

Undercomprehension

MY SENSE OF OUR TIME IS OF A GROWING GAP BETWEEN THE good society that we seek and the ways and means of achieving it. As I have put it,

Knowledge becomes more and more the problem as politics becomes more and more complicated. The growing complexity of the world of politics . . . results not only from increasing and global interdependencies, but from the very expansion of the sphere of politics. The more the visible hand and political engineering displace the invisible hand of automatic adjustments (and maladjustments), and the more politics enters everywhere, the less we are in control of what we are doing.

And my conclusion repeats: 'We are . . . living *above and beyond our intelligence*, above our grasp of what we are doing. The more we engage in remaking the body politic, the more I am struck by the uneasy feeling that we are apprentice sorcerers'.¹

POLITICAL ENGINEERING

My case does not address, then, all knowledge, knowledge in general, but the domain of what I call political engineering. 'Political' should be understood broadly, as the ambit of any and all collectivized decisions taken by state-located authorities. On the other hand, 'engineering' narrows the notion of knowledge to the ambit of 'applied knowledge', namely, practical knowledge, *knowing how*, the practice (practical implementation) of a theory (programme, blueprint). Knowledge thus is, here, cognitive control of the societies and polities in which we live: the cognitive control that enables us to steer their course.

At its maximum political engineering is the very engineering of

¹ *The Theory of Democracy Revisited*, Chatham, N.J., Chatham House, 1987, pp. 120 and 247.

history, that is to say, a wholesale remaking of man and of his city. The engineering of history is an offspring of the 'government of science' heralded by the Saint-Simonians, whose real-world most ambitious implementation has been the collectivistic, total planning inaugurated in the late 1920s in the Soviet Union. Western liberal-democratic societies have engaged, instead, in a different and piecemeal kind of political engineering (not, then, in a wholesale engineering of history). Even so, an engineer-like mentality has come to characterize what we call modernity — a novelty that should be recognised as being such. Our ancestors never seriously entertained (until our century) the thought that the future could be 'planned' and made to conform to global, intentful design. For millennia history was perceived as a sequel of acts of God, in near-Darwinian or Spencer-like terms. Humans would generally engage, within the inexorable web of events, in remedial activities. In politics, from Aristotle to Benjamin Constant, the task was to limit and neutralize power, to impede its arbitrary use and abuse. In economics, the promotion of the wealth of nations, i.e., economic policies, had to await Colbert and Adam Smith for their inception; and the *laissez-faire*, *laissez-passer* of the Manchester School amounted, as a policy enactment, to little else than allowing markets to blossom and display their automatic virtues. In ethics, justice was generally spoken of as individual, not social justice: the giving to each of his due, hardly the full-fledged creation of a just society.

True, governments and states have always intervened (in some sense of the term); but they intervened in order to 'regulate', to establish a discipline, generally the divide between the permitted and the prohibited. Apart from 'extractions' (such as taxes), the model of this kind of intervention was the legal system. Nowadays, however, we engage in large-scale society-building and economy-building. As I was saying, the model is here engineering. And while the two kinds of intervention shade into one another, in their respective cores 'regulation' amounts to controlling a tide, whereas 'engineering' consists of altering or even reversing the course of a tide — a far more ambitious and difficult undertaking.

THEORY WITHOUT PRACTICE

So much for setting my title, 'Undercomprehension', in perspec-

tive. It goes without saying that human knowledge is always fallible, imperfect and insufficient. It also hardly needs to be said that while our cognitive control of nature is speedily growing, the cognitive control of 'things human' is not. But are we simply failing to keep pace, or are we doing worse? My sense is that we are in fact backsliding, for we do not know *how to do* the very things that we are doing. I thus employ undercomprehension to mean a *know-how deficit* that we fail to both acknowledge and confront. If the distinction is drawn between ignorance — not knowing — and incompetence — inability — then undercomprehension stands for *cognitive incompetence*. What we have is an engineering without engineers. We have engaged in maxi-politics with micro-legs. And as we take steps that outpace and outdistance our legs, the ratio of the legs to the length of the step leaves us with shorter legs. We are, unawares, becoming midgets. At the same time, the more our ill-guided hands replace the invisible hand, the more we open up a Pandora's box. Indeed, we are more and more the creators of tangles that we are less and less able to untangle.

