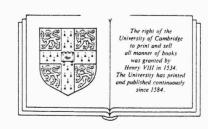
The nature of social laws Machiavelli to Mill

ROBERT BROWN



CAMBRIDGE UNIVERSITY PRESS

CAMBRIDGE
LONDON NEW YORK NEW ROCHELLE
MELBOURNE SYDNEY

Defending Objectivity

Andrew Collier is the boldest defender of objectivity – in science, knowledge, thought, action, politics, morality and religion. In this tribute to Andrew, his colleagues acknowledge the influence he has had upon them. They show that they have been challenged by his thinking and, in turn, offer challenging responses to him.

This wide-ranging book covers key areas with which defenders of objectivity often have to engage. Sections are devoted to the following:

- The 'Objectivity of value' are things of value in the world, independently of the labels we subjectively attach to them?
- 'Objectivity and everyday knowledge' do our workday practices possess an objectivity which our theories do not, or vice versa?
- 'Objectivity and materialism' does that which is materially based have a special claim to being objective?
- 'Objectivity in political economy' is the moral dimension systematically distorted in economic and social theory and can such a claim be substantiated?
- 'Objectivity and reflexivity' can we reason and reason reflexively without undermining the very objectivity we seek to defend?
- 'Objectivity, postmodernism and feminism' can these common attacks upon objectivity remain coherent or are they necessarily self-undermining?
- 'Objectivity and nature' is appreciation of nature or advocacy of deep ecology dependent upon the objective value of the natural world?

The diverse contributions range from social and political thought to philosophy, reflecting the central themes of Collier's work.

Margaret S. Archer is Professor of Sociology at the University of Warwick. She is a Trustee of the Centre for Critical Realism.

William Outhwaite is Professor of Sociology at the University of Sussex. He is an associate editor of the *European Journal of Social Theory*.

Critical realism: interventions

Edited by Margaret Archer, Roy Bhaskar, Andrew Collier, Nick Hostettler, Tony Lawson and Alan Norrie.

Critical realism is one of the most influential new developments in the philosophy of science and in the social sciences, providing a powerful alternative to positivism and postmodernism. This series will explore the critical realist position in philosophy and across the social sciences.

Critical realism

Essential readings
Edited by Margaret Archer, Roy Bhaskar,
Andrew Collier, Tony Lawson and Alan Norrie

The Possibility of Naturalism (3rd edition)

A philosophical critique of the contemporary human sciences Roy Bhaskar

Being and Worth

Andrew Collier

Quantum Theory and the Flight from Realism

Philosophical responses to quantum mechanics
Christopher Norris

From East to West

Odyssey of a soul Roy Bhaskar

Realism and Racism

Concepts of race in sociological research

Bob Carter

Rational Choice Theory

Resisting colonisation Edited by Margaret Archer and Jonathan Q. Tritter

Explaining Society

Critical realism in the social sciences Berth Danermark, Mats Ekström, Jan Ch. Karlsson and Liselotte Jakobsen

Critical Realism and Marxism

Edited by Andrew Brown, Steve Fleetwood and John Michael Roberts

Critical Realism in Economics

Edited by Steve Fleetwood

Realist Perspectives on Management and Organisations

Edited by Stephen Ackroyd and Steve Fleetwood

After International Relations

Critical realism and the (re)construction of world politics Heikki Patomaki

Capitalism and Citizenship

The impossible partnership Kathryn Dean

Philosophy of Language and the Challenge to Scientific Realism

Christopher Norris

Transcendence

Critical realism and God Margaret S. Archer, Andrew Collier and Douglas V. Porpora

Also published by Routledge

Routledge studies in critical realism

Edited by Margaret Archer, Roy Bhaskar, Andrew Collier, Nick Hostettler, Tony Lawson and Alan Norrie.

Marxism and Realism

A materialistic application of realism in the social science Sean Creaven

Beyond Relativism

Raymond Boudon, cognitive rationality and critical realism *Cynthia Lins Hamlin*

Education Policy and Realist Social Theory

Primary teachers, child-centred philosophy and the new managerialism *Robert Wilmott*

Hegemony

A realist analysis Jonathan Joseph

Realism and Sociology

Anti-foundationalism, ontology and social research *Tustin Cruickshank*

Critical Realism

The difference it makes Edited by Justin Cruickshank

Critical Realism and Composition Theory

Donald Judd

On Christian Belief

A defence of a cognitive conception of religious belief in a Christian context Andrew Collier

In Defence of Objectivity and Other Essays

Andrew Collier

Realism, Discourse and Deconstruction

Edited by Jonathan Joseph and John Michael Roberts

Critical Realism, Postpositivism and the Possibility of Knowledge

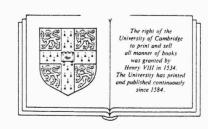
Ruth Groff

Defending Objectivity

Essays in honour of Andrew Collier Edited by Margaret S. Archer and William Outhwaite

The nature of social laws Machiavelli to Mill

ROBERT BROWN



CAMBRIDGE UNIVERSITY PRESS

CAMBRIDGE
LONDON NEW YORK NEW ROCHELLE
MELBOURNE SYDNEY

Published by the Press Syndicate of the University of Cambridge The Pitt Building, Trumpington Street, Cambridge CB2 1RP 32 East 57th Street, New York, NY 10022, USA 296 Beaconsfield Parade, Middle Park, Melbourne 3206, Australia

© Cambridge University Press 1984

First published 1984

Printed in Great Britain by Redwood Burn Trowbridge, Wiltshire

Library of Congress catalogue card number: 83-15194

British Library Cataloguing in Publication Data
Brown, Robert
The nature of social laws.

