

# Still Muddling, Not Yet Through

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# $\mathbf{S}_{\text{TILL MUDDLING, NOT YET THROUGH}}$

Charles E. Lindblom, Yale University

For a people weary of their government, Abraham Lincoln asserted "a revolutionary right to dismember and overthrow it." Jefferson at least speculated on the possibility that occasional revolution was healthy for the body politic. It is not to dissent from them that I have been claiming that "muddling through"<sup>2</sup> –or incrementalism as it is more usually labeled—is and ought to be the usual method of policy making. Rather, it is that neither revolution, nor drastic policy change, nor even carefully planned big steps are ordinarily possible.

Perhaps at this stage in the study and practice of policy making the most common view (it has gradually found its way into textbooks) is that indeed no more than small or incremental steps—no more than muddling—is ordinarily possible. But most people, including many policy analysts and policy makers, want to separate the "ought" from the "is." They think we should try to do better. So do I. What remains as an issue, then? It can be clearly put. Many critics of incrementalism believe that doing better usually means turning away from incrementalism. Incrementalists believe that for complex problem solving it usually means practicing incrementalism more skillfully and turning away from it only rarely.

Of the various ways of turning away from incrementalism, two stand out. One is taking bigger steps in policy—no longer fiddling, say, with our energy problems, but dealing with them as an integrated whole. The other is more complete and scientific analysis of policy alternatives than incrementalists attempt.<sup>3</sup> These two big actions and comprehensive analysis—are obviously closely related, and they come nicely together in conventional notions of "planning." Hence a choice is clearly posed. Is the general formula for better policy making one of more science and more political ambition, or, as I would argue, a new and improved muddling?

I can now analyze the choice better than I did 20 years ago.<sup>4</sup> I begin with an apology for sometimes confusing incremental *politics* with incremental *analysis* and for inadequately distinguishing three versions of incremental analysis. In its core meaning incrementalism *as a political pattern* is easy to specify. It is political change by small steps (regardless of method of analysis). So defined, incrementalism varies by degree. Raising or lowering the discount rate from time to time is extremely incremental. Making the original decision to use the discount rate as a method of monetary control is still modestly though not extremely incremental. Reorganizing the banking system by introducing the Federal Reserve System is still incremental, though less so.

Eliminating the use of money, as both the Soviets and the Cubans aspired in their early revolutionary years, is not incremental. Where the line is drawn is not important so long as we understand that size of step in policy making can be arranged on a continuum from small to large.

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As for the three meanings of incrementalism as policy analysis, it now seems clear that in the literature and even in my own writing each of the following kinds of analysis sometimes takes the name of incrementalism:

- Analysis that is limited to consideration of alternative policies all of which are only incrementally different from the status quo. Call this simple incremental analysis.
- 2. Analysis marked by a mutually supporting set of simplifying and focusing stratagems of which simple incremental analysis is only one, the others being those listed in my article of 20 years ago:<sup>5</sup> specifically,
  - a. limitation of analysis to a few somewhat familiar policy alternatives;
  - b. an intertwining of analysis of policy goals and other values with the empirical aspects of the problem;
  - c. a greater analytical preoccupation with ills to be remedied than positive goals to be sought;
  - d. a sequence of trials, errors, and revised trials;
  - e. analysis that explores only some, not all, of the important possible consequences of a considered alternative;
  - f. fragmentation of analytical work to many (partisan) participants in policy making.

This complex method of analysis I have called *disjointed incrementalism*.

**Charles Lindblom** is Sterling Professor of Economics and Political Science at Yale University and director of the university's Institution for Social and Policy Studies. 3. Analysis limited to any calculated or thoughtfully chosen set of stratagems to simplify complex policy problems, that is, to short-cut the conventionally comprehensive "scientific" analysis.<sup>6</sup>

Such a practice I have now come to call strategic analysis.

Disjointed incrementalism is one of several possible forms of strategic analysis, and simple incremental analysis is one of several elements in disjointed incremental analysis. We can now examine each to see why it should be pursued as an alternative to the pursuit of conventional "scientific" analysis, which I have usually labeled "synoptic" in acknowledgement of its aspiration to be complete.<sup>7</sup> Let us begin with strategic analysis.

### The Case of Strategic Analysis

The case for strategic analysis as a norm or ideal is simple: No person, committee, or research team, even with all the resources of modern electronic computation, can complete the analysis of a complex problem. Too many interacting values are at stake,<sup>8</sup> too many possible alternatives, too many consequences to be traced through an uncertain future-the best we can do is achieve partial analysis or, in Herbert Simon's term, a "bounded rationality."<sup>9</sup> I need not here review the many familiar reasons by now recorded in the literature of social science for our inability to achieve a synoptic intellectual mastery of complex social problems.

Consider a continuum on which analysis is arrayed according to its *completeness* or synoptic quality. On it, we can indicate both hypothetical and real alternatives.

The continuum suggests several observations. Wepolicy makers, administrators, policy analysts, and researchers-usually do significantly better than the worst extreme that can be imagined. For complex problems, however, we never approach synopsis but remain instead at great distance. Some of us practice strategic analysis better than others-that is, we employ in an informed and thoughtful way a variety of simplifying stratagems, like skillfully sequenced trial and error.

