DEMOCRACY AND COMPLEXITY

A REALIST APPROACH

DANILO ZOLO
Democracy and Complexity
A certain prince of the present day, whom I shall refrain from naming, preaches nothing but peace and faith, and to both one and the other he is entirely opposed; and both, if he had put them into practice, would have cost him many times over either his reputation or his state.

Machiavelli, *Il Principe*
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_Danilo Zolo_

Translated from the Italian by David McKie

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Preface

Following the collapse of communism, Western democracy appears to have become the world’s only viable political system. Democracy itself, however, is at present undergoing unparalleled evolutionary stresses in modern post-industrial societies. So strong have these stresses become that the explanatory power – perhaps even the ability to convey any meaning at all – of the very notion of ‘representative democracy’ is now seriously called into question. In the same way, other large sections of the vocabulary of European political theory appear to have been emptied of their content. Terms such as ‘sovereignty of the people’, ‘common good’, ‘consensus’, ‘control’, ‘participation’, ‘pluralism’, ‘party competition’, ‘public opinion’, have long been detached from the values they originally bore. Indeed, it is hard to avoid the impression that even the acknowledged classics of political thought have now ceased to be able to provide us with any real help.

Nor is the situation any less problematical in the area of political research. The epistemological paradigms postulated by the various theories of democracy – including the economic theory, the empirical theory, and the ethico-political theories of contractualistic or utilitarian origin – have all succumbed to the prevailing uncertainty over the foundations of scientific knowledge and the situation of crisis in the social sciences. This uncertainty has followed the demise of empiricist philosophies of science and is still characteristic of the movement which, for want of a better name, it has been convenient to call ‘post-empiricism’.

For all these reasons the need for a thoroughgoing reconstruction of democratic theory will form the principal concern of this book. By democratic theory I shall mean liberal-democratic theory tout court, in the sense in which it has become established in the political culture of Europe, without intending to draw any precise distinction between liberalism and democracy. I hope that the argument of this book will serve to justify the
loss of this philosophically significant distinction, as well as certain other historiographical simplifications which will be made necessary by my approach.

For many, of course, the ideal of democracy remains an important symbol. In certain political contexts, especially, but not only, in the Third World, the word 'democracy' still represents a revolutionary challenge to power on the part of political and military groups. This has dramatically become the case in the countries of 'actually existing socialism', where the political and institutional legacy of Marxism-Leninism has manifestly failed to withstand the test of experience. After the democratic revolution of 1989 and the decline of the Soviet Union, the communist system stands widely revealed in its true light as unbearable regressively rather than a transcendence of the formalism of representative democracy. At the same time, however, it is not hard to predict that the Eastern European countries which are now so fulsome in their praise of democratic liberties and of free-market economics will, after the removal of the Iron Curtain and the anticipated arrest of their economic decline, all too rapidly find themselves faced with exactly the same problems as those that typically afflict Western democracies.

In fact the notion of representative democracy, especially at a time when its traditional conservative and progressive alternatives are breaking down, no longer appears capable of successfully describing the political systems of post-industrial countries and of adequately distinguishing the democratic from the non-democratic. This is especially true of the notion of democracy which has developed out of what I propose to call the 'neo-classical' doctrine. I have in mind the theories of democratic pluralism which extend from Schumpeter to, amongst others, Lipset, Dahl, Plamenatz, Aron and Sartori. To my mind, these theories are nowadays no less rudimentary or unrealistic than the classical doctrine of democracy whose lack of complexity and realism they originally set out to oppose. Fifty years after *Capitalism, Socialism and Democracy*, it is necessary to realize that Schumpeter's brand of realism has been displaced, not to say wholly superseded, by the realism contained in a reality of infinitely greater complexity. Once again, therefore, we are faced with the need to evolve another theory of democracy of still greater complexity and realism than those previously transmitted to us by the Western tradition, both classical and 'neo-classical'.