1. Natural law
I. Title
171'.2 K460

ISBN 0 521 25782 4

To my daughter Kathryn

Contents

	Acknowledgements	page ix
	Introduction 1 Conceiving the problem 2 Divine legislation for Nature and Society 3 The medieval Natural Law conception	1 6 10 13
1	From isolated generalizations to the 'circle of commerce' 1 Botero on population constraints 2 Practical generalizations: Bodin, Guicciardini, Machiavelli 3 Three types of activity 4 The sixteenth-century economists 5 The 'circle of commerce': Mun and Misselden	25 25 28 35 38 42
2	Political principles and unintended consequences 1 Hobbes' laws of nature 2 Hobbes and necessary social principles 3 The laws of trade: North and Locke 4 Locke's laws of value 5 Unintended consequences: Mandeville and Smith	49 49 53 58 63 66
3	Social explanation as applied psychology 1 Turnbull's social Newtonianism 2 Scientific explanation: Berkeley and Newton 3 Human atoms and the social order 4 Hume's 'universal maxims' 5 Hume's motives of action 6 Hume's legacy: unanswered questions	70 70 74 78 81 87 91
4	The causal laws of social progress 1 Montesquieu on the principles of governments 2 Quesnay's economic system 3 Turgot's historical stages of society 4 Turgot and the co-variance of economic factors 5 Condorcet on the science of social mathematics 6 Human uniformity and the autonomous system	96 96 101 104 110 113 118

	Contents	V
5	The methods of social economy 1 Say's methodology of economics	12 12
	2 Some economic laws of Malthus and Ricardo	12
	3 Natural tendencies and temporary effects	13
	4 Social economy and political economy: J. S. Mill	13
	5 The model state: von Thünen	14
	6 Senior's basic principles of political economy	14
	7 Senior's basic principles criticized	15
6	Vico's humanistic science of history	158
	1 The superiority of the humane sciences	158
	2 The necessity of the 'eternal customs'	162
	3 The method of historical knowledge	170
	4 The human creation of history	176
_	5 Empathetic understanding and the pattern of history	181
7	Comte and the objective knowledge of social stages	187
	1 The rejection of psychology2 The law of social evolution	187
	3 Knowledge of social wholes	192
	4 Two kinds of explanation	198
	5 Empirical laws and metaphysical causes	201
	6 The social physics of collective events	204
8		209
9	J. S. Mill: the structure of a social science 1 Macaulay on motives	213
	2 Macaulay: James Mill's principles of human nature	213
	3 J. S. Mill: Macaulay on experimental method	218
	4 Derivative laws and empirical generalizations	221
	5 Approximate generalizations	226
	6 Resolving scientific laws	230 233
	7 Generality and precision in scientific laws	233
	8 The derivation of ethological laws	241
	9 Ethology as an independent science	244
	10 Speculation and social change	248
	Conclusion	251
	1 Concerning the answer	251
	2 The search for laws vs the search for rules	252
	3 Reducibility and the search for social laws	255
	4 Our common-sense vocabulary and precise laws	257
	5 Can we hope to discover strict social laws?	259
	Index	265

Acknowledgements

For their helpful comments and objections I am grateful to my colleagues Stanley Benn, Keith Campbell, S. L. Goldberg, Knud Haakonssen, and Eugene Kamenka. From Elizabeth Short I have received much help in translating certain passages, in preparing the index, and with the reading of proofs. To Vibeke Wetselaar and Helen Hookey I owe the considerable labour of typing the manuscript.

Canberra February 1983

Robert Brown

In an influential essay entitled 'The Divorce Between the Sciences and the Humanities' Sir Isaiah Berlin has drawn attention to the historical sources and nature of what he calls 'the great cleavage between the provinces of natural science and the humanities' – a cleavage first clearly expressed, he says, by Giambattista Vico in 1725. In doing this, Vico began, in Berlin's words, 'a great debate of which the end is not yet in sight'. It was, and remains, a debate largely concerning two different, and partially opposed, conceptions of the appropriate methods for obtaining knowledge in the field of the humanities.

On the one side of the debate are those who believe that the methods of natural science ought to be used also in the social studies: in those portions of history, anthropology, literature, philology, jurisprudence, economics, and art which give us genuine information rather than mere judgements of value. On the other side are those who favour a different procedure, who from Vico onward have represented the Counter-Enlightenment, the reaction against the monolithic methodology of the eighteenth-century philosophes of France. It is this latter view which influenced, Berlin says, 'social and cultural thinkers like Young and Adam Ferguson, Hamann and Möser and Herder'. It also influenced 'the great generation of classical scholars, Wolf and Niebuhr and Boeckh. who transformed the study of the ancient world, and whose work had a decisive influence on Burckhardt and Dilthey and their successors in the twentieth century'. To this list of Berlin's we can add the names of such philosophers as Fichte, Hegel, Schelling, Jacobi, and Humboldt, historians such as Ranke, Droysen, and Savigny, the economists Roscher, Knies, and Schmoller, and the

¹ Reprinted in Against the Current (Hogarth Press, London, 1979), pp. 80–110.
² Ibid., p. 110.
³ Ibid., p. 108.

later social thinkers Rickert, Troeltsch, and Meinecke. The list is endless and largely German. But all the people on it would have agreed that the aim of the humane studies is not simply to obtain factual information and give explanations in terms of causes and social scientific laws. It is at least, as Berlin puts it, 'to examine what a situation meant to those involved in it, what their outlook was, by what rules they were guided, what "absolute presuppositions" (as Collingwood called them) were entailed in what they (but not other societies, other cultures) said or did...'⁴