Granted that, critics may ask: Doesn't the left end of the continuum, complete or synoptic analysis, represent the only defensible ideal? Should we not, therefore, continue to press toward it? To some critics the answers seem obvious, hardly worth reflecting on. Consider, however, a simple analogy. Men have always wanted to fly. Was the ambition to undertake unaided flight, devoid of any strategy for achieving it, ever a useful norm or ideal? Although the myth of Icarus stimulates the imagination, flying becomes a productive ambition only to those who accept the impossibility of flying without mechanical assistance and who entertain the thought of using fabricated wings and other devices.

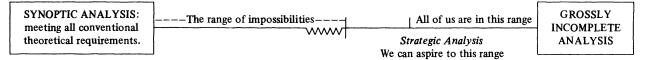
Achieving impossible feats of synopsis is a bootless, unproductive ideal. Aspiring to improving policy analysis through the use of strategies is a directing or guiding aspiration. It points to something to be done, something to be studied and learned, and something that can be successfully approximated. What kind of aspiration, norm, or ideal gives direction and other specific guidance to a body builder-his hope to have the strength of a gorilla or his intention to exceed Arnold Schwarzenegger? For a soprano, the impossible aspiration to hit a note six octaves above the highest note ever sung, or the resolve to reach A above high-C? For a person who dislikes telephone directories, to memorize all the telephone numbers he might ever use or to memorize a still difficult smaller set of frequently called numbers? An aspiration to synopsis does not help an analyst choose manageable tasks, while an aspiration to develop improved strategies does.

I suggest that, failing to grasp this point, analysts who think in the older conventional way about problem solving pretend to synopsis; but knowing no way to approximate it, they fall into worse patterns of analysis and decision than those who, with their eyes open, entertain the guiding ideal of strategic analysis. Again through a diagram, I can suggest what actually happens in policy analysis. We can array on the continuum a range of actually possible degrees of completeness of analysis.

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For complex problems, tied to an unhelpful aspiration that simply admonishes "Be complete!", an analyst unknowingly or guiltily muddles badly. Or, pursuing a guiding ideal of strategic analysis, he knowingly and openly muddles with some skill. Hence his taking as an ideal the development of better strategic analysis will be far more helpful than his turning away from strategic analysis in an impossible pursuit of approximations to synopsis. Is the appropriate ideal for the commuter miraculously long legs or better bus service? What can actually be done in the pursuit of each of the two?

For complex social problems, even formal analytic techniques-systems analysis, operations research, management by objectives, PERT, for example-need to be developed around strategies rather than as attempts at synopsis. Some theoretical formulations of these techniques and all examples of their successful application to complex problems reflect this important point.



	Ill-considered, often bumbling incompleteness in analysis.	seat-of-pants seat-of-pants semi-strategies plus studied strategies	Strategic Analysis: informed and thoughtful
		Most of us are in this broad range; some here toward the right (We ought to be in this range)	choice of methods of problem simplification.

#### The Case for Disjointed Incrementalism

It should now be clear why I endorse not only strategic analysis as a norm but disjointed incrementalism as one kind of it. Disjointed incrementalism is a strategy practiced with variable skill. Taking carefully considered disjointed incrementalism as a norm would improve the analytic efforts of many analysts, for the several now familiar reasons given in the article of 20 years ago. It would set them on a productive course of analysis while turning them away from conventional attempts at formal completeness that always lapse, for complex problems, into ill-defended makeshifts. A conventional synoptic (in aspiration) attempt to choose and justify the location of a new public housing unit by an analysis of the entirety of a city's land needs and potential development patterns always degenerates at least into superficiality if not fraud. A disjointed incremental analysis can do better.

The valid objection to disjointed incrementalism as a practical analytical method is that one can find better kinds of strategic analysis, not that one can turn to synopsis as an alternative. The valid objection to disjointed incrementalism as a norm or ideal for analysis is that better strategic ideals are available, not that synopsis is a useful ideal.<sup>10</sup> Are there other kinds of strategic analysis, or at least other hypothetic ideals of strategic analysis? More, I would reply, than we have taken the trouble to uncover; hence much exploration remains to be undertaken. A conspicuous early alternative, tapped in a concept with which disjointed incrementalism overlaps, is Simon's "satisficing."<sup>11</sup> Dror and Etzioni have also investigated alternatives.<sup>12</sup> Given the alternative strategies often available, disjointed incrementalism is of course not always necessary in analysis.

All analysis is incomplete, and all incomplete analysis may fail to grasp what turns out to be critical to good policy. But—and this is a "but" that must be given a prominent seat in the halls of controversy over incrementalism—that means that for complex problems all attempts at synopsis are incomplete. The choice between synopsis and disjointed incrementalism—or between synopsis and any form of strategic analysis—is simply between ill-considered, often accidental incompleteness on one hand, and deliberate, designed incompleteness on the other.