How did the present-day know-how deficit come about? The reasons that explain it can be usefully divided into objective and subjective. The objective ones are well known — first and foremost 'complexity'. However, it is not simply the case that complexities and interdependencies have grown; it is also the case that entirely new complexities — technological ones — have emerged, and that we are confronted with a web of hitherto non-existent interdependencies. Until the recent advent of the electronic information society, human beings lived in a compartmentalized world replete with buffers and filters — the buffers and filters provided by distance, invisibility and time lags. In a matter of a few decades long distances have become short ones, what was hitherto never seen appears daily on our home video, and everything is interlocked in real time, instantly. Interactions and feedbacks that took time and/or never occurred, now all occur all the time. By any measure, complexity has not simply increased; it has leaped above the thresholds that engender mutations and permutations. Note, in this connection, that while piecemeal intervening allows us to construct cognitive maps in which one variable varies and all the other variables are kept constant under a *ceteris paribus* assumption, this cognitive strategy is no longer permissible with respect to large-scale, frequent intervention. Here the clause that applies is, if

anything, *ceteris non paribus*: nothing remains equal, every variable varies. If so, the complexity easily becomes cognitively unmanageable.

Among the subjective ingredients of cognitive incompetence, the one which especially calls for attention is the strange twist that has rendered the social sciences *par excellence* 'half sciences'. Sciences are generally divided, or divisible, into 'pure' (purely theoretical, research for its own sake) and 'applied' (application and practice oriented). To be sure, the pure science eventually becomes applied and, conversely, the applied science seeks inspiration from the pure one. Also, the pure and applied sciences may respectively be well demarcated (as in physics) or may extensively overlap (as in economics); but in all cases there is a difference between the science that explores, on the one hand, and the science that performs, on the other.

However, sociology and political science cannot be so divided. Regardless of how dismal they are as sciences, the ulterior point is that they are *semi-sciences*, half theory and half nothing: the applied science is simply absent. Under the urge of truly becoming sciences, or at any rate more science-like, sociologists and political scientists have attended to the theory-research nexus in almost total neglect of the theory-practice conversion. Research, and research only, has been for the last forty years the battle cry of the social scientist. We have thus developed, unawares, *a theory without practice*. In the political and social areas (in striking though seldom appreciated difference from how we tackle economic matters) we incessantly come up with reform proposals left in mid-air, that is, without ever asking ourselves i) How would this programme work? and ii) How can it be made to work? Hence, it is no wonder that our theory generally fails to deliver, that its 'realisation' defies its intent. The reforms that succeed are almost as rare as white flies.

Take, as an illustration, Nelson Polsby's *Consequence of Party Reform*,² a perceptive account of 'what went wrong and why' with the reforms enacted by Democrats and Republicans in the United States in the 1968–80 period. These reforms were aimed at broadening participation and at taking the nomination of presidential candidates out of the smoke-filled rooms of the political bosses. Instead they engendered all sorts of unexpected consequences:

²Oxford University Press, 1983.

making elections chancier, more susceptible to pressure group influence and, ironically, less equitable. They have also powerfully contributed to the demise of the American party. Now, these are findings *ex post*. Was it difficult to predict the unintended effects of the reforms *ex ante*? I submit that it was not, that an 'applied science' would easily have foretold much of what has in fact happened. Luck has it that the earlier proposal for a more responsible party government endorsed by the American Political Science Association in the 1950s was never implemented.³ I again take it that it was clearly predictable then, and is still easily predictable today, that the reform in question would replace the muddling through of the existing American machinery of government with a magnificently stalemated system. Moving on to other examples, in the United States the war on poverty, remedial discrimination, bussing, are all decried today as having largely failed to achieve their goals, either as wars without victory or as small victories overcome by negative side-effects, by backlashes. Once more I ask: was most of this difficult to anticipate? Or is it instead the case that almost all the reforms that we propose are simply and merely endorsed by nobility of intent?