One characteristic, though not invariable, belief of thinkers of the Counter-Enlightenment was that the 'meaning' of a social situation can only be discovered by imaginative sympathy on the part of the interrogator, by his entering into, or feeling into, the projects, emotions, and thoughts of the participants. This special ability was given many names during the nineteenth century: empathetic understanding, sympathy, Einfühlung, are only three of them. The ability was always contrasted with ordinary analytic reason of the kind employed in logic, science, and technology. Thus there were to be at least two major areas of human knowledge, Naturwissenschaft and Geisteswissenschaft, and two different abilities or procedures or methods of enquiry which were appropriate to their respective areas of knowledge. Practitioners of the former, at their most extreme, believed in the public testability of all truth-claims, and hence in the universal necessity for controlled observation, for experiment, for the employment of mathematical techniques, and for the rejection of claims to 'intuitive knowledge' and the dogmas that were based on them. Practitioners of Geisteswissenschaften, at their most extreme, accepted as indispensable the use of private intuition, embraced Einfühlung as a method of procedure, stressed the value-laden aspects of 'cultural products', and distinguished between the 'understanding' of social life and the explanation of natural processes.

It would be possible, and certainly valuable, to discover the social sources – religious, economic, political – of these two opposing conceptions of method. It would also be possible, and perhaps even more valuable, to trace the intellectual transformations of these ideas since the eighteenth century and the history of their relationship with each other. If both these enterprises could be undertaken within the confines of one study,

4 Ibid.

the perennial demands of many critics would be satisfied: we should then possess both a social and intellectual history of the struggle between the different supporters of two important, but apparently conflicting, views of the humane studies. We should have an instance of the kind of scholarly work that critics constantly urge their colleagues to produce but of which there are few substantial examples. That such a book has not yet been written is some evidence of its difficulty; and that neither half of it has even been attempted is still stronger testimony to the gulf between the self-deceiving requests made by critics and the meagre results offered by practitioners.

The present study has a more limited ambition than that of describing the intertwined histories of two opposing conceptions of the humane 'sciences'. While the limitation has been adopted unwillingly, its necessity will become obvious since even the restricted aim is ambitious enough. That aim is to trace, characterize, and to some extent criticize, the intellectual sources and development of one central feature of what became known as the Enlightenment conception of the sciences of social life. It is to trace the intellectual development of one aspect of the conception while necessarily remaining largely silent about its social transmission – necessarily not only for reasons of time and space but for reasons of intellectual procedure. We cannot trace the social transmission of a theory or an idea unless we can recognize its various manifestations over time; and we cannot do that until we are clear about its character, that is about its essential elements and their organization. One very good way, then, of becoming clear about the elements of a theory is to find out with whom they arose, and how and where the process of uniting the elements took place. The Enlightenment conception of the social sciences, and its central notion of a social law, has both intellectual sources and intellectual descendants. Only when we take these into account are we in a position to ask, and to answer, the different question 'Through whose hands, and by what means, were these views actually transmitted?' Of course it may be that the intellectual development of a theory and its social transmission - or the transmission of some of its constituents - take place at the same time and among the same people. Often they do not.

Similarly, the intellectual development over time of a theory must be known before we can investigate not only its transmission but the social reasons for its popular appeal and adoption – for

wider social attitudes toward it. If we knew only the latter we should be deprived of the chief point of our work, namely the intellectual event whose social setting we were trying to provide. Take, for example, Berlin's interesting remarks about the rise of Lutheran pietism in eighteenth-century Germany and its connection with the German cultural resistance to, and rejection of, the thought and attitudes represented by the French Enlightenment. 'The pietists', writes Berlin, 'profoundly unpolitical in temper, contemptuous of the world and its varieties, sought direct communion of the individual soul with God' and 'tended to be suspicious of hierarchy, ritual, learning and rational speculation'. Especially strong in East Prussia, the pietists resisted the modernizing efforts of Frederick the Great; their resentment, Berlin suggests, 'was probably at the root of the revulsion against the materialism, utilitarianism, ethical naturalism and atheism of the French lumières'. 5 It does not require much extension of these remarks in order to apply them, rightly or wrongly, to Herder's stress on the notion of Einfühlung, and more generally to Counter-Enlightenment views concerning the methods of the humane 'sciences'. But unless we know what those methods were supposed to be and how they differed from the methods advocated by the French lumières, these suggestions about the influence of pietism are useless to us.

The present volume tries to sketch the growth of the central idea of the Enlightenment conception, the idea that there are scientific laws of society just as there are scientific laws of nature. Examples of the earliest such generalizations are drawn from the political writers of the sixteenth century, from Machiavelli for example; and discussion of the organization of such generalizations into a social science is drawn from a philosopher as recent as John Stuart Mill. The work of each man forms a natural boundary. Before Machiavelli there was little analysis of the operation of actual societies and of the principles and rules by which their governors must – not merely should – be guided. After Machiavelli there was a great deal of such discussion, even though much, perhaps most, of it was designed to prove him mistaken. Similarly, before Mill there was little analysis of the operation of actual social sciences and of the principles and rules by which they must – not merely

might – be organized and practised. After Mill, there was a great deal of such discussion, even though much, perhaps most of it outside Germany, was designed to prove him correct.

This book ends with Mill because he was the first person to bring the Enlightenment conception of the social sciences to a point sufficient for us fully to understand and appraise it. Subsequent elaboration has added nothing essential to his argument and removed nothing that makes a substantial difference. No one who either favours or opposes the basic claim – the claim that there are social laws just as there are physical laws, and that therefore the structure, procedure, and aims of the social sciences must resemble that of the physical sciences – is likely to have his opinion altered by considering conceptual developments after Mill. All the conceptual information necessary for concluding for, or against, the view which he advocates can be found in his writings. Only if we take the claim to be an empirical one do we need to consider later evidence; and if that is our view then the work of later philosophers cannot help us much.