Many specific weaknesses have been identified in disjointed incremental analysis: for example, that it will often do no better than find a "local" optimum, a policy better than its near and only incrementally different neighbors but possibly much inferior to a more distant alternative policy never examined. Disjointed incremental analysis is much flawed, as are all alternative possible or concretely imaginable forms of policy making and policy analysis. I think I have failed to communicate to readers just how bad I think policy analysis and policy making are, even under the best circumstances. Evidence of that failure is Langdon Winner's attribution to me of a "marvelous logic" that promises that "planners can perform effectively" and that "lack of understanding on the broad scale is not a hindrance to sound decision making."<sup>13</sup> Of course, it is a hindrance, and a tragic one. And that is why we need analytical strategies like disjointed incrementalism to make the most of our limited abilities to understand.

The choice between synopsis and disjointed incrementalism—or between synopsis and any form of strategic analysis—is simply between ill-considered, often accidental incompleteness on one hand, and deliberate, designed incompleteness on the other.

An aspect of disjointed incrementalism which I filed away years ago as unfinished business and to which I intend shortly to return is the relation between its remedial orientation-its concern with identifiable ills from which to flee rather than abstract ends to be pursued-and what appears to be the mind's need for a broad (and some would say "higher") set of lasting ambitions or ideals. I am myself committed to some such ideals; that is, I make use of them. Yet they are often only distantly and loosely operative in the specific analysis of policy problems. At best they can only be incompletely analyzed-held in the mind loosely where they are beset by internal contradictions. They do not represent, as has been suggested, a distant synoptic guidance of incremental analysis, for synopsis on values remains impossible. Perhaps they enter into our thinking most significantly through posing trade-off problems, in which incremental gains on one front are traded against decrements on others.

#### The Case for Simple Incremental Analysis

Simple incremental analysis—which is analysis of no more than small or incremental possible departures from the status quo—cannot be defended in isolation from the more complex strategies, like disjointed incrementalism, of which it is a part. It is only an aspect of analysis and is or is not useful depending on circumstances and on the stratagem of which it is a part. Insofar, however, as we can speak of one aspect of analysis (bearing in mind its relation to the larger strategy of which it is a part), we can clear up some confusions in the literature. To begin with, the easiest point to make is that, in societies in which actual political change proceeds by incremental steps, it is difficult to deny the frequent relevance of simple incremental analysis. If political decision makers are going to choose among incremental alternatives A, B, and C, it would seem that some analysis of just those alternatives would often be helpful.

The most frequent and basic objection is not to simple incremental analysis of incremental alternatives actually on the political agenda; it is instead to the political practice of change only by increment. That is to say, the objection is not to incremental analysis but to the incremental politics to which incremental analysis is nicely suited.

Let us therefore explicitly digress from the appraisal of incremental analysis to the appraisal of incremental politics. Much can be said both for and against the latter, and I am increasingly impressed with what must be said against those forms of it that are practiced in Western Europe and North America.

#### **Incremental Politics**

Abstractly considered, incremental politics looks very good. It is intelligently exploratory when linked with sequences of trial and error. It reduces the stakes in each political controversy, thus encouraging losers to bear their losses without disrupting the political system. It helps maintain the vague general consensus on basic values (because no specific policy issue ever centrally poses a challenge to them) that many people believe is necessary for widespread voluntary acceptance of democratic government.

Moreover, incrementalism in politics is not, in principle, slow moving. It is not necessarily, therefore, a tactic of conservatism. A fast-moving sequence of small changes can more speedily accomplish a drastic alteration of the status quo than can an only infrequent major policy change. If the speed of change is the product of size of step times frequency of step, incremental change patterns are, under ordinary circumstances, the fastest method of change available. One might reply of course that drastic steps in policy need be no more infrequent than incremental steps. We can be reasonably sure, however, that in almost all circumstances that suggestion is false. Incremental steps can be made quickly because they are only incremental. They do not rock the boat, do not stir up the great antagonisms and paralyzing schisms as do proposals for more drastic change.

None of this line of argument defuses the deep hostility that many people quite reasonably feel toward political incrementalism. Many people see the U.S., for example, as somehow trapped in an incremental politics that leaves its government incapable of coping effectively with big problems like environmental decay, energy shortage, inflation, and unemployment. I share their concern and would like to clarify its relation to political incrementalism.

American and Western European politics suffer from serious problem-solving disabilities. One, especially pro-

nounced in the U.S., is the dispersion of veto powers throughout the political system. In addition to those veto powers to be found in the Constitution and in legislative procedures are those even more ubiquitous veto powers that reside in property rights. I refer not to rights you and I hold in our personal possessions but to the property rights of business enterprises, which permit, with the help of judicial interpretation, the veto of many forms of government regulation that might otherwise be attempted to cope with our problems. Even business property rights in information throw obstacles in the way of regulators who cannot obtain the necessary facts.

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Perhaps a better way to put the point-simultaneously enlarging it somewhat-is to note a fundamental characteristic of politics in market-oriented systems. Having assigned many or most of the great organizing and coordinating tasks of society to business enterprises, then subjecting the managers of these enterprises to market inducements rather than commands (which the constitutional rules of these systems forbid in the main), the only way to get the assigned jobs done is to give businessmen whatever inducements will in fact motivate them to perform. That renders these political systems incapable of following many lines of policy that, however attractive they might look for, say, energy conservation or environmental protection, threaten to undercut business inducements to perform.<sup>14</sup>

This particular structural feature of politics in market oriented societies, as well as other difficulties in policy making, is often confused with political incrementalism. To see our difficulties clearly, the problem is not incrementalism but a structure of veto powers that makes even incremental moves difficult and insufficiently frequent. (This same structure, moreover, makes drastic, less incremental moves even more difficult-ordinarily simply impossible.) If we could imagine an incremental politics without the veto powers that now abound in it, I suggest that we would find incremental politics a suitable instrument for more effectively grappling with our problems. Whether we want to buy that gain at the price we must pay-a reduced role in the system for market enterprises-is another question.