My latest reading in the reform literature is Herbert Gans, *Middle American Individualism*. It is an intelligent and judicious book — a best case, so to speak. Gans's premise is that instead of trying to improve American democracy by demanding further participation and an improved citizenry, we should look at what can be achieved by making changes in the political institutions. In his words, 'If citizens cannot or will not come to political institutions to participate, these institutions will have to come to them'. His concern thus is to reinforce representation. Among his proposals to this end, one is the extension of polling, for polling 'results in citizen input . . . [and] is often far more representative than voting because all populations are sampled, including nonvoters'; another is to channel representation 'through the legal system, using the courts to argue that in a democracy citizens are entitled to adequate representation', the implication being that citizens 'must be able to obtain lawyers more easily'. But 'improving representation does not exclude attempts to improve participation as well'. And here Gans's concern

³The story is told and appraised by Evron M. Kirkpatrick, 'Toward a more Responsible Two-Party System: Political Science, Policy Science or Pseudo-Science', *American Political Science Review*, December 1971.

is that 'encouraging more direct democracy . . . is apt to bring out only the better educated, who will probably dominate the discussion unless speakers are chosen at random'.⁴

All of the above is certainly feasible. There are difficulties, however. Polls, I have argued, are largely a 'reflection effect' of the media themselves; and they unquestionably are dangerously manipulable.⁵ The legal system is already clogged by an escalating avalanche of litigation. Hence, the cost that may be involved is an all-harmful court-overload leading to a general paralysis of the legal system. Thirdly, I am somewhat taken aback by Gans's reduction of the problems posed by direct participation to an unfair advantage given to the well-to-do. A fuller consideration of the issue reveals, I submit, that hosts of problems, obstacles and costs are involved in the matter.⁶ All told, the improvements proposed by Gans call upon a calculus of means (to be explained and spelled out shortly). Gans does not go into that. Should he? No, not necessarily Gans himself. But somebody should: I mean, somewhere there should be an applied science that looks into costs and benefits, that assesses means-ends congruence, and that probes into side-effects, backfirings and inverted outcomes. But no. It does not even cross our minds that political science and sociology are required to be, at some point, practice-related and practice-tested just like and just as much as, e.g., economics.⁷

UNINTENDED CONSEQUENCES

How do we get away with that, and particularly with our being almost always mistaken, that is, defeated by the test of practice? Our standard alibi is that in human affairs we inevitably stumble into 'unintended consequences'—consequences that are both unforeseen and undesired—and that the unforeseen is indeed *non-foreseeable*. But if unintended consequences were truly inevitable,

⁴The quotations are from pp. 123, 126–27, 130, 132, 133, of *Middle American Individualism*, Free Press, 1988.

⁵See my 'Video-Power', *Government and Opposition*, Vol. 24, No. 1, Winter 1989, esp. pp. 48–50.

⁶A number of such problems are indicated and discussed in my *Theory of Democracy Revisited*, op. cit., esp. pp. 111–20. Gans also overlooks the problem of intensity that I cover in ch. 8, *passim*.

⁷While economics doubtlessly is a 'knowledge for use', it will be argued that economists too are increasingly practice-defeated. The reason for this is, however, their excessive inbreeding and isolation. In the all-communicating society large segments of economic behaviour are dictated by news-feeding far more than by economic fundamentals.

then it would be patently inconsistent and plain stupid to pursue any kind of political engineering; we should be satisfied with the watchdog state, with sheer damage avoidance and damage repair.