Against this it will be protested that Marx's views on the developmental laws embodied in the materialist interpretation of history, and his views on the law of economics, provide a counterexample – that it is absurd to discuss the growth of the notion of social laws in the nineteenth century without discussing the views of Marx. But to this complaint there are two replies to be made. One is that Mill's A System of Logic, the book with whose contribution the present volume concludes, was published in 1843, long before Marx had contributed anything to the discussion of the topics with which this book deals. The other reply is directed to the implicit suggestion that the book should terminate with the thought of Marx rather than with that of Mill. Now while Marx's application of the notion of social laws is considerably more complex and interesting than his scanty methodological discussion of the idea itself, Marx's use of such laws is neither explicit enough nor sufficiently novel to justify us in carrying our present account forward another two decades. To discuss Marx in this volume would require us to discuss Engels also since the latter said more about social laws than did Marx. It would also require us to examine something of the later history of Marxism; and in this way we should be led into the first section of a subsequent volume, one which urgently needs to be written. However, it is a common error of the committed to believe that Marx's thought, unlike that

⁵ 'Hume and the Sources of German Anti-Rationalism' in *David Hume: Bicentennial Papers*, ed. G. P. Morice (Edinburgh University Press, 1977); reprinted in *Against the Current*, p. 165.

of other thinkers, casts its shadow backward in time as well as forward. We need not strive officiously to be Marxians prior to Marx.

1. Conceiving the problem

Since the sixteenth century, the belief that human society, like nature itself, is subject to discoverable laws has played an increasingly important role in Western thought. The role has been so far reaching that any useful account of its development, and the bearing of that development upon our present views, requires us to pay close attention not only to the questions which earlier thinkers wished to put to Society – rather than to Nature – but also to the assumptions which those questions display.

There is, however, one general and overriding question which earlier thinkers could not have asked, a question which faces us at the outset and whose answer members of this generation have felt bound to seek. That question is why the efforts by so many people, during the last four hundred years, to discover laws of society have not been better rewarded. If there are laws of society, why have they been so difficult to find? Is it because their character has been misconceived? Or is it simply that they have been sought in the wrong area of social life? Do they exist unrecognized, or is the long search for social laws the unhappy outcome of a gross misunderstanding? Are there laws of society with which we are all familiar and which are not difficult to state? Or are there reasons of logic, or fact, or both, which ensure that social laws do not – perhaps cannot – exist?

Each of these questions, once it was formulated, has never lacked for answers. Indeed, the history of modern Western social thought consists, in large part, of the persisting differences of procedure, often expressed in controversy, between supporters and opponents of the view that significant and discoverable laws of society exist. For if they do, then the manner in which human society ought to be studied will be, on the face of it, very different from that required if there are no such regularities of law. Certainly this is the conclusion which, as the history of the subject reveals, Western social commentators usually have drawn. They have believed, rightly or wrongly, that the presence or absence of social laws is a problem whose answer is needed in order for us to settle a host of ancillary questions. Some of these questions are religious:

'Is man exempt from the regularities to which the remainder of creation is subject? Does God have a special set of laws for man, and is it our duty to seek them out?' Some of the questions are metaphysical: 'How can we reconcile the presence of social laws with our possession of free will – for example, with our apparent ability to falsify the truth of any social generalization which may be put forward as a law of society?' Still others of these ancillary questions are more directly concerned with the characteristics of the supposed laws: the kinds of units which they are thought to relate, the types of relations which the laws describe, and the sorts of connections which may hold among different forms of natural and social laws. There is also the further, and persistently troublesome, question of the nature of the relationship between social enquiries directed toward the discovery of social laws and social enquiries which are not thus directed.

It is a matter for careful examination, of course, whether the existence of social laws was, and is, as crucial a problem as these consequential topics suggest. But the only, and hence the best, way that we have for determining the first half of the answer is by historical enquiry. For until we know what the thinkers who developed the concept of a social law had in mind, what role they envisaged for the concept, what issues its use was intended to decide, we cannot identify the problems which they took themselves to be addressing. Without that knowledge we cannot determine how important a problem the existence of social laws was, and should have been, for these earlier social thinkers. No doubt we can answer the second half of the question without such information: that is, we can discuss at length the present role of social laws while not troubling ourselves with previous notions of them. To do so, however, would be to cut ourselves off from most of the controversies which have carried the issue to its present state; and in doing this we should also be keeping ourselves in ignorance of problems which are closely related to our own, and thus of solutions which might be helpful to us. Once we tolerate this ignorance, we lose track of the assumptions that underlie our own formulation of the problems raised by the supposed existence of social laws. But to lose track of these underlying assumptions is to lose sight not only of their connection with specific problems but also of some of the reasons, namely those provided by the assumptions, why we take the problems to be worth pursuing.

However, while history, like context, is almost everything, it is

not often informative to be told so. In the case of social laws we need to distinguish between two different sorts of historical investigation in which we might be interested. One is an investigation of the ways in which social generalizations took on an increasingly explicit and important role in Western thought after the seventeenth century. This is a topic which has been much studied, especially by historians of economics, and the chronological outlines are by now well known. Intertwined with this topic is another one of more direct concern to us here and one which will be pursued in detail later. It is that of the growth of methodological discussion about the nature of social laws and their place, if any, in social enquiry. The utility of such discussion is parasitic upon attempts to frame and actually employ social generalizations. For if no attempts were to be made, then our interest in their hypothetical success or failure could not be sustained long, any more than our interest in equitation could long survive the disappearance of horses. It is true that methodological debate may precede the activity itself; but if the activity never takes place the discussion of its character will lapse from inanition. In point of fact, performance usually precedes its own analysis, and it is only later that descriptions of actual performances of an activity become suffused with explicit prescriptions concerning its standards and ends. As we shall see, this has been the case with the employment of social generalizations.