Another source of timidity in American politics is ideological conservatism having its source in the many indoctrinations that grow out of the structure of private enterprise. It is difficult for many political leaders, and for ordinary citizens as well, to open their minds to the possibility that the American Constitution, with its many curbs on the popular will, including the Fourteenth Amendment's guarantees to corporations, is not an adequate set of rules for coping with our current great problems. It is no less difficult for them to let their minds freely explore—and reconsider the traditional justifications of—the extraordinary autonomy of the business corporation and its capacities to obstruct government problem solving.<sup>15</sup> Yet a high degree of homogeneity of timid political opinions is not a consequence of political incrementalism. If there is any relation between the two, political incrementalism is a consequence rather than a cause.

I think these comments rise above the dubious logic that many critics of political incrementalism have employed: U.S. policy making, which is incremental, is inadequate. Let us therefore rid ourselves of incremental politics. My head, which is covered with hair, aches. I ought to shave my scalp.

At this point it would be relevant for a critic of political incrementalism to point out that even if incrementalism is not the source of our problem of widespread vetoes and governmental timidity, nevertheless incremental politics offers us no way out-specifically, no way to reduce the veto powers. To that, several responses might be made. One is that, popular as revolutionary aspiration was among a few of our brightest young people only 10 years ago, a revolutionary cause does not have enough advocates and potential activists to warrant much consideration. It is, in any case, always a treacherous method of social change that as often disappoints its movers as gratifies them. A potentially revolutionary situation-such as a Lenin, Castro, or Mao, or a Samuel Adams or Jefferson might nurture-is not now in sight.

Perhaps then, short of revolution, we should attempt a comprehensive constitutional reform of American government? Such a proposal, if it could be made effective, falls into a category of big-step policies that strain or pass beyond the limits of incremental politics. Other big step examples would be the realization in actual operation of a comprehensive energy program, to which President Carter and many Americans aspire; or at the local level, a comprehensively planned actual rebuilding of a city, socially as well as physically; or one big integrated implemented solution to environmental decay; or an actually operative development plan for a developing country. For many people these are happy visions, but except in rare circumstances they remain impossibilities. Too many vetoes are cast against them. Too many conflicting interests pull them apart. An operative, integrated solution to a problem is a vast collection of specific commitments all of which are implemented. The odds of agreement among political elites or citizens on these vast collections are extremely slim.

Moreover, among those who draw back from agreement will be many informed and thoughtful leaders and citizens who know that many of the specific elements embraced in the integrated program are bound to be mistaken. They believe that of any large sample of attempts at social problem solving, a large number will always turn out to have missed the mark or to have worsened the situation. They will prefer to see the political system act on the elements one at a time. Not that errors will be avoided, but each element will consequently receive greater attention and will be more carefully watched for feedback and correction.<sup>16</sup> Again, it is because we see reason to expect such big attempts to fail that we move incrementally in politics. It is not that incremental politics is the cause of our not making such attempts.

It is difficult for many political leaders, and for ordinary citizens as well, to open their minds to the possibility that the American Constitution, with its many curbs on the popular will, including the Fourteenth Amendment's guarantees to corporations, is not an adequate set of rules for coping with our current great problems.

I suggest, therefore, that, poor as it is, incremental politics ordinarily offers the best chance of introducing into the political system those changes and those change-producing intermediate changes that a discontented citizen might desire. That holds out no great hope, only as much hope as can be found in any style of American politics. If we live in a system designed by the constitutional fathers to frustrate in large part the popular will, their success in doing so reminds us that even if we attempted a new constitutional convention the same consequences might follow.

Incremental politics is also a way of "smuggling" changes into the political system. Important changes in policy and in the political system often come about quite indirectly and as a surprise to many participants in the system. That life has been heavily bureaucratized by the rise of the corporation and big government is a development that sneaked up on most citizens, who never debated the issues and who did not understand at the time that such a transformation was in process. Incremental changes add up; often more happens than meets the eye. If, on one hand, this is an objection to incremental politics, this feature of it also suggests that a skilled reformer may learn paths of indirection and surprise, thus reaching objectives that would be successfully resisted were his program more fully revealed. This possibility of course raises important issues in political morality.

One last question about incremental politics: Is it true, as often suggested in the literature of political science, that democracies are for the most part committed to change by no more than incremental moves while authoritarian governments can move with bigger steps? It seems clear that authoritarian systems themselves ordinarily move by increments. Indeed, some authoritarian systems are relatively effective in suppressing political change of any kind. The pace of change in the Soviet Union, for example, incremental or other, is not demonstrably faster than in the U.S. and may be slower. On the other hand, authoritarian systems are at least occasionally capable-apparently more often than in democratic systems-of such nonincremental change as the abrupt collectivization of agriculture in the Soviet Union and the Great Leap Forward and the Cultural Revolution in China (as well as the Holocaust and the recent destruction of Cambodia's cities and much of its population).

