Popper's Views on Natural and Social Science by Colin Simkin

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relations between such concepts irrespective of their connections with individuals, and aggregations which ignore changes in relative prices. That, of course, excludes a good deal of what some regard as macroeconomics but still leaves necessary room for macro concepts in economic analysis.

21. INSTITUTIONS AND TRADITIONS

The Americans have shown that it would be wrong to despair of regulating democracy by the aid of manners and of laws.

Alexis de Tocqueville

Popper's insistence that social science has to seek explanations of important social phenomena largely in terms of the unintentional results of intentional individual aims and actions has already been noticed. Both he and Menger stressed that such explanation was often needed for social institutions and also for many economic phenomena, notably market prices. Popper argues that it is even more needed to explain traditions, which have much in common with institutions but are less subject to conscious creation or deliberate change[1].

Traditions, on his view, refer to those aims, tastes or values which a body of people have in common with others, over successive generations, and which influence their behaviour in similar ways; examples are family or group loyalties, respect for law and order, honesty in dealings with others, and critical rationalism in science. Institutions refer to the common observation of a certain set of norms for joint fulfillment of certain *prima facie* social functions, public or private; examples are a police force, an educational system, a scientific association, a supermarket chain, or an insurance company.

Traditions are closer to individuals than institutions are, and can have an important role in ensuring that institutions function as they are supposed to do. For example traditions of honesty and fair dealing may lead a government department to avoid corruption among its members, or else lead to effective demands from politicians or citizens that the bureaucrats mend their ways.

There is what Popper calls a certain *ambivalence* about social institutions. They are set up to perform accepted functions but their powers may be misused to pervert those functions. Members of a police force, for example, may accept bribes to protect criminals instead of arresting them, members of a customs service may asssist smugglers instead of preventing them, or generals

[1] *Conjectures and Refutations*, Ch. 4.

may use an army in order to tyrannize a country instead of defending it against aggressors. It is important, therefore, that institutions should be well-designed, perhaps in conjunction with other institutions, in order to promote good performance of their proper functions. That idea lay behind the checks and balances of the American Constitution.

But no institution can be knaveproof; its proper functioning depends in the last resort on the people who man it or on those who can control them. That is why traditions are important; they are closer to influencing people's thinking and behaviour.

Traditions are thus needed as a kind of link between institutions and the values and hopes of individuals. They are precious and, like institutions, cannot be taken for granted. Europe lost the tradition of science so brilliantly begun in Ancient Greece, and did not revive it until the Renaissance. In our own day, traditional family life has been greatly damaged by easy divorce, homosexual relations, and decline of parental authority over children. This does not mean that traditions or institutions are sacrosanct. Neither were created by God or Nature, and neither have the kind of personality attributed to them by holists or historicists. They rather resemble scientific theories in being open to critical examination, empirical testing, correction and innovation. But they should not be changed until their functions, and so the consequences of their loss, are well enough understood.

Among these consequences could be social instability. Some degree of order is needed if people are to have sufficient rational predictability in their social relations to order their own lives and to conduct their affairs. If this order deteriorates through the collapse of important traditions or institutions, there could be serious anxieties and frustrations which might lead to further harm because of adverse economic and political consequences. That, as we saw in the discussion of holistic planning, could lead to government interventions which damage democracy.

Traditions, no doubt, have developed from the taboos and customs of primitive societies, and were connected with cosmological and religious beliefs which all cultures have had in some form or other. They would have become associated with the development of institutions in a mutually reinforcing way. Both, too, would have been subject to something like a Darwinian process of evolution which became more conscious and deliberate as critical faculties developed along with language and writing. The closed society breaks down as social institutions become recognized as serving human purposes, and as alterable

for better service of those purposes[2].

The paramount institution is, of course, the state, which can give other institutions the protection and support which they need, modify and even create some of them. They all have to be protected by law, manned and financed. For that reason, and also because of the basic role of institutions in establishing a social order, 'all long-term politics is institutional'[3]. As history abundantly shows, this very power of the state creates great dangers of coercion and exploitation of individuals. When such evils have become intolerable, and circumstances have favoured revolution, some tyrannical governments were overthrown. But, as history also shows, revolutions have seldom realized the intentions of those who led them because of resulting disruption to social life and the unforeseen consequences of such disruption. The great advantage of democratic institutions, so long as they are effectively manned, is that they enable the governed to get rid of bad rulers without the violence of revolutionary upheavals. This, for Popper, is the basic characteristic and virtue of democracy.