Because an activity and its theoretical analysis eventually establish a symbiotic relationship, it is usually neither practical nor practicable to discuss them quite separately, and that will not be attempted here. But it is both possible and useful to note that while the development of explicit generalizations from implicit ones often accompanies the growth of their analysis, this is not an invariable result. Nor need the analysis wait upon the presence of explicit generalizations within the field under scrutiny. Analogies drawn with examples from other fields will do: the influence exerted on Hobbes' thought by the work of Galileo, and that exerted by Newton on almost all serious social thinkers of the first three quarters of the eighteenth century, are two of the best-known instances.

On the other hand, the mere existence of explicit generalizations is in itself often insufficient to stimulate questions of analysis. In the history of science there are many cases of isolated, explicit, and even quantitative, generalizations which provoked no

contemporary discussion about their logical status. Two examples from chemistry are Richter's law of equivalent proportions concerning the weights of substances that combine with each other (1791), and Proust's law of the constant composition or ratio of weights of the elements in a compound (1797). It was not until Dalton, Gay-Lussac, Avogadro, and others, further developed, and then applied to chemistry, the atomic theory of matter - a theory which gave an explanation of Richter's law and Proust's law - that the philosophical analysis of these generalizations claimed much attention. Similarly, Boyle's law of 1662, although significant as an early example of a quantitative generalization, did not receive its first explanation until Newton gave it, and the law did not receive its present explanation until 1738; in that year Bernoulli suggested that the inverse variation of a gas's volume with its pressure was due to the pressure simply being the impact, on the vessels' containing walls, of the random motion of the atoms of gas. Here again, it was the explanatory theory which excited analytical discussion, not the mere empirical generalization.

The reason for this is clear. Isolated empirical generalizations, however explicit, only classify an object or property or event as belonging with others of the same kind which behave similarly. Generalizations of this sort can be confirmed or disconfirmed by direct example; they can be confused with definitions; and some of the relationships which they assert to hold can be both complicated and expressible mathematically. But isolated empirical generalizations, by definition, cannot raise the more complex and interesting problems of indirect evidence, of conflict between theories, of crucial experiments, and of theoretical vocabularies, to which developed theories are subject. Methodological analysis thrives on, and largely consists in, problems such as these problems which arise from competing explanations. Logical analysis does not flourish on the simple difference between our reliance on an implicit generalization and our reliance on an explicit one. Certainly it is true, as Schumpeter says, that 'From the standpoint of the theorist it is always a "major event" when an important concept is made explicit and workable, although it was - this is the usual case - implicitly present in previous arguments.'6

⁶ J. A. Schumpeter, *History of Economic Analysis* (Allen & Unwin, London, 1954), p. 316.

11

The importance of that event, however, arises from the utility of the concept itself, not from the utility of some contemporaneous analysis of it.

2. Divine legislation for Nature and Society

There is a preliminary generalization which must be developed and believed in either before, or in conjunction with, the attempt to replace implicitly lawlike generalizations with explicit ones. This preliminary generalization is simply that our world is controlled largely by lawlike processes which can be discovered by human beings. For if it is not thought to be thus controlled, then there is no point in our trying to establish what are the laws of its operation; and if it is thought to be controlled by laws beyond our power to discover, the outcome for us will be no better, since we shall have no means of identifying them, and hence no good reason to look for them. On the other hand, the notion of a law-governed world must itself be the product of an extensive use of particular implicit generalizations. Without some experience of such regularities, it is difficult to imagine why earlier peoples would wish to attribute them as, for example, Anaximenes did in the Ionia of the sixth century B.C., to an unbounded deity who created and governs the world-order by means of lawlike processes of change. Since we know that ideas of this sort must go back very far in human prehistory, their antiquity demonstrates how ancient must be the interpretation of Nature's regularities as due to the intention of a deity who legislates his will both for Nature and Society.

This view that there was a single source for the laws of both, and the corresponding Christian assumption that such laws were all of the same intentional character – that the physical laws of Nature and the moral laws of Society ('natural laws') were simply the rules, writ large, of a Divine Legislator – was not seriously challenged in Western Europe until the eighteenth century, and it held sway long after that. The earlier treatment of physical laws as divine legislation applied to Nature was accompanied, of course, by the treatment of moral rules ('natural laws') as divine legislation applied to Society: natural laws and moral (or 'natural') laws were merely two different applications of the same kind of Holy Writ. Because the two sets of laws were supposed not to differ in their essential features, the physical laws which regulated the course of Nature were thought of as moral commandments issued to an

obedient Nature, and moral laws as the natural regularities which Society both should, and largely did, obey. This assimilation of natural and social laws to the directives laid down by a Divine Legislator, in pursuit of His scheme of salvation for mankind, made it difficult to discuss the features of Society without moralizing; or to discuss the features of Society without mistaking them for aspects of eternal Nature. Thus the interpretation both of natural regularities and of social observances as being embodied commandments had the effect, well recognized and much supported by religious belief, of discouraging the separate investigation of either one of them.