The most common reason alleged for democratic incapacity to act with comparable vigor on an equal number of occasions is that political change must not challenge the fundamental consensus which exists on the rules of the game and other basic values without which noncoercive democratic government is impossible. Small steps do not upset the democratic applecart; big steps do.

Although that argument may be valid, we have no solid evidence on it, and I am increasingly suspicious of it. It is too simple, assigning too much effect to a single cause. Whether a political community will be split in politically dangerous ways when larger issues, posing bigger losses and gains, move onto the political agenda depends, it would seem, on at least one other variable: how rigidly participants are attached to various causes, values, and perceptions of their own interests.

In contemporary societies, political participants are attached less by the flexible or adaptable bindings of reason than by the indoctrinations through which they have been reared: by parents and school and through the ever repeated media endorsements of the American way, private enterprise, the Constitution, and the like. It is easy to imagine a body of citizens more able than ours to cope with big issues because they are less indoctrinated, less habitual, and more thoughtful in their consideration of those issues—and, in particular, more open to alternative ways in which their needs can be met.

Hence, in a very distant future, bigger political steps may be possible-not large without constraint but perhaps significantly less incremental than at present. It is worth our thinking about, even if we cannot predict it.

#### Simple Incremental Analysis Again

To return from our digression into incremental politics to the further appraisal of simple incremental analysis, we must meet the objection that simple incremental analysis, like disjointed incremental analysis of which it is a part, encourages political incrementalism. The analytical habit, found as it is in politicians as well as professors, encourages us all to think small, timidly, conservatively about social change. I agree, although the causation is in both directions, and the phenomenon is something like a vicious circle.

Yet the corrective is not the suppression or neglect of incremental analysis, which remains necessary and useful for all the reasons we have given above, but the supplementation of incremental analysis by broadranging, often highly speculative, and sometimes utopian thinking about directions and possible features, near and far in time. Skinner's Walden Two, Commoner's Poverty of Power, Fromm's Escape from Freedom, Shonfield's Modern Capitalism, Miliband's The State in Capitalist Society, Rawls' Theory of Justice, and Rousseau's Social Contract illustrate the variety of inputs, great and small, necessary to thinking about policy.

Some features of such analyses are especially pertinent. They are not synoptic-not even the most broadly ambitious of them, like the Platonic dialogues or Hobbes' *Leviathan*. Much is omitted; few issues are pushed to the point of exhaustion; and we take from them not closure but new insight-specifically, powerful fragments of understanding. They are methods that liberate us from both synoptic and incremental methods of analysis.

Moreover, they give us no sound basis for policy choices. They do not seek to make a contribution to policy making by assessing the pros and cons of policy alternatives. But they do greatly raise the level of intellectual sophistication with which we think about policy. Not explicitly directed to problems in policy making, many of them need a substantial interpretation and translation before they become effective, as some do, for millions of participants in policy making.

Some of these liberating analyses have the effect less of giving us information than of making us aware, and in that lies their great effect on our minds. They tell us what we know but did not know we knew; and what we know but had not before been able to make usable.<sup>17</sup>

Of kinds of analysis that are neither synoptic nor incremental in intention, one modest kind frequently makes a highly valuable contribution to policy making. It is the analysis of some one or a few pivotal issues or variables critical to policy choices. To research the question, Why Johnny can't read, is to attempt neither synopsis nor incremental analysis. It is simply to try to ferret out some information or develop some understanding essential to good policy making. These modest but critical or pivotal research interventions in policy making perhaps represent professional analysis in one of its most fruitful forms. They make the kind of contribution to which professional research is well suited, and they leave most of the evaluation of policy alternatives in the hands of politicians, administrators, which is perhaps where it belongs.

#### Partisan Mutual Adjustment and Pluralism

Some critics of incrementalism have failed to catch the distinction between political incrementalism and what in *The Intelligence of Democracy* is labeled and analyzed as partisan mutual adjustment. Partisan mutual adjustment, found in varying degrees in all political systems, takes the form of fragmented or greatly decentralized political decision making in which the various somewhat autonomous participants mutually affect one another (as they always do), with the result that policy making displays certain interesting characteristics. One is that policies are resultants of the mutual adjustment; they are better described as happening than as decided upon. Another is that policies are influenced by a broad range of participants and interests (compared to those of more centralized policy making). Another is that the connection between a policy and good reasons for it is obscure, since the many participants will act for diverse reasons.

Another is that, despite the absence or weakness of central coordination of the participants, their mutual adjustments of many kinds (of which bargaining is only one) will to some degree coordinate them as policy makers. In many circumstances their mutual adjustments will achieve a coordination superior to an attempt at central coordination, which is often so complex as to lie beyond any coordinator's competence. Such a proposition does not deny the obvious failures of coordination that mark government and are especially conspicuous in Washington. It merely claims that such coordination as, with difficulty, our governments achieve will often owe more to partisan mutual adjustment than to attempts at central coordination.