At the moment, at the end of the 1980s, the minimal state is in fact back in favour. In the face of mounting disasters, of the acknowledged failure, on the one hand, of the non-market economies of total planning and, on the other hand, of state interventions that misperform and backfire, the remedy has been dictated *rebus ipsis*, by the very force of things. To a greater or lesser extent, the mobilized societies of the earlier decades have in fact demobilized. The password of the day is 'deregulation'. Now, to undo the badly done surely is right. But it is not, in itself, a long-term solution.

For one thing, deregulation across the board is just as blind (and risky) as regulating everything. In earlier decades we have 'done badly', as a rule, when regulations have been dictated by principle (on ideological or moral grounds: fighting the wickedness of capitalism, the injustice of private property, and the like) rather than by practical justification and need. Thus, it is clearly the case that in earlier decades there have been areas of decision which have been unnecessarily 'collectivized' and that can well be 'privatized' and given back to the individual for his own care and deciding.⁸ But the objective complexities that I have recalled earlier cannot be disposed of by automatic self-regulation. Even simple matters such as car traffic cannot be handled by just letting everybody drive and park as he or she likes. Deregulating banks simply allows them, in the long run, to fail at the expense of their depositors (or, alternatively, of the tax payer). The American deregulation of air traffic is leading, as it stands, to dangerously congested airports, to inconvenient service (hub airports) and, in the longer run, to concentrations that will, in turn, bring back monopolistic pricings. Pollution, deforestation, land exploitation conducive to sand bowls, require far more regulation than we have ever had. Financial markets, computerized trading, and the like, cannot be left unregulated. We are not likely to give up health care, and in one way or another this is also an area in need of regulation. And so on and so forth.

The goodness of the present-day wave of deregulations and

⁸I dwell on the calculus that shows how and when it is convenient to collectivize decisions in *The Theory of Democracy Revisited*, op. cit., pp. 216–23.

privatizations simply resides in the undoing of former ill-doings. But deregulation will have to be followed, in most instances, by re-regulation; and new regulations of the hitherto unregulated are also in the offing. The alternative is not between interventions (hands on) and non-intervention (hands off). The alternative is, rather, between incompetent and competent intervening. In the short run the prudent advice is, 'If you do not know how to do it, do not do it'. But in the longer run the solution is in learning *how to do*. The true remedy can only be in curing undercomprehension. Let us thus confront squarely our know-how deficit, beginning with its emblematic best excuse: unintended consequences.

That actions always and inevitably produce unintended effects is, I submit, either trivially true or partly (but importantly) untrue. While 'unintended' may stand for i) unexpected, unforeseen, unpredicted, and/or ii) undesired (different from, or even contrary to, the intended outcome), the two meanings are best construed in that order and it is the first one that is at issue. It is precisely because we mispredict that undesired consequences come about. Conversely, correct predictions would eliminate the unwished for. So, the problem is predictability. And we make the problem intractable by overgeneralizing it, by making all consequences equal. But equal they are not. *Vis-à-vis* the full gamut it will always be the case that all actions do, at some point, produce some kind of either unforeseen or undesired consequence. So what? No net ever catches all the fish; but if some fish are caught, and if they are worthwhile fish, that may be good enough. To argue that if a net is imperfect we should do without any net, is a practical stupidity.

Turning from what is trivially true to what is importantly wrong in the manner in which we handle unintended consequences, the preliminary point is that predictability will always elude us if we are told i) that we are bound to fail, and thus that ii) it is useless to try. Suppose, however, that we were taught and pressed into trying. As *ex post* accounts of mistakes almost invariably show, much of what we have failed to foresee in recent decades was, in truth, easily predictable. But, of course, predicting requires a training and a discipline.⁹ The one that I recommend above all others (including cost-benefit analysis, which is too narrowly construed) is means-ends analysis, what I call the calculus of means.¹⁰

THE CALCULUS OF MEANS

In my rendering the calculus of means consists of four major steps, namely, ascertaining:

- i) whether the means are *sufficient*;
- ii) whether the means are *congruent* (fit for the things to do);
- iii) whether *other ends* are affected (spill-over and side-effects);
- iv) whether the means are *in excess* of the end and thus counter-productive.

