Popper on “Social Engineering”: A Classical Liberal View

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In The Poverty of Historicism, and again in The Open Society and Its Enemies, Karl R. Popper used the phrases “social engineering” and “social technology” when writing about social and political reform. In the former book, he coined the terms “piecemeal social engineering” and “utopian social engineering” to denote two different approaches to reform.1 In the latter book, Popper shortened these terms to “piecemeal engineering” and “utopian engineering.”

In this paper I will examine critically what Popper said about social engineering. First, I will argue that in distinguishing between what he called its “piecemeal” and its “utopian” varieties, Popper confused two entirely different issues. His case for the former, and against the latter, is marred by this confusion. Second, I will argue that Popper overlooked important problems with certain kinds of piecemeal engineering. Finally, I will argue that what I will call “piecemeal utopian political reform” is a defensible approach that is not vulnerable to Popper’s arguments against utopian social engineering.

Popper on Social Engineering

Although Popper did not coin the term “social engineering,” the terms “piecemeal social engineering” (or “piecemeal engineering”) and “utopian social engineering” (or “utopian engineering”), and the distinction between the two, are his. Popper argued passionately for the former and against the latter.

In The Poverty of Historicism, Popper began with a discussion of the doctrine that gave that book its name. In his criticism of what he called “historicism” he contrasted two kinds of predictions.2

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1 Although Popper acknowledged Friedrich Hayek’s objections to the “engineering approach” to social problems, he continued to use the term “engineering” when writing about reform.


In the one case we are told about an event which we can do nothing to prevent. I shall call such a prediction a ‘prophecy.’… Opposed to these are predictions of the second kind, which we can describe as technological predictions since predictions of this kind form a basis of engineering. They are, so to speak, constructive, intimating the steps open to us if we want to achieve certain results [Emphasis in the original].

Unlike the historicist, thought Popper, the social technologist does not tell us how to adjust to coming events that we can do nothing to prevent, events that we can supposedly predict on the basis of laws of historical development. Instead the technologist tells us what we need to know “if we want to achieve certain results.”

In opposition to the historicist methodology, we could conceive of a methodology which aims at a technological social science. Such a methodology would lead to the study of the general laws of social life with the aim of finding all those facts which would be indispensable as a basis for the work of everyone seeking to reform social institutions [Emphasis in the original].

There are, Popper contended, two basically different ways in which social engineers can use the results of a technological social science to reform social institutions and this led him to his distinction between two kinds of social engineering.

Just as the main task of the physical engineer is to design machines and to remodel and service them, the task of the piecemeal social engineer is to design social institutions and to reconstruct and run those already in existence.…

Holistic or Utopian social engineering, as opposed to piecemeal social engineering,… aims at remodelling the ‘whole of society’ in accordance with a definite plan or blueprint…

In The Open Society and Its Enemies, Popper elaborated on this distinction between the piecemeal and the utopian types of social engineering. According to him, the utopian approach flows from an insistence on determining one’s ultimate political goal, one’s ideal state, before taking any

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3 Popper, The Poverty of Historicism, p. 46.
4 Ibid., pp. 64-65, 67.
practical action. On the other hand, the piecemeal approach, again according to Popper, flows from the insistence on attempting to locate and eradicate the greatest and most urgent social evils. Utopian social engineering, Popper claimed, requires the centralized rule of a few, the suppression of dissent and, ultimately, the use of violence instead of reason to settle the disputes that arise in the pursuit of the ultimate goals of the engineers. Piecemeal social engineering, he claimed, allows for democratic action, the tolerance of dissent and the use of reason and compromise to settle political disputes.

Especially odious to Popper were the brutal methods that he associated with utopian engineering. The “canvas cleaning” approach to the reconstruction of society that he found in Plato’s Republic seemed to him a terrible foreshadowing of the horrors inflicted upon millions of human beings by the totalitarian regimes of the twentieth century. Attempting to wipe the slate clean and redraw an entire society from scratch, based on a blueprint drawn up by visionaries, is not what he deemed a rational kind of social engineering and can only lead to disaster.

Even with the best intentions of making heaven on earth it only succeeds in making it hell—that hell which man alone prepares for his fellow-men.

“Piecemeal” vs. “Utopian” Social Engineering

There are, I believe, two important problems with Popper’s analysis of social engineering and his criticism of utopian social engineering. The first, which I will consider in this section, is that in distinguishing between the piecemeal and the utopian brand of social engineering, he confused two entirely different issues. The second, which I will consider in the next section, is that he did not address some of the pitfalls of the nonutopian piecemeal approach that he himself plainly favored.