Far more than the classical doctrine, it is the neo-classical theories of democracy that provide political theodicies of the 'prince of the present day'. By designating such a 'prince' democratic, and by seeing pluralistic democracy as 'one of the most extraordinary of all human artifacts',¹ they

simply justify the principality of today, in all its forms, as the best of all possible principalities. However, it is not my purpose to attempt here any fruitless (and inevitably moralistic) resurrection of the ethico-political prescription of classical democracy in the old European tradition. A sufficient number of such attempts have appeared on both sides of the Atlantic in the last twenty years, of which John Rawls has provided the most prominent example. To my mind they add up to little more in substance than a harking back to the puritan individualism of European proto-capitalism, whose political ideals, it has been said, extended no further than the intellectual horizon of the eighteenth-century ironmonger.

For myself, I remain unconvinced that the underlying assumption behind the notion of representative democracy – i.e. the sovereignty, rationality, and moral autonomy of the individual – remains in any sense valid as an assumption rather than as an extremely difficult goal in the context of what have now become the truly effective factors in the political systems of modern, complex societies. Consequently, I intend to argue for the elaboration of a ‘post-representative’ theory of the political system capable of matching the levels of complexity now reached by industrial societies in the midst of the ‘information revolution’: a theory which would take account of the ‘evolutionary risks’ which democracy encounters in those societies.

In doing this, I consciously ally myself with the tradition of European political realism which leads from Machiavelli to Hobbes, Marx, the Italian elitists, Weber and Schumpeter. Naturally I hope to remain aware of the difficulties inherent in such a proposition, but I shall aim not to lose sight of the essential lesson to be drawn from this tradition: that the salient characteristic of all political decision-making is its lack of impartiality, and the randomness of its morality. In contrast with the moralism which at present holds sway in political philosophy in the English-speaking world, one of my basic assumptions will be that the primary function of the political system is that of reducing fear, through a selective regulation of social risks.

At the same time, however, it is important to state that I ally myself with classical notions of the resistance to power and the struggle against its insolence, abuses and privileges. For this apparent contradiction, the lessons of recent times will perhaps form my best apology.
Acknowledgements

My first thanks are due to Richard Bellamy and John B. Thompson for the encouragement they gave me to develop a number of ideas which I had begun to advance in a previous collection of essays. That those ideas should finally have emerged as a book to be published in English is owed to the kind suggestion of Anthony Giddens, David Held and John B. Thompson, who also offered some valuable advice about its structure. To Anthony Giddens I owe in addition the opportunity to stay in Cambridge during the autumn of 1988 as Visiting Scholar of the University’s Social and Political Sciences Committee. Through the kindness also of Jeremy Butterfield, Fellow of Jesus College, my stay in Cambridge at that time enabled me to lay the ground for the book in near ideal conditions.

In June 1989 I spent a brief, but closely packed, time at Bielefeld, where the ample resources of the University Library, and especially of its sociology section, greatly assisted my further research. The success of the visit was largely made possible by the expert bibliographical help I received from Elena Esposito.

A book which saw its beginnings in one Cambridge reached an equally happy conclusion in another. As a result of a much appreciated invitation from its chairman, Guido Goldman, I was able to spend the winter of 1989–90 at Harvard, as Visiting Scholar at the Center for European Studies.

My book naturally owes a great deal to the English-speaking environment in which it was both conceived and, in large part, written. But I should not wish, for all that, to pass over the large debts I have incurred in discussing its ideas with numerous Italian friends. In thanking Luca Baccelli, Franca Bonichi, Antonio Cassese, Furio Cerutti, Pietro Costa, Raimondo Cubeddu, Luigi Ferrajoli, Giovann Francesco Lanzara, Giovanni Mari, Virgilio Mura, Andrea Orsi Battaglini, Emilio Santoro and Francesco Vertova, I am able to acknowledge just a few of those debts.
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The greatest, however, as always, is to Norberto Bobbio, whose views are so constantly in my mind that it is as if I have discussed every page of the book with him, even those he has never seen.

Finally, on the literary side, it is a pleasure to express my thanks to David McKie, Fellow of Robinson College, Cambridge, who once again has been kind enough to lend a text of mine the elegant precision of his English.