A frequent opinion that the inequalities of partisan mutual adjustment are so great that more central decision making can simply be assumed to be an improvement is simply naive. Strong central authority can be—and historically is, in case after case—an instrument for protecting historically inherited inequalities.

One can imagine a nation practicing political incrementalism without partisan mutual adjustment, or with only a minimum of it. One can also imagine partisan mutual adjustment for nonincremental policy making. In actual fact, the two are closely linked in all national political systems; both have the effect of reducing analytical tasks.

"Partisan mutual adjustment" pins down one meaning of "pluralism." Objections to partisan mutual adjustment, often voiced as objections to pluralism, often begin with the allegation that not all interests are represented by participants in it, nor are participants influential in proportion to the numbers of citizens for whom they act. Who can deny so obvious a point? It is not, however, a persuasive objection to partisan mutual adjustment unless it can be shown that more centralized political decision making represents a fuller array of interests and does so more consistently with principles of democratic equality. In many cases it does not. For persons committed to democracy, the case for partisan mutual adjustment versus more central forms of policy making thus turns in part on which of the two can best cope with formidable inequalities in politics. A frequent opinion that the inequalities of partisan mutual adjustment are so great that more central decision making can simply be assumed to be an improvement is simply naive. Strong central authority can be-and historically

is, in case after case—an instrument for protecting historically inherited inequalities.

A second major objection to partisan mutual adjustment, again expressed ordinarily as an objection to pluralism, is that it is fraudulent. The various participants do not in fact represent the variety of interests and values of the population. Instead they share dominant interests and values, and their relations with each other give the lie to those who claim to find in pluralism a healthy competition of ideas. In the extreme form, critics allege that policy is set by a ruling class with trappings of pluralist diversity.

I find it hard to deny a large core of truth in that criticism. Let us divide policy issues into two categories: those on the ordinary questions of policy, and those that constitute the grand issues pertaining to the fundamental structure of politico-economic life. The grand issues include those on the distribution of income and wealth, on the distribution of political power, and on corporate prerogatives. On the first set, the ordinary issues, partisan mutual adjustment is active (though not without defects of inequality in participation and disturbing tendencies toward corporatism). On the grand issues, partisan mutual adjustment is weak or absent. The treatment in politics of the grand issues is governed by a high degree of homogeneity of opinion-heavily indoctrinated, I would add. As has often been pointed out, the grand issues are, thanks to a homogeneity of opinion (i.e., the failure of a competition of ideas), simply left off the agenda.18

A third objection to partisan mutual adjustment turns out to be an objection to its particular form in many countries, the U.S. included. It is a form in which, though none of the participants can on their own initiate a change, many or all can veto it. That is not essential to partisan mutual adjustment, but it is the way we practice it in the U.S. That fact raises the possibility that a thoughtful response to the imperfections of policy making through partisan mutual adjustment might call for changing its form or its governing rules rather than trying to suppress it. Critics of partisan mutual adjustment sometimes seem to fall into no more careful a logic than: I cannot use my car because it has a flat tire; I had better sell it.

## **Politics and Analysis**

Confusing partisan mutual adjustment with incrementalism in its various forms, Charles L. Schultze has incorrectly associated incremental analysis (specifically disjointed incrementalism) with the crudities and irrationalities of "politics" and his more conventional forms of analysis, synoptic in ambition, with "analysis."<sup>19</sup> If he could make that stick—that incrementalism settles issues through power, his methods by brains—it would give him an easy victory in his attack on incrementalism. But he has made at least two mistakes.

First, analytical incrementalism is analysis. It is not simply a substitution of politics for analysis. "Incrementalism" denotes the three kinds of analysis discussed above—more modest methods than he endorses, yet nevertheless methods of analysis. What he should have said is that not incrementalism but partisan mutual adjustment is to some extent a substitution of politics for analysis. The coordination of participants is in some large part left to their political interactions with each other and, in any case, is not centrally directed analyzed coordination as coordination might be in the mind of a sufficiently cerebral coordinator. Their patterns of interaction may be designed—that is, various authorities may be required to interact with each other—or the patterns may have taken form without design. In either case, their coordination arises from their reciprocating political effects on each other, not through a centrally analyzed coordination.

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Incrementalism aside, Schultze's second mistake is to miss the significance of the analytical components of partisan mutual adjustment, and indeed of all "politics." In partisan mutual adjustment and all politics, participants make heavy use of persuasion to influence each other; hence they are constantly engaged in analysis designed to find grounds on which their political adversaries or indifferent participants might be converted to allies or acquiescents.