The amalgam itself resisted dissolution even after the independent growth of the new physics at the turn of the seventeenth century, for there were two stages to be gone through before dissolution could occur. First, the work of those scientists, from Galileo to Newton, who increasingly treated Nature as a mechanical system of interconnected parts had to be absorbed. Until the scientific success of the new physics was first established and then publicly acknowledged, the notion of God as being merely the original designer and energizer of the Universe could not be applied to Society. For since the Christian God had designed both Nature and Society according to the same plan, the agreement between their respective laws had to be a structural one. Unless the laws of Nature were the encoded instructions from God for the self-operation of a world-machine, there could be no such similar code for the running of the social engine.

Second, the application of the mechanical model to Society had to be tried and the difficulties of the 'mechanization of the social picture' understood. As long as both the laws of Nature and the laws of Society were taken to be the encoded regularities of the same kind of mechanical system, much the same conclusion as had been reached previously could be retained. That is, natural regularities and social rules could still be coupled as being divine directives expressed in similarly mechanical systems. The only change was that now each system could be investigated separately with less danger of offending God, since his role had been redescribed as being indirect, and it was thought important to discover exactly what processes he had originally set in motion. The fact that they were now believed to maintain themselves had as one of its consequences the widely shared view that the search for the regularities of natural processes was straightforward and their

discovery certain. The existence of the Christian God ensured the presence of His plan, and the character of that God guaranteed the reliability of the plan's operation and hence the reliability of scientific predictions. That the unfolding of the plan took a mathematical and mechanical form was simply additional evidence of God's rationality. But if human social life did not appear to take a similar form, then an explanation of the apparent difference was required. Was not Society also a field in which God's rational commandments were embodied? This question, when asked non-rhetorically, laid open the possibility of a negative answer — and with it the possibility that the truly mechanical system of Nature did not embody God's commandments either.

The mere hypothesis that at least one, and perhaps both, of these negative answers might turn out to be correct was in itself intellectually disturbing, but it is only the threat to God's social plan, and the intellectual reactions to that threat, which will concern us here. The claim that the social system of a particular society is inspired and maintained by divine will has been, traditionally, the first refuge of that system's early ideologists. Since the best, indeed the only, evidence for such a claim is the retention of social and political power by the claimant, divine support on this basis has commonly been regarded as a short-term benefit. However, there is another, and more cautious, claim which has often been put forward instead. It is that God supports not regimes and rulers taken individually, but certain types of regimes and rulers. His moral precepts are embodied only in certain types of social and political arrangements; when these are not present His precepts do not actually guide or control the behaviour of the people in question. Their beliefs are irrational. and hence unnatural because the people are neither following God's social plan nor adhering to the 'laws of nature' which contain the details of its operation. People in such societies can lose sight of the social prescriptions that display the divine will: they can lose sight of them because the prescriptions do not in fact become the regularities of social life. For this reason the 'anomic' people cannot learn the divine rules of Nature by imitating their exemplifications in the regularities of social behaviour. The prescriptive law does not become a descriptive one.

One obvious advantage of this more restricted claim is that falsification of it is difficult. Since the presence or the absence of God's support for particular types of social system can only be

tested either by observations drawn from many places and periods, or by conclusions derived from a well-substantiated theory, this claim need not, and of course did not, suffer much from the failure of any given regime. But there is another, more worthwhile, advantage which this claim possesses. It is that the claim directs our attention away from the power relations between God and a particular ruler and, instead, to the character of the divine precepts - God's 'natural laws' - which are said to be embodied in certain kinds of political and social arrangements. Since God's support for these arrangements is thought to rest on their inherent desirability, and hence moral value, we must deal with four unavoidable questions. The first is 'To what forms of conduct do these precepts bind us?' The second question is 'How are these forms of conduct embodied in particular types of social systems?' and the third is 'Which types of systems embody these forms of conduct?' The fourth and most general question is simply 'By what means or procedures can we obtain the answers to the first three questions?"

3. The medieval Natural Law conception

From the time of the pre-Socratic philosophers onward, it was a common belief of the educated in Europe that a part of the human soul, the part which Aristotle apparently thought of as the 'active reason', is independent of the body and is eternal and divine. It was thought to give human beings their rational powers, their ability to know the essences of things. Active reason also provides the universe with an intellectually coherent organization, for active reason is either identical with both Nature and God, as the Greek Stoics thought, or is at least one of their defining properties. Human beings are rational animals, then, because they have the capacity to participate in the rationality which is the organizing force of the Universe. This Stoic identification of active reason with Nature had as its consequence a set of beliefs which later became the doctrinal core of medieval thought. This set was summarized by Otto Gierke in this way:

... its peculiar characteristic is that it sees the Universe as one articulated Whole and every Being – whether a Joint-Being (Community) or a Single-Being – as both a Part and a Whole: a Part determined by the final cause of the Universe, and a Whole with a final cause of its own...

But as there must of necessity be connexion between the various groups, and as all of them must be connected with the divinely ordered

Universe, we come by the further notion of a divinely instituted Harmony which pervades the Universal Whole and every part thereof. To every Being is assigned its place in that Whole, and to every link between Beings corresponds a divine decree. But since the World is One Organism, animated by One Spirit, fashioned by One Ordinance, the self-same principles that appear in the structure of the World will appear once more in the structure of its every Part. Therefore every particular Being, in so far as it is a Whole, is a diminished copy of the World; it is a Microcosmus or Minor Mundus in which the Macrocosmus is mirrored. In the fullest measure this is true of every human individual; but it holds good also of every human community and of human society in general. Thus the Theory of Human Society must accept the divinely created organization of the Universe as a prototype of the first principles which govern the construction of human communities.⁷

This is the intellectual framework into which we must fit the most influential medieval answer – that of Aquinas – to our fourth question: 'How can we obtain the answers to our first three questions?' Aquinas begins, characteristically, by emphasizing the goal-directed nature of human action:

'good' is the first thing that falls under the apprehension of the practical reason, which is directed to action, since every agent acts for an end under the aspect of good. Consequently the first principle in the practical reason is one founded on the notion of good, viz., that good is that which all things seek after. Hence this is the first precept of law, that good is to be done and ensued, and evil is to be avoided. All other precepts of the natural law are based upon this, so that whatever the practical reason naturally apprehends as man's good (or evil) belongs to the precepts of the natural law as something to be done or avoided. 8

Thus, for Aquinas, the natural law – the law common to all people – is based on the fact that all human beings have an innate tendency to seek the fulfilment of their capacities and the satisfaction of their needs; this satisfaction and fulfilment is what human beings take to be good. As Aquinas puts it in brief, 'all those things to which man has a natural inclination are naturally apprehended by reason as being good and, consequently, as objects of pursuit, and their contraries as evil and objects of avoidance. Wherefore the order of the precepts of the natural law is according to the order of natural inclinations.' These 'natural inclinations' include self-

⁸ Summa Theologica, 1–11; A.94, A.2, in The Political Ideas of St. Thomas Aquinas, ed. D. Bigongiari (Hafner Publishing Co., New York, 1953), p. 45.

preservation, sexual intercourse, a desire for knowledge of God, and a desire for life in society. All these, therefore, fall within the scope of the precepts of natural law, for 'to the natural law belong those things to which a man is inclined naturally'.¹⁰

Hence Aquinas' answer to our procedural question is that we must study the character of the natural inclinations which all people take to be good. These tendencies show us, in a general fashion, the sorts of conduct to which natural law confines us. Because of the existence of such tendencies, 'natural law in its first common principles is the same among all men, both as to validity and recognition (something is right for all and is so by all recognized)'. 11 It is true that such common principles alone will not enable us to specify in detail the forms of conduct which either are, or should be, exemplified in particular societies. For this reason the common principles alone do not give us the answers to our three substantive questions about the exemplification of certain forms of conduct in certain types of social and political systems. In order to answer those questions we need to know the particular circumstances in which the common principles are to be applied. For in given cases, says Aquinas, the general rules derived from these common principles 'may prove defective both as to validity because of certain particular impediments ... and also as to recognition'. 12 Men can fail to recognize the natural law because their reason 'has been distorted by passion, or by evil habits, or by bad natural relations'. 13 As an example of a particular impediment, Aquinas gives the failure to restore deposits to their owner because restitution would be harmful to the community. 14 He goes on to remark that 'as the limiting particular conditions become more numerous, so do the possibilities decrease that render the principle normally applicable, with the result that neither the restitution nor the failure to do so can be rigorously presented as right'.15

But how does this question, the question of the embodiment of God's natural laws in specific forms of social life, bear upon our problem here? How do these earlier attempts to describe the social content of God's will and reason help us to understand the growth of the idea of empirical social laws? These attempts help us in the following way. The medieval Natural Law conception of society was not only a religious justification of an ideal society, it was also

⁷ Political Theories of the Middle Age, trans. F. W. Maitland (Cambridge University Press, 1900), pp. 7–8.

¹⁰ *Ibid.*, q.94, A.4, p. 49.
¹¹ *Ibid.*, p. 50.
¹² *Ibid.*
¹³ *Ibid.*
¹⁴ *Ibid.*

a religious explanation of the structure of existing societies. Its argument, as we have remarked, was that since all human beings have certain common natural inclinations which are divinely implanted in them, their social life both should be, and is in fact, subject to the common principles and limits of the Natural Law that is God's rule. Of course such a law has to be 'discovered', and its consequences derived, by human reason. But since we begin by believing that the Universe, in whole and part, is goal-directed by God's will, there are severe constraints placed on what we can 'discover'. For example, we clearly cannot 'discover' the falsity of the claim that every person has an innate tendency to seek the fulfilment of his or her capacities and the satisfaction of needs – a fulfilment and satisfaction which every person takes to be good. For if we could make such a 'discovery', then it might turn out, on the one hand, that the absence of such a tendency was disconfirming evidence for God's goal-directedness or, on the other hand, that not every person acts for an end which he or she takes to be good. Either one of these results could lead us to conclude that the course of human social life is not explicable in terms of a divinely encouraged striving to realize the principles of Natural Law.

However, embedded in this view of a universe 'striving to realize the principles of Natural Law' was a closely related view, one which A. N. Whitehead called 'the greatest contribution of medievalism to the formation of the scientific movement'. This was 'the inexpugnable belief that every detailed occurrence can be correlated with its antecedents in a perfectly definite manner, exemplifying general principles'. Whitehead went on to say:

Without this belief the incredible labours of scientists would be without hope. It is thus instinctive conviction ... which is the motive power of research: – that there is a secret, a secret which can be unveiled. How has this conviction been so vividly implanted on the European mind?