7 Ibid., Vol. 1, pp. 159-168.
8 Popper’s interpretation of Plato is, of course, controversial. As he saw it, utopian social engineers had to wipe the slate (canvas) clean before constructing the ideal society.
9 Popper, The Open Society and Its Enemies, Vol. 1, p. 168. The disasters that followed the Bolshevik Revolution, and similar revolutions in China, Cambodia and elsewhere, are detailed in The Black Book of Communism. It seems, however, that the human carnage in these cases was not so much “canvas cleaning” in Popper’s sense as it was the brutal suppression of anyone who threatened either the power, or the long-term or short-term goals of the revolutionaries.
The first problem is that Popper confused the question of the presence or absence of a set of “utopian” principles to guide political reform with the scope of a given effort at reform or of a given stage of reform. It is true that he allowed the possibility that piecemeal social engineers might be guided by a utopian vision.\textsuperscript{10}

The politician who adopts this [piecemeal] method may or may not have a blueprint of society before his mind, he may or may not hope that mankind will one day realize an ideal state, and achieve happiness and perfection on earth. But he will be aware that perfection, if at all attainable, is far distant and that every generation of men, and therefore also the living, have a claim…

He seems, however, not to have realized what an important concession to utopianism this is. If piecemeal engineers can be guided by the vision of an ideal society then it is possible for a group of them to have exactly the same utopian vision for the whole of society as a different group of social engineers whom Popper would label “utopian.” It may seem preferable to stick with the label “holistic” for the latter group since the words “piecemeal” and “holistic” seem to capture better the distinction that Popper had in mind. Unfortunately, however, the word “holistic” also has drawbacks in this context since both groups of reformers may have a vision for the whole of society and either group can be distinguished from reformers who seek to make one specific reform in order to eliminate one identifiable source of human suffering.\textsuperscript{11}

Popper often insisted that he was loath to engage in verbal disputes but there is a genuine dispute here that is about more than the meanings of words. The difference between our first two groups of social engineers is not a difference in the vision that inspires their reform. There need not even be a difference in the empirical hypotheses that they take from “technological social science” to guide them in their reform efforts. The difference is in the way in which the two groups plan to implement their reforms. One group proposes to construct a new society from scratch, as it were, and the other proposes to change the existing society one step at a time. This is a difference that makes a difference.

We can hardly fault Popper for criticizing the brutal methods of some social engineers but it seems to me misleading to call their approach “utopian” or even “holistic.” It is better, I think, to label the two types of social engineering “revolutionary” and “evolutionary.” This would help avoid

\textsuperscript{10} Popper, \textit{The Open Society and its Enemies}, p. 158.

\textsuperscript{11} An organization whose only mission is to press for tougher measures against drunk drivers is a good example of a group of non-utopian piecemeal reformers.
confusing two entirely different issues: the scope of a given effort at (or stage of) reform and the scope of the vision that inspires the reformers.

Problems with “Piecemeal” Engineering

In addition to confusing two different issues, Popper overlooked an important problem with the kind of piecemeal approach to reform that he himself favored. He acknowledged that even the most carefully considered reform may have unintended (and undesirable) consequences. It seems to me, however, that piecemeal reform designed to cure one specific ill, to reduce or eliminate one area of human suffering, can very easily create unanticipated problems in other areas. In fact, one of the benefits of theories about the whole (or at least a large portion) of society is that they can tell us when changes in one area are likely to create problems somewhere else.

It is also possible that a series of two or more piecemeal reforms that are not guided by some fairly comprehensive theory will have unintended consequences that none of the reforms by themselves would have. They may, for example, largely cancel each other’s effects.\(^{12}\) It is true, of course, that reformers who are constantly alert to the unintended consequences of their intended actions might become aware of such a result. It is also true, however, that this result might, in some cases, have been avoided if the reformers had been guided by a theory drawn up on the basis of a comprehensive social theory.

Piecemeal Utopian Reform: An Outline

In this section I will discuss an approach to political and social reform that can be called “piecemeal utopian reform” and in the next section I will argue that this approach can be defended against all of the criticisms that Popper leveled against utopian social engineering. Although this general approach has often been discussed among libertarians and classical liberals, it may not be clear how to reconcile it with Popper’s useful insights.

First, let me briefly characterize what I call “piecemeal utopian reform.” It is an evolutionary or gradualist approach that resembles Popper’s piecemeal social engineering in that it proceeds one step at a time and does not attempt to rebuild the whole of society from scratch or abolish all undesired institutions at once.