Is that kind of analysis-partisan analysis to achieve influence in mutual adjustment-an adequate way to bring information and intelligence into policy formation? The historical concept of a competition of ideas at least vaguely recognizes its importance. Adversary proceedings in courts of law show our extreme dependence on it for some kinds of decision making. Whatever contribution interest groups make to policy making is largely through partisan analysis. I should like to suggest that partisan analysis is the most characteristic analytical input into politics and also the most productive. It is in a fuller appreciation of how partisan analysis might be improved rather than, as Schultze would seem to have it, curbed, that policy making can be made more intelligent.<sup>2</sup> <sup>o</sup>

Finally I should like to suggest the still insufficiently explored possibilities of intelligent and democratically responsive policy making that lie in improved combinations of incremental analysis (in all of its three forms), incremental politics, and partisan mutual adjustment, including partisan analysis. The possibilities are perceived, though not fully worked out, in John Stuart Mill's *Representative Government* and in other liberal expositions of a competition of ideas linked to political education through political participation. More surprising, they appear in Maoist thought, with its emphasis on achieving economic growth not by a fine-tuning of development from above but by tapping intelligence and incentives broadly through fragmentation of responsibility and the cumulation of fast-moving incremental gains.<sup>21</sup> The same new or refreshed insights now have sprung out of the tradition of orthodox economics, given a new line of development by Harvey Leibenstein and his concept of X-efficiency.<sup>22</sup> Even more significant for skeptics of incrementalism and partisan mutual adjustment are our new insights into how science proceeds. Conventionally synoptic or "scientific" policy making turns out not to be true to science at all.

Michael Polanyi, Lakatos, and Kuhn, among others, have been revealing that in their scientific work scientific communities themselves characteristically practice both incrementalism and partisan mutual adjustment, though by other names.<sup>2 3</sup> Even Kuhn's "scientific revolutions" are the accomplishment of partisan incrementalists. Their reconsiderations of how science is practiced are, I think, conclusive objections to the synoptic ideal.

\* \* \* \* \*

I have never well understood why incrementalism in its various forms has come to so prominent a place in the policy-making literature. The original *PAR* article has been reprinted in roughly 40 anthologies. I always thought that, although some purpose was served by clarifying incremental strategies of policy analysis and policy making, to do so was only to add a touch of articulation and organization to ideas already in wide circulation. Nor have I well understood the frequency with which incremental analysis as a norm is resisted. That complex problems cannot be completely analyzed and that we therefore require strategies for skillful incompleteness still seem close to obvious to me.

I thought I ventured into territory not familiar to all social scientists and administrators only when I pointed out that fragmentation of policy making and consequent political interaction among many participants are not only methods for curbing power (as they are seen to be in a long tradition of thought incorporating both Montesquieu and the founding fathers) but are methods, in many circumstances, of raising the level of information and rationality brought to bear on decisions. That led me into examining policy analysis as itself a social process not limited to what goes on in the analyst's mind and thus to the concept of the "intelligence" of partisan mutual adjustment.

I also thought that it was useful to elaborate the ways in which social problems can often be attacked (not well but with some reduction in incompetence) by "resultants" of interaction rather than "decisions" arising out of anyone's understanding of the problem at hand. If coin tossing can settle some problems better than can futile attempts at analysis of the unanalyzable (or futile attempts at analysis when information is wholly lacking), then it is not surprising that various forms of social interaction can sometimes handle problems better than analysis can when analysis at best is grossly incomplete. Understanding a social problem is not always necessary for its amelioration—a simple fact still widely overlooked.<sup>24</sup>

Rather than intending to stimulate a variety of attempts to question the usefulness of incremental analysis and of partisan mutual adjustment, I had earlier hoped that the PAR article and subsequent publications would stimulate attempts of colleagues to articulate other strategies that avoid the impossible aspiration to synopsis, to give a more precise formulation to disjointed incrementalism as one such strategy, and to model partisan mutual adjustment as a mechanism for social "rationality" rather than as, historically, a mechanism for curbing central authority. On the whole, these hopes have been disappointed.

Some of my colleagues tell me they do not understand how—or whether!—I reconcile the benign view of pluralism to be found in my work on incrementalism and partisan mutual adjustment with the skepticism about pluralism expressed in the more recent *Politics* and Markets and its emphasis on an indoctrinated citizenry and the disproportionate political power and influence of business in politics. Do I deceive myself in believing that I have followed a consistent line of thought? As I have already noted, the policy issues that

#### Notes

- 1. My thanks to James W. Fesler, David R. Mayhew, and Edward W. Pauly for their helpful comments on an earlier draft.
- I now have an opportunity to thank William B. Shore, former managing editor of this journal, for entitling my article of 20 years ago "The Science of Muddling Through" (19 Public Administration Review, 1959), a title that may have contributed as much to the attention the article has received as did its contents.
- 3. Specifically, the conventional steps, with appropriate refinements to deal with probabilities, are:
  - a. Identify and organize in some coherent relation the goal and side values pertinent to the policy choice to be made.
  - b. Identify all important policy alternatives that might realize the values.
  - c. Analyze all important possible consequences of each of the considered alternative policies.
  - d. Choose that policy the consequences of which best match the values of step a.
- 4. The only substantial deepening of the idea of incrementalism that I might be able to claim in the intervening period is an attempt to place incrementalism, as well as partisan mutual adjustment, in intellectual history by showing that it conforms with a long-standing half implicit model of "good" social organization and is challenged by another. See my "Sociology of Planning: Thought and Social Interaction" in Morris Bornstein (ed.), Economic Planning, East

come onto the political agenda in what are called the Western democracies are almost entirely secondary issues on which policy making is indeed pluralistic, though grossly lopsided. On the grand issues that rarely come on the agenda, pluralism is weak to the point of invisibility. It is true that the earlier work emphasizes what works (though badly) in politics, the more recent work what does not work (though it persists). In both phases or steps, I have looked for half-hidden mechanisms. The only thing I see wrong about the two steps is their order. I fear that I became braver only with age, although I should like to deny that interpretation. In any case the subtle influences and pressures of one's academic colleagues are powerful in the development of a scholar's writing and teaching. If we resist yielding to them on what we believe, we often almost unknowingly yield on what we decide to study.