Government, then, is necessary to protect and support the institutions upon which social life depends, and democratic institutions are necessary to prevent government from becoming tyrannical. But they are not sufficient for this purpose because the political power of government can be strongly reinforced by its economic power. Popper, therefore, holds with other liberals of the classical kind defined by Hayek[4] that, in the economic sphere, we should be wary of creating or strengthening any institution if this would enhance the power of the state. Marx might have been similarly uneasy about state power when he looked forward to 'the withering away of the state' under communism[5].

Government intervention in economic life may take two forms. One form is the creation of a protective framework of laws to prevent undesirable activities or to assist the development of desirable activities. Examples are labour laws to protect workers against bad working conditions, banking laws to protect depositors against loss of their money, or anti-monopoly laws to foster competition. The other form of intervention is much more direct, giving power to some state agencies to act, within certain limits, as they consider necessary for achieving specific purposes of

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[2] *The Poverty of Historicism*, Sections 21 and 32.
[3] *The Open Society and Its Enemies*, Ch. 7, Section III.
[4] *Individualism and Economic Order*, Ch. I.
[5] *The Open Society and Its Enemies*, Ch. 17, Section VII.

legislation. Examples are licensing authorities for industrial or trading activities, wartime direction of labour, or foreign exchange controls. Popper, as a democrat, favours use of the first form of intervention rather than the second, although recognizing that this may not always be possible. An important case is the state's budget, because some taxation has always to be levied in order to support the operations of the government and of other institutions which depend on the state. But a liberal will be anxious that these activities do not unnecessarily magnify state power nor infringe individual liberties, including that of spending his own income in ways that suit him.

Popper concludes his *Poverty of Historicism* by sketching an institutional theory of scientific and industrial progress as a superior alternative to the psychologistic and historicist theory by which Comte and Mill attempted to explain this most striking development of modern times. Their explanation ran in terms of 'the progressiveness of the human mind' impelled by 'the desire of increased material comfort'. Popper sees two weaknesses in their explanation. One is that it neglects other qualities of the human mind, such as forgetfulness and laziness, which could equally well be invoked to explain economic decline and no doubt would have been had this happened. The other is that it completely neglects the social environment of institutions and technology.

Scientific and industrial progress could undoubtedly be halted by sufficiently restricting the functioning of such institutions as research laboratories, scientific publications or conferences, universities or schools, and, in the end, freedom of thought. These institutions all require legal protection or state aid. It can therefore be concluded that 'ultimately, progress depends largely on political. . . . institutions that safeguard the freedom of thought: on democracy'[6]. Although these political institutions are necessary for scientific and industrial progress, they cannot guarantee it. Something also depends on traditions, and especially on the traditions of democracy and critical rationalism.

Viewed from the standpoint of an institutional theory of progress—which is, itself, an application of situational logic—the psychologism of Comte and Mill is a minor factor and perhaps not even a helpful one. For 'we might say that the human factor is *the* ultimately uncertain and wayward element in social life and in all social institutions[7]. Nor can it be controlled because,

[6] *The Poverty of Historicism*, s9, p. 155.
[7] idem, p. 158.

as Spinoza observed, thought, unlike action, cannot be fettered. Attempts to control it, moreover, by institutional or coercive means would undermine the objectivity of science, and hence scientific and industrial progress.

Because of the importance of scientific objectivity for both intellectual and social progress something should be said here about the challenge to it from the so-called *sociology of knowledge*, which has some striking resemblances to psycho-analysis. Its followers claim that scientific theories, and especially political or economic theories, cannot possibly be judged as objectively true or false because they are the outcome of thought processes which are inescapably, and perhaps unconsciously, influenced by the social conditions and interests of those who propound or accept them. Yet if these prejudices are analysed their exposure could help to purge theories of bias, although the cure is never likely to be complete.

This brand of sociology was developed from certain ideas of Marx by Mannheim, Scheler and Durkheim in opposition to Weber's ideal of a value-free science, and it has more recently been strongly advanced by the Swedish economist and Nobel Prizewinner, Myrdal. They have promoted the false idea that to explain the psychological motivation or sociological condition of a theorist is to explain away his theory, and are open to the obvious *riposte* that if every theory is of doubtful truth so must be the sociology of knowledge itself.