Danilo Zolo

Florence and Cambridge
1 Some General Assumptions

Complexity

In *Democracy and Its Critics* Robert Dahl has argued that any proper discussion of the problems of democracy must begin by addressing itself to the half-hidden assumptions lying behind democratic theory. These assumptions, he reminds us, are present in all conceptions of democracy, but are ones which proponents of democracy tend to dismiss as a sort of unexplored and unrecognized 'shadow theory'. The result is that this grey area in fact receives greater illumination at the hands of critics of democracy. This is an opinion not usually voiced in American political science and one with which I find myself largely in agreement. It is important, therefore, that I should first lay bare the assumptions behind my work and attempt to argue their case. In doing this, I shall aim to reduce the extent of my own 'grey area', although it would naturally be foolish to hope to eliminate it entirely.

The general premiss behind my thought is the hypothesis that it is the idea of complexity – along with the closely related notion of social complexity – which opens the way to a realistic analysis of the condition and fate of democracy in post-industrial societies. The idea of complexity, at least in the sense in which I propose to use it, involves a very broad range of philosophical assumptions which cannot be taken for granted. In addition I shall make reference to a 'reflexive epistemology' and, albeit critically, to system theory.

The idea of complexity is plagued with controversy. A decade ago Herbert Simon was able to identify no less than seven distinct meanings then given to the term. It is true that in certain disciplines a number of rigorous definitions have been reached: for instance in dynamic topology, information theory, artificial-intelligence research, and, above all, in computer science, where the notion of computational complexity has well
Some General Assumptions

established itself. Such formalized definitions are useful, in these as in other contexts, for mathematical calculation. They fail, however, to admit of any significant application in the social sciences. Their practical utilization requires a large number of supplementary assumptions or *ceteris paribus* clauses which can only annul the logical rigour of their point of departure and hence their utility.

Once we abandon narrow subject confines and enter into the domain of the social sciences (or the related area of political and journalistic language), we find ourselves confronted with a pathological situation. For here the notion of complexity, despite all the value it has acquired in specialized contexts, has only an awkward and, usually, trivial meaning, as in the reply so often given by European politicians to tricky questions, namely that 'the problem is more complex than that'. Often the word 'complex' appears to stand for little more than the psychological unease of someone who finds himself in the position of having recently made the discovery that the world in which he lives is no longer that of his parents and grandparents.

In fact, even in its more sophisticated uses, the concept of complexity remains vague and ambiguous, to an extent which goes beyond the vagueness and ambiguity of terms normally employed in the social (and natural) sciences. It has to be admitted that philosophers of complexity have hardly distinguished themselves in their attempts to bring their subject up to the standards required for rigorous scientific debate. The examples of Edgar Morin and Niklas Luhmann come to mind, not to mention the proponents of *autopoiesis*, and 'second-order cybernetics'.

My first task, therefore, is to set out in specific terms the idea of complexity which I intend to use, and, in doing this, to offer some defence of it. For epistemological reasons which I hope will become clear by the end of this chapter, I shall make no attempt to give it a formal definition which aspires to some grade of verifiability (or falsifiability) within a properly axiomatized theory. Instead, I shall restrict myself to suggesting a possible line of interpretation. And this I shall put forward, after the event, not for its methodological rigour, but for its ability to select and arrange in coherent fashion certain problems which I consider important. In this way, I hope to set out the premisses, naturally entirely stipulative, of a clear and accessible argument, matching what I am in a position to offer with what I hope will be the reasonable requirements of my readers.

In my theoretical lexicon the term 'complexity' does not describe objective properties of natural or social phenomena. Nor does it denote complex objects as contrasted with simple objects. Rather, it refers to the cognitive situation in which agents, whether they are individuals or social groups, find themselves. The relations which agents construct and project on their
Some General Assumptions

environment in their attempts at self-orientation – i.e. at arrangement, prediction, planning, manipulation – will be more or less complex according to circumstances. In the same way their actual connection with the environment will be more or less complex.