Piecemeal utopian reform can be in the private sector or the public sector. Reform in the private sector (which might simply be called “social reform”) may involve the provision of a new kind of social service by a voluntary nonprofit group or the provision of a new kind of good or service by a profit-making enterprise. Reform in the public sector (for which the term “political reform” might be reserved) may involve a change in the provision of

\(^{12}\) An increase in the maximum penalty for certain crimes combined with a relaxation of strict parole policies may be a good example of two piecemeal reforms that tend to cancel each others’ effects.
a governmental service or in the manner of paying for this service or it may involve a change in the basic legal framework of society.\textsuperscript{13}

Political reform can be negative as well as positive. Keeping in mind that Popper’s piecemeal social engineers are supposed to be alert to the unintended consequences of the changes that they (or others) institute, one of the aims of piecemeal utopian political reform, is the undoing of previous bits of social engineering that have had undesirable consequences.

I contend that piecemeal utopian reform can be defended against all of the criticisms that Popper leveled against utopian social engineering. The first basic criticism might be called an epistemological one; the other criticisms, political or ethical ones.

**Piecemeal Utopian Reform: A Defense**

One of Popper’s criticisms is an epistemological one that concerns not so much the scope of a set of reforms (or stage of reform) as the manner of settling the issue. How far-reaching should a given set of reforms be? Popper argued that utopian social engineers have decided a priori that reconstructing the whole society from the ground up is the only way to reform their society.\textsuperscript{14}

One of the differences between the Utopian or holistic approach and the piecemeal approach may therefore be stated in this way: while the piecemeal engineer can attack his problem with an open mind as to the scope of the reform, the holist cannot do this; for he has decided beforehand that a complete reconstruction is possible and necessary.

Piecemeal social engineers, on the other hand, can afford to base their decision about the scope of a political or social reform on empirical evidence. This surely seems a point in favor of piecemeal social engineering, if only because utopian social engineering is characterized in such a way as to preclude the experimental approach to this question.

I contend that there is no special problem here for piecemeal utopians. Although their long-term goal is to reform the whole of society, they needn’t decide a priori how best to do this nor how long it will take. The scope of a given stage of reform will no doubt depend upon many factors, including, for example, the extent of the citizens’ support for the program of reform at any given time. The speed with which a program of reform is implemented will also depend upon many factors, such as the degree of success of the earliest changes in meeting citizens’ expectations. There is no

\textsuperscript{13} Reforms that are changes in the legal framework might, perhaps, better not be thought of as “engineering” at all. (See, for example, Friedrich Hayek, *The Counter-Revolution of Science*, pp. 165-182.)

\textsuperscript{14} Popper, *The Poverty of Historicism*, p. 69.
reason, however, why piecemeal utopians need to be dogmatic about either issue. Their approach to reform does not decide this question in advance of experience and they can adjust their program depending upon the results of their initial experiments in reform.

Popper also leveled two closely related ethical and political criticisms against utopian social engineering. The first is that utopian engineers have to proceed without the consent of the majority because it is very difficult to get a majority to support a blueprint for the whole of society. They will therefore, he argued, have to rely on the centralized rule of one person or a few persons. This criticism, Popper contended, does not apply to piecemeal social engineering since it needn’t be difficult at all to get a majority to support a particular reform aimed at alleviating an easily identifiable source of human suffering. 15

In favour of his method, the piecemeal engineer can claim that a systematic fight against suffering and injustice is more likely to be supported by the approval and agreement of a great number of people than the fight for the establishment of some ideal.

The second criticism is that utopian social engineers have to suppress dissent because their plans will inconvenience many people over a long period of time and will no doubt encounter widespread resistance. Since the engineers cannot allow this resistance to prevent them from laying the groundwork that their program requires, they cannot tolerate open dissent.

We might call the first of these problems the majoritarian problem and the second the civil libertarian problem and we can acknowledge that in each case Popper has a point. They are not, however, points that can be made against piecemeal utopian reform.

Let’s grant that the authoritarian rule of a single dictator or of a small dictatorial committee would be required by “utopian” (i.e., revolutionary) social engineering. Let’s also grant that Popper is right that even the most benevolent of authoritarian rulers would be hard pressed to get the necessary information to determine if the revolutionary program was working out according to plan. There is not any reason to believe that piecemeal utopian reform needs to be authoritarian. Piecemeal utopians need not get the agreement of the majority to the blueprint. By proceeding one reform at a time, they may be able to build a series of alliances such that a majority supports each reform, although only a minority approves of the blueprint as a whole. This need not involve any attempt on the part of the utopians to deceive their fellow citizens or conceal their ultimate goals.

There are pitfalls here, of course, in the making of alliances with groups that do not share the reformers’ long-range goals. There are also some

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15 Popper, *The Open Society and Its Enemies*, p. 158.
difficult strategic and tactical challenges. There are, however, no grounds for deciding that piecemeal utopian reformers can’t proceed without the support of the majority for their entire program, provided that they can mobilize enough support at each stage of reform.

