended effect of transferring power to new, complex, self-organizing networks involving a wider range of actors. This is a macro-level development that Rhodes (1997: 45) terms 'pluralization'.

Rhodes' (1997: 195) notion of 'institutional pluralization' may have a *prima facie* affinity with the traditional concept of pluralism, but he appears to acknowledge that plurality is not a sufficient condition for pluralism:

The differentiation scenario of an ever-more fragmented, complex and unaccountable system looms large. It will act as a check on executive interventions, but it does not herald a pluralist heaven. Differentiation provides checks and balances but without both constitutional guarantees or democratic accountability. (1997: 135)

Indeed, Rhodes (1997: 197) concludes that the 'fetishization of economy, efficiency and management' that has accompanied the emergence of the putative differentiated polity has led to the exclusion of 'new' ideological groups, which would include animal protection. For example, the values underpinning this change stem less from a concern with taking account of animal welfare considerations in animal research policy, than from the alleged 'profligacy' of 'experimental rats bred at £30 each when available commercially at £2' (Rhodes, 1997: 93). Furthermore, it could be argued that in regulatory policy domains such as animal research, a weak state vis-à-vis the regulated industry may undermine pluralism insofar as the state lacks the resources that would allow it (if it so wished) to reflect any public interests that might conflict with business and professional interests.

The asymmetric power model

Rhodes does not explicitly develop his differentiated polity model to account for the broader questions of the distribution of power in the British political system that are raised by policy areas such as animal research. In order to address this issue, Marsh et al. (2003: 307) propose an 'asymmetric power' model, which they describe as 'an adaptation of the Rhodes model in which we have used our own research to account for what we regard as the structural inequalities that still exist in British politics'.

This model postulates a number of asymmetries in power distribution (Richards and Smith, 2002: 282–3), but most relevant to this study is the assertion that persistent patterns of structural inequality in society mean that many groups continue to be denied access to policy-making. It is argued that economic and professional groups possess resources deemed essential by the government, such as knowledge and expertise, which facilitate close and exclusive exchange relationships with the government. These resources give these groups unique influence over