These premisses allow the conditions of complexity to be expressed under the following four headings:

1. The wider the scope of possible choices and the higher the number of variables which agents have to take account of in their attempts to resolve problems of knowledge, adaptation and organization, the more complex their environmental situation becomes. For example, life in a metropolitan environment offers more complexity than life in a rural environment in proportion to the greater variety of experience it provides. The complexity is further increased, the more the inhabitants become aware of the possibility they have of being exposed to pollutive substances. In Western countries, political life has become more complex with the introduction into elections of opinion polls. These extend the range of available information and influence the choice of voters by anticipating the result of the ballot.

2. An environment grows in complexity, the more interdependent the variables become. Variations in the value of one variable inevitably act on other variables (and so too they on it), making the task of cognition (and operation) necessarily more difficult. A larger amount of information is then needed to arrange and control the environment. Once a certain threshold of complexity is crossed, the very quality changes of the calculations needed to predict the effects of the recursive relations which interconnect the environmental factors. Even analysis of individual phenomena becomes less certain, given that their basic condition – and developments from that condition – can scarcely be separated from the nexus of non-linear connections.

3. A third element of complexity is formed by the instability or turbulence of the environment and by the tendency of its variables to change along swift or unpredictable trajectories. This facet of complexity is of a dynamic nature, and is all the more important the more it is connected to processes which lead either from order to disorder (revolution, chaotic evolution, catastrophic bifurcation, etc.) or, and still more significantly, to the birth of order from disorder.

4. The fourth condition of complexity, which itself embraces the first three, is the state of cognitive circularity reached by agents who become aware of the high level of the complexity of their own environment. These agents realize that the difficulty they encounter in their attempts to explain and predict environmental phenomena according to linear (i.e. monocausal, monofunctional, or simple-law) schemes, itself conditions their overall
relationship with the environment. The difficulty in fact arises from what is actually their own cognitive activity in constructing and altering their environment through their attempt to grasp it intellectually. (This situation seems to receive confirmation from the prevalent interpretations of the uncertainty principle.) Consequently, the agents take account of the fact that they are not in a position to define their environment in objective terms, i.e. by neutralizing the distortions introduced by their own cognitive activity and, circularly, that they are not in a position to define themselves without reference to the complexity and turbulence of the environment which, over time, condition and modify their own cognitive activities. The situation they find themselves in, therefore, is one of epistemological complexity. From this there arises, as we shall see, the need for a ‘reflexive epistemology’, based on recognition of the cognitive intertwining of agent (or system) and environment in conditions of heightened complexity.

Social complexity

By ‘social complexity’ I have in mind a specific configuration of social relations in modern post-industrial societies as it is perceived by the social agents themselves. This configuration may be seen – as it is, for example, by Niklas Luhmann – as the outcome of a very general evolutive tendency. The underlying hypothesis behind his and others’ views is that social groups tend over time to modify their organizational structure according to a logic of increasing differentiation. This hypothesis is now generally considered to be well established, having been advanced by many of the founders of modern sociology, such as Spencer, Simmel, Durkheim, Weber and Parsons, who form the tradition to which Luhmann himself subscribes.

Luhmann’s argument is that social evolution has historically taken the form first of a phase of segmentary differentiation, second as differentiation through stratification, and finally, in modern times, as functional differentiation, arising from an increase in the quantity and variety of the functional subsystems of each social system. The subsystems (economic, political, scientific, etc.) develop more specific roles than were present in the system from which they were originally differentiated, creating to this end separate organizational structures and shaping themselves to working criteria – ‘functional codes’ – which open the way towards autonomous specialization.

I should say at the outset that, in contrast to Luhmann, the establishment of an evolutionary basis for a theory of social complexity holds little of value for me. I doubt even whether such a basis could ever be
affirmed, especially if the attempt to do so is made by means of a rough combination, on the most general of theoretical planes, of System Theory and the ‘Darwinistic approach’. More significant, from my point of view, is the analysis of the actual level of complexity of contemporary political systems, the ramifications of this development and the issue of whether this level will increase or diminish in the immediate future.