Furthermore, the program that the populace is asked to support may not contain a detailed blueprint of the future society but only what might be called a “blueprint-in-outline” of utopia. Indeed, on some views the proper goal for reform is not so much a utopia as a framework for utopias.\(^\text{16}\) Let private individuals and voluntary groups of such individuals experiment with their own utopian schemes within a legal framework that allows for such experimentation. The utopia at which piecemeal reformers aim may be an anarchistic or minimal statist society in which various people have their own blueprints and it may not be possible to give anything more than a blueprint-in-outline of such a society.

The civil libertarian problem, I believe, tells against any attempt by revolutionaries to rebuild the whole of society from the ground up. Because any attempt at such thoroughgoing change is bound to inconvenience most, if not all, of the citizens very severely there is bound to be a great deal of criticism of the program. Once the social engineers have decided to proceed they will have to turn a deaf ear to this criticism if they hope to accomplish anything at all. Popper’s criticism is well taken.

There is a civil libertarian problem, however, not because the long-term goal is to remake the whole of society but because the short-term goal is to sweep away the present society and to lay the foundations without which the long-term goal is supposedly unachievable. The severity of the dislocations will both require widespread cooperation and provoke widespread resistance.

Piecemeal utopian reformers need have no such problem. They can limit the scope of the first stage of reform if necessary and, in any case, if they overreach they may simply have to retreat. Because they have not made any a priori judgments about the scope of the first round of reform, they can be more flexible, considering both the extent of their support and the likelihood of increased or decreased support in response to the consequences of this first round of reform. They may, of course, have to alter the scope of a given reform, or the speed with which reform can be implemented in response to dissent, especially if their earliest reforms do not satisfy their fellow citizens. Here we have a problem that piecemeal utopian reformers have to solve but there is no reason to believe that this problem is insoluble.

Piecemeal utopian reformers can be open to constructive criticism from two sources: first, other reformers who share the long-term goal but disagree about the best way to achieve that goal; and second, those who do not share the long-term goal. Furthermore, even in the case of political reform,

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not only may piecemeal utopians be tolerant of dissent, they may be in no position to suppress dissent even if they were disposed to be intolerant of it. The mere fact that a group of utopian political reformers is able to gain enough power to present a legislative program to a democratic assembly—perhaps they have been duly elected to that assembly—is no guarantee that they have the power to suppress dissent even if they want to do so. They may, in fact, have to be especially tolerant in order to gain enough allies to get any part of their legislative program passed. They may also have to compromise in response to criticism of their program by accepting fewer changes than they really want, or by postponing some changes. In this way they may get the support that they need to achieve any reform at all.

Popper also argued that utopian social engineers cling dogmatically to their blueprint or to the theory on which it is based but piecemeal utopian reformers need not do this. It is true, of course, that reformers may cling dogmatically to their pet hypotheses but utopians have no monopoly on dogmatism. Indeed, it seems obvious from a casual observation of history and current events that there have been dogmatists who insist, regardless of the empirical evidence, that their one favorite reform will cure some pressing social ill even if (they admit) it is not a panacea. (Didn’t ardent alcohol prohibitionists cling to their cherished program in defiance of evidence that it was doing more harm than good?)

On the other hand, it is quite possible that, in the course of their reforms, a group of utopians will alter their plans, perhaps by deciding to forego some of the more extreme reforms (which they might have planned to institute last, anyway). A group of individualist anarchists, for example, might agree to stop dismantling the state when they had reached a classical liberal minimal state because criticism had convinced them that a large industrial society without any government at all simply would not work.

Finally, Popper gave special attention to the problem of the successors of the utopian social engineers, arguing that even a benevolent dictator had to face the problem of choosing an equally benevolent successor. Here again, however, we have not so much a severe criticism as a problem to be solved. In the first place utopian social reformers will usually have to conduct a campaign to persuade others to support their program. There is no reason why these reformers can’t seek to persuade their younger fellow citizens to join them. In fact, their most obvious source of support is exactly the young and idealistic. The utopian reformers need have no special problem with succession at all. Piecemeal utopians no doubt will, as Popper says that utopian social engineers must, have to work for a generation or more to realize their program. There is no reason, however, why younger converts to the cause cannot constantly renew their ranks so that the program can be carried to its completion after its initiators have left the scene.

**Conclusion**

I have argued that in distinguishing between piecemeal social engineering and utopian social engineering Popper has confused two different
issues. I have also argued, somewhat briefly, that some kinds of piecemeal social engineering have pitfalls that Popper seems not to have considered. Finally I have outlined an approach that I call “piecemeal utopian reform” and have argued that it is not vulnerable to the criticisms that Popper leveled against utopian social engineering. There is much, I believe, that today’s classical liberals can learn about political reform from Karl Popper but we should consider his approach critically with the idea that although we do not need to reject it wholesale, we do need to improve upon it.