It is by no means hard to detect subjective influences or class interests in some social theorizing, but their detection falls short of demonstrating that no social scientist can escape such influences. How, on this view, could the theory of stockbroker Ricardo have had such influence upon that of communist Marx? How could the ideas of capitalist Engels have been so acceptable to proletarian leaders? Or how could the American behaviourist Watson and the Soviet physiologist Pavlov have had such similar theories about behaviourism?

Popper accuses the sociologists of knowledge of falling into error for the ironic reason that they neglect the sociology of science itself. Instead, they focus on the psychology of individual scientists, ignoring the fact that scientific objectivity 'is not the product of the individual scientist's impartiality but the product of the social and public character of scientific method'[8]. Scientific theories and findings are always exposed to the scrutiny and criticism of other scientists, many, in a democracy, having

[8] *The Open Society and Its Enemies*, Vol. 2, p. 220.

different opinions, aspirations, economic interests or ideologies. There would, admittedly, be little hope of scientific objectivity if this depended only on the impartiality of individual scientists. But scientific institutions for the dissemination of facts and theories, for their criticism by other scientists and for testing theories in reputable laboratories or in other ways lead to both personal and public checks which can reduce, if not completely eliminate, bias from theories.

The objectivity of science is thus not a matter of individual or group psychology but one of inter-subjective criticism and testing until a provisional consensus is reached about the acceptability of a theory or any test of it. Social science, admittedly, has lagged much behind natural science in these respects, but this situation could improve with the further development of intellectual traditions and institutions within social science[9].

It is relevant here, as in other contexts such as methodological individualism, to notice Popper's reply to a criticism, made by Winch, about overlooking that aims can be attributed to institutions as well as to people. Winch had written that 'to think of . . . institutions as simply instruments . . . misses the point that educational institutions, to stick to my original example, are a source of social and cultural values of their own'.[10]

Popper replied: 'At any moment of time we, and our values, are the products of existing institutions and past traditions. Admittedly, this imposes some limitations on our creative freedom, and on our powers of rational criticism. Yet it also provides our critical and creative powers with stimuli and with objects; though we are the products of institutions and traditions, our rationality consists in our being able to criticize and reshape institutions and traditions. And, though the regulative values which enter into these critical activities are, largely, derived from these institutions and traditions, they are themselves criticizable, and changeable. These, I think, are facts.'[11]

[9] *The Open Society and Its Enemies,* Ch. 23, and *The Poverty of Historicism,* pp. 155–56.
[10] *The Philosophy of Karl Popper,* pp. 896–97.
[11] idem. p. 1168.

22. THE ROLE OF HISTORY

As economics pushes beyond 'statics', it becomes less like science, and more like history.

John Hicks

Situational logic, deriving from marginal utility economics, seems to be concerned with what Hayek calls 'social structure' rather than with social change[1]. Supposed laws, such as those of diminishing marginal utility and equi-proportional marginal utilities, give, as he says, only abstract characteristics of this situation, 'relations between kinds of elements about which individually we can know little'[2]. Any predictions which it can give will be only 'pattern predictions', relating to the 'general attributes of structures'[3].

A similar view was held by Pareto about the general equilibrium theory which he helped to develop; he pointed out that this theory could not predict prices because it would be absurd to think that we could ever have enough data for that purpose[4].

Popper, of course, has a much narrower view of the scope of situational logic in recommending piecemeal analysis of practical problem situations. He would be far from denying the possibility that such piecemeal work can widen out, as Medawar indicated, into more general theories; nor would he wish the insights reached by abstract, general theories, such as general equilibrium analysis, to be neglected wherever they could help piecemeal analysis or piecemeal social engineering. But it could be reasonably held that, if economics is to advance beyond the abstract and general analysis of social structures, concrete and piecemeal analyses are needed.

The characteristic problems of economics, however, are not those of structural patterns, according to Hicks, but those of change; and 'the extent to which these can be reduced into scientific terms is rather limited', because 'at every stage in an economic process new things are happening'[5]. He spoke approv-

[1] *Studies in Philosophy, Politics and Economics,* p. 16.
[2] *New Studies in Philosophy, Politics and Economics,* p. 88.
[3] idem, p. 28.
[4] *Manuel d'économie politique,* pp. 223–34.
[5] *Causality in Economics,* pp. x–xi.