My use of the term ‘social complexity’ should therefore be seen in the light of this more toned-down assessment. The following four propositions will help to make clear what it is:

1. In post-industrial societies, typified by a high level of division of labour and functional differentiation, social complexity manifests itself as the variety and semantic discontinuity of the languages, understandings, techniques and values which are practised within each subsystem and its further differentiations. Every subsystem tends to seek specialization and to work on the basis of distinct and autonomous functional codes. The meaning of an event experienced within one social environment – a religious experience, for example – cannot be conveyed in the terms relevant to the experience of a different environment – a sports club, for instance, or an office, or a nuclear research laboratory. The different experiences are not at root commensurable. The variables of social behaviour increase in correlation, and there is a consequent growth in the difficulty of its understanding and prediction.

2. Alongside the tendency to autonomy of the functional codes, there exist phenomena of growing interdependence between the various subsystems. These phenomena are a condition of their coordination within the wider social orbit. Study of the different forms taken by this interdependence reveals diffuse and polycentric activity, with a characteristic tendency towards the breaking down of hierarchical structures. Political campaigns, for example, are nowadays conditioned by the requirements of the medium of television, but this medium is subordinate to legislation governing political use of the media, and both of these agents, the politicians and the television company, have to submit to the exigencies of the advertising market. This process is in turn conditioned not only by general economic legislation, but also by the increasingly fierce competition between television and more traditional forms of publicity. Herbert Simon and Raymond Boudon have demonstrated how, in the fields of economics, business studies and sociology, an increase in phenomena of interdependence is accompanied by an increased difficulty of prediction and social intervention. Since they are forced to make their predictions and projections in the absence of full information and sufficient knowledge of the lines of interaction, the economist, politician and social engineer have to accommodate themselves to a significant body of ‘perverse effects’: that
is, of results they had not predicted and which are hardly welcome to them. More generally, any growth in phenomena of functional interdependence is matched by a significant increase in negative external factors.

3 Differentiation of experience favours social mobility. In place of a society weighted with the ballast of universal and unchanging principles, there is a pluralism of social spaces regulated by contingent and flexible criteria. Removal of the constraints of tradition, stratification, and localization leads to a marked acceleration of social change. Moral ‘polytheism’ and widespread agnosticism over the ‘final questions’ take the place of institutionalized collective beliefs brought into being by political coercion.

4 As seen by individual agents (or systems), increased levels of differentiation lead to a greater ‘depersonalization’ and ‘abstractness’ of social relations. Variety of experience increases, but the experiences are more directly moulded by functional needs or expectations. The individuals, who give or receive specialized services within ever more differentiated roles, become interchangeable elements within those roles. The multiplicity of possible actions and the increase in the range of services produce a kind of ‘selective overload’ in a context of increasing insecurity and instability. The wider the spectrum of possible choices extends, the more pressing and hazardous becomes the need for each agent to choose between options and to ‘reduce the complexity’.

Epistemological complexity

My treatment of the problem of complexity (including social complexity) is quite clearly only one of the many which are possible. It cannot claim, in absolute terms, to be preferable to any other. My outlook is unavoidably context dependent and cannot avoid a certain evaluative bias. But one feature essential to my treatment is the attempt to deal with the complexity of political and social relations in post-industrial societies on the basis of a further, no less complex, cognitive approach: that is, on the basis of a reflexive epistemology.

The meaning I attach to reflexive epistemology may be conveyed most directly by reference to the metaphor first used forty years ago by Otto Neurath to describe the position of the philosopher of science in the post-Einsteinian period. It has more recently been given even greater celebrity by Quine, who took it as a symbol of his own critique of dogmatic empiricism. Philosophers, according to Neurath, are like sailors who are prevented by storm from returning to port and so are forced to repair their disintegrating ship in mid-ocean, supporting themselves, while they
carry out the repair, on the very structures threatened with collapse by the waves.

The reflexive nature of this metaphor well conveys the idea of 'epistemological complexity' which I have referred to as one of the summary conditions of complexity. The metaphor alludes to a cognitive situation in which any possibility of certainty or, following Popper, of 'approximation' to the truth, is excluded because agents themselves are included in the environment which they attempt to make the object of their own cognition. The agents may take critical – i.e. reflexive – account of the situation of circularity in which they find themselves, but they cannot remove themselves from their own historical and social perspective, or free themselves from the biases of the scientific community, culture or civilization to which they belong and which influence their own perception of themselves. They cannot know themselves objectively, but they cannot even know objectively their environmental either, since they themselves alter the environment by projecting upon it their own biases when they interact with it in making it the object of their cognition.