To a disjointed incrementalist, there is never a last word; and these words are not intended to be a "last word in incrementalism," which I have from time to time been asked to attempt. I have only a weak grasp of the concepts here discussed. Having for some years occupied myself with politics and markets and hence subordinated my interest in the further study of incrementalism, I have now returned to the study of knowledge and analysis in policy making and other forms of social problem solving.<sup>25</sup> I hope to muddle through—or along.

and West (Cambridge, Mass.: Ballinger, 1975), subsequently revised as chapters 19 and 23 of my *Politics and Markets* (New York: Basic Books, 1977).

In the intervening years, I also spelled out disjointed incrementalism in more detail, including with the extended discussion an analysis of certain problems drawn from philosophic discourse, in David Braybrooke and Lindblom, *The Strategy of Decision* (New York: Free Press, 1963). I also developed the related analysis of partisan mutual adjustment in *The Intelligence of Democracy* (New York: Free Press, 1965).

- 5. And more fully in Braybrooke and Lindblom, A Strategy of Decision, chapter 5.
- 6. For illustration, familiar stratagems include trial and error, bottle-neck breaking, limitation of analysis to only a few alternatives, routinization of decisions, and focusing decision making on crises, among others.
- 7. In the article of 20 years ago, synopsis was called the "root" method (in contrast to "branch," which was another term for incrementalism).
- 8. To which are added all the complications of value analysis arising out of the elusive character of values and their resistance to "scientific" verification.
- 9. Herbert A. Simon, *Models of Man* (New York: John Wiley, 1957), p. 198.
- 10. In addition, an alternative to incrementalism as practiced is more skillful incrementalism: for example, more attention to monitoring policies for feedback and correction.
- Herbert A. Simon, "A Behavioral Model of Rational Choice," 69 Quarterly Journal of Economics (February 1955).

- 12. Yehezkel Dror, *Public Policymaking Reexamined* (San Francisco: Chandler, 1968), chapter 14; and Amitai Etzioni, "Mixed-scanning," 27 *Public Administration Review* 1967).
- 13. In Todd R. LaPorte, ed., Organized Social Complexity (Princeton, N.J.: Princeton University Press, 1975), p. 70.
- 14. Developed more completely in Politics and Markets, Part V.
- 15. See Politics and Markets, chapters 15 and 17.
- 16. That I am willing to claim, despite the obvious weaknesses of monitoring of results for feedback and correction that characterize most incremental policy making.
- 17. On awareness as one of two forms of knowing, see the illuminating discussion in Alvin G. Gouldner, *The Coming Crisis of Western Sociology* (New York: Basic Books, 1970), pp. 491-95; also in his *Enter Plato* (New York: Basic Books, 1965), pp. 267-72.
- Peter Bachrach and Morton S. Baratz, "The Two Faces of Power," 56 American Political Science Review (December 1962).
- 19. Charles L. Schultze, *The Politics and Economics of Public Spending* (Washington, D.C.: Brookings, 1968), chapter 3 and *passim*.
- 20. For a fuller statement of reasons, see Charles E. Lindblom, *The Policy-Making Process*, 2nd edition (Englewood Cliffs, N.J.: Prentice-Hall, 1979). Schultze and I agree on at least some of the benefits to be had from one kind of partisan, the research minded "partisan for efficiency." But this very special category, illustrated by the professional economist or

systems analyst, is the only category of partisan that Schultze shows much appreciation for.

- 21. My own thinking is indebted to Albert O. Hirschman for early alerting me to the importance of problem-solving incentives, in addition to intellectual capacity, in complex problems solving. See Albert O. Hirschman and Charles E. Lindblom, "Economic Development, Research and Development, Policy Making: Some Converging Views," *Behavioral Science* (April 1962).
- 22. Harvey Leibenstein, "Allocative Efficiency vs. 'X-Efficiency," American Economic Review 56 (June 1966). Also his Beyond Economic Man (Cambridge, Mass.: Harvard University Press, 1976).
- 23. Michael Polanyi, "The Republic of Science," I Minerva (Autumn 1962); Imre Lakatos and Alan Musgrave (eds.), Criticism and the Growth of Knowledge (Cambridge: Cambridge University Press, 1970); Thomas S. Kuhn, The Structure of Scientific Revolutions, 2nd edition (Chicago: University of Chicago Press, 1970). See also, for a detailed empirical study of incrementalism, partisan mutual adjustment, and partisan analysis-especially the latter-Ian Mitroff, The Subjective Side of Science (New York: Elsevier, 1974).
- Further developed in Charles E. Lindblom and David K. Cohen, Usable Knowledge (New Haven: Yale University Press, 1979), pp. 19-29.
- 25. As a beginning, Lindblom and Cohen, Usable Knowledge.