To be sure, the means in question are not merely material (financial resources) but also instrumental means: technical, procedural, and manpower-related. For instance, the expertise, efficiency and procedural pathways of a given bureaucracy are very much at the core of the instrumental means. If the notion of means extends to both resources and instrumentalities, then we must distinguish between sufficient/inadequate material means on the one hand, and congruence/unfitness of instrumental means, of the means of implementation, on the other hand. A reform may fail because its budget is insufficient, but also because nobody is in charge and/or because the personnel in charge are incompetent. Thus means can be sufficient but unfit; fit but insufficient; and, of course, both inadequate and incongruent.

Coming to the third step — the assessment of how the pursuit of one end affects the pursuance of other goals — two considerations are involved. First, since means (resources) are always scarce, re-allocations and/or the pursuit of a new goal inevitably affect other ends. Thus, maximizing A involves minimizing B. Secondly, some ends are consonant, but others are dissonant. Thus, pursuing both A and B might harm both. What have to be looked into, here, are spill-overs, side-effects and, more generally, collateral repercussions.

Finally, the fourth step — the one that in shorthand reads as an 'excess' of means vis-à-vis the end — looks into the unintended consequences that are of major import. Some means overshoot the target — they are, so to speak, an overkill that may not only be counterproductive but may also overturn itself into an opposite

⁹A seminal, insightful exploration is Bertrand de Jouvenel, *L'Art de la Conjecture*, Monaco, Editions du Rocher, 1964. Tellingly, the work has largely passed unnoticed.

¹⁰I draw here from G. Sartori, *La Politica: Logica e Metodo in Scienze Sociali*, Milan, Sugar-Co, 1979, pp. 125–30.

effect, the contrary of what was desired. One may also speak, in this connection, of means that are mistargeted, that are actually means for ends that we did not intend at all. Thus, taxing the rich may also hurt the poor; the maximization of equality may create new and greater inequalities; more popular power may actually produce powerlessness. We have all in our time witnessed much of this.

The commonplace rebuttal of means–ends analysis is that the distinction is hard to draw because means and ends are ‘chained’ together, and because an end can be, in turn, a means to a further end. True; but this is hardly an objection.¹¹ In the real world it is always the case that everything hangs together. Should we, on this account, renounce analytic distinctions? If yes, then analysis itself is repealed; if no, then means–end analysis is as feasible and as valid as analytic thinking in general. Logically and epistemologically means–ends analysis is not a special case; and its being branded as such strikes me as a defensive reflex. We have conveniently erected for ourselves a sanctuary — a science (half-science) without know-how, redeemed, in its mistakes, by the alibi of unintended consequences. Why spoil such a comfortable niche with the calculus of means?

To sum up, unintended consequences *can* be intended (in no small part) and the calculus of means is quite feasible if we make it a requirement of the applied science. However, modern politics does confront us with unprecedented complexities that do defy an engineering of history. We are thus required, on the one hand, to equip ourselves with longer legs; but we are also required, on the other hand, to shorten our steps. Along the course of the twentieth century we have come more and more to resemble the frog of Aesop. Indeed the parabola of communism resembles that parable. As the frog has blown itself up (in the Soviet Union and its imitations) a fatal blow may also have been inflicted to the ambition of engineering history, of remaking man and preordaining the future. Even so, we are not likely to return to a Nozick-like, pre-engineered world satisfied by tide control; we shall, I predict, continue to strive for tide reversals. Despite setbacks, the good society is and will remain a ‘good’ that we cherish and pursue. Let us pursue it with cognitive competency, knowing how.

¹¹For the complexities, which do not detract from the worth of the construct, see Jan-Erik Lane, ‘The Logic of Means-Ends Analysis’, *Quality and Quantity*, 1986, pp. 339–56.