When we compare this tone of thought in Europe with the attitude of other civilizations when left to themselves, there seems but one source for its origin. It must come from the medieval insistence on the rationality of God, conceived as with the personal energy of Jehovah and with the rationality of Greek philosophy. Every detail was supervised and ordered: the search into Nature could only result in the vindication of the faith in rationality. ¹⁶

In short, then, the medieval Natural Law conception of society offered an explanation-sketch of the regularities of social life, a sketch which pre-empted the area which later was occupied by quite different forms of explanation. It was a sketch which presupposed that, in the words of Gierke quoted previously, 'the Theory of Human Society must accept the divinely created organization of the Universe as a prototype of the first principles which govern the construction of human communities'. Since the Universe is organized so as to fulfil God's plan, the regularities of human society must follow suit. They are directed toward the achievement of God's goals for mankind and, consequently, these regularities are the social expression of the divine precepts which govern the actions of human beings. Hence the notion of a merely empirical regularity, one which has no further role to play in the divine plan and does not mirror its structure, cannot coherently be entertained. For on the medieval view, a social regularity does not simply record the ways in which people actually behave under specifiable conditions; it also carries people toward the predestined goal of the way in which they ought to behave. In the long term, what happens is inevitable because it is part of God's plan and is therefore rational and just. So on this view of Goddirected society there is no point in – and no room for – the pursuit of a godless and non-prescriptive conception of how societies work. The medieval Natural Law conception is, first, an explanatory rival of the idea of scientific laws of society and, second, a self-justificatory account of the convergence, in the long run, between the goals of Christian virtue and the actual political achievements of human societies. Wherever the medieval Natural Law conception held sway, its incompatibility with the notion of scientific social laws would logically require that they be excluded.

Yet if this conclusion is soundly based, a new question arises. For if long-term inevitability is a feature of the Catholic God's plan – and hence of the medieval conception of Natural Law – then the sixteenth-century Calvinist view of strict predestination of souls either to damnation or to irresistible grace is a view of the inevitability of human affairs in both the long and short term. So a question arises concerning the possible consequences for science of this difference, the difference between the medieval Catholic view that in the short term the influence of human free will is effective and the subsequent Calvinist view that it is not. Some writers have suggested that the complete determinism implied by sixteenth-

 $^{^{16}}$ Science and the Modern World (Macmillan, New York, 1925), Mentor reprint, 1948, p. 13.

century Calvinist predestination made the acceptance of scientific determinism easier: if the course of Nature is thought to have no causal gaps, then one source of resistance to the idea of discoverable causal regularities is removed. Carl Friedrich, for example, referred to Johannes Althusius as the 'political theorist of Calvinism par excellence' 17 and contrasted Althusius' seventeenthcentury view of nature and politics with that of Aguinas. According to Friedrich, 'medieval voluntarism implies a view of Nature fundamentally different from that of Althusius and it furthermore implies an interpretation of political life which is similarly voluntaristic'. 18 Friedrich remarks that Althusius, 'like Hobbes, is attempting to develop the implications for a science of politics of the rigid determinism which the dogma of predestination meant in the natural order'. 19

Now it would be extremely convenient to be able to rely on an historical causal connection between adopting a belief in predestination and adopting scientific determinism. But to establish the connection is a difficult task, and it has yet to be done. Such a belief is in itself neither a necessary nor a sufficient condition of adoption of the scientific method: the latter appeared early in Catholic countries such as Italy and appeared late in the Calvinist country of Scotland. It could be argued, of course, that what the idea of predestination encouraged was not the appearance of scientific determinism but its continued development. However, the evidence for this claim is not strong. The doctrine of dual predestination promulgated by St Augustine did not lead to the continued later development of the scientific method originated by his predecessors, the Hellenistic Greeks. Nor do the varying degrees of predestinarianism in the history of Islam seem to correlate with the growth of a scientific determinism in Moslem countries. Moreover, it is worth recalling that in the sixteenth century, Jean Bodin, one of the earliest of modern writers on what we should now refer to as causal regularities in politics. was first a Catholic, then apparently a Protestant; and interesting also that he held both to the doctrine of free will and to the belief that the physical environment has important causal effects upon human social behaviour - that people tend to create certain forms of social organization under certain physical conditions. Bodin's

advocacy of geographical (and astrological) determinism in social life co-existed with his orthodox Catholic view that individual human actions are freely chosen and not physically determined. His case reminds us that the co-existence of incompatible views in a thinker is hardly an insurmountable obstacle to their independent development. If the mere acceptance of Calvinist determinism actually smoothed the path of scientific determinism, then equally, the mere acceptance of Catholic voluntarism – in distinction to the medieval Natural Law conception – did not prevent the acceptance of scientific determinism. Thus the claim that the latter was a causal offshoot of Calvinist predestinarianism has still to be substantiated.

Obviously, claims of this sort are instances of a more general problem in historical work, the problem of the actual causal influence, if any, which is exerted by a particular view at a specific time and place. Suppose, for example, we were to go on to ask, as it would be natural to do, whether the medieval Natural Law conception actually prevented the emergence and spread either of the idea of scientific determinism or of the idea of scientific social laws. We should then have to distinguish this question from the related one with which, in error, it might be united, namely whether, on grounds of logical or scientific incompatibility, the medieval conception ought to have prevented belief in scientific determinism and social laws. Clearly, the question of actual historical influence can have a completely different answer from the question concerning logical and scientific compatibility. People's conceptions often influence human behaviour on logically irrelevant or scientifically mistaken grounds; and equally often, people's beliefs fail to influence human behaviour even though the reasons why they should do so are logically and scientifically excellent. There is a strong tendency in work on the history of thought to make the same answer do for both questions: that is, to think, for example, that in demonstrating the logical incompatibility of two views we are thereby demonstrating their historical, or causal, independence of each other. Every historian knows differently; but every historian of ideas is professionally tempted, in specific cases, to confuse incompatibility, or dissimilarity, of ideas with historical independence, and conversely, to confuse the similarity of ideas with historical influence between them.

Calvinist predestinarianism, then, may be logically incompatible

¹⁷ Politica Methodica Digesta of Johannes Althusius (Harvard University Press, Cambridge, Mass., 1932), Introductory Remarks, p. xvii.

18 Ibid., p. lxx.

19 Ibid., p. lxviii.