

# Piecemeal