Agents may well attempt to deal with the problem of circularity by including themselves among the objects which they study. But they will never succeed in forming the perfect circle of cognitive self-transparency by neutralizing, so to speak, all the anthropological, semantic, and sociological preconditions of their own intellectual biographies. They can only try to reduce, but never succeed in suppressing, the element of epistemological complexity. And in this respect, as post-empiricist philosophers, historians and sociologists of science such as Thomas Kuhn, Ludwik Fleck, and the Edinburgh School have persuasively argued, the epistemological situation of social groups, and even of scientific communities, is no different from that of individual agents.²⁰

Moreover, if agents wish to avoid condemning themselves to total cognitive and communicative paralysis, they have to avoid calling into question the whole conceptual apparatus set in place for them by the environment. At least in part, they have to accept, acritically and non-reflexively, the linguistic and theoretical presuppositions handed down to them by the 'folklore' of the tradition to which they belong.²¹ They are not therefore in a position to occupy some neutral ground, a Cartesian tabula rasa, which they can take as a 'methodological starting-point' for an objective foundation of knowledge. Nor is it possible for individuals, as Edmund Husserl and Edith Stein suggested,²² to attain at least some inner certainty, a basic insight at the end of a psychological journey made within the phenomenological context of the 'world of life' (Lebenswelt). If the situation of circularity is truly one which may not be overcome, all possibility of the justification for, or of an objective foundation of,
knowledge must fail, whether it be of an empirical, Galilean nature or of
an intuitive, consciential kind.

From this ‘reflexive’ standpoint, philosophies of science based on
realistic or idealistic stances can only appear, for symmetrically opposite
reasons, wholly inadequate. And this is no less the case with more soph-
isticated recent versions such as ‘internal realism’ and ‘radical con-
structivism’ respectively. Such philosophies ignore the situation of
circularity from which no cognitive construct is free, and, in so doing, set
out to establish linear, causal and ‘directional’ relations between agent and
environment. They conjure up ingenuously – that is, through their inability
to grasp the complexity of the cognitive position – relations of objective
mirroring of the environment or, conversely, of subjective ‘production’ of
it.

Thus there are good reasons for seeing neo-positivism in particular as
being the most thoroughgoing attempt in our time at the scientific and
logicist denial of ‘epistemological complexity’. The so-called North
American empiricist ‘received view’ comes most to mind, advanced by
such writers as Rudolf Carnap, Carl G. Hempel, Ernest Nagel, R. B.
Braithwaite, Alan Kaplan, and exercising a deep influence on con-
temporary social sciences. Amongst other things it has, as we shall see,
contributed significantly to the establishment of political science and to
the development, within it, of ‘revisionist’ theories of procedural democ-
cracy. But the fault of this version of empiricism is that not only does it
rest on an ingenuously realistic epistemology, but it has also presupposed
the universality and constancy of scientific language, conceiving it as an
organic system of perfectly rigorous statements, free (or freeable) from all
ambiguity, metaphorical vagueness, and evaluative content, and therefore
capable of being logically formalized and subjected to control.

As to the construction of theories, this conception of empiricism
demands that scientific explanation and prediction be based deductively
on universal laws, valid for every possible time and every possible space.
It binds the scholar, whether on the arts or the science side, to the discovery
of causal connections between phenomena, according to the nomological
and deductive model of scientific explanation advanced by Popper and
formalized by Hempel.

The basic failure of such philosophies of science to take into account
the problem of ‘epistemological complexity’ cannot be subject to doubt.
Following the ideal of maximum epistemic parsimony and a conception
of the truth as the correspondence of linguistic statements to reality, they
set out to make knowledge of the environment coincide with its reduction
to highly simplified, linear and ‘directional’ explanatory principles. From
this viewpoint, even the universe itself comes to be seen as a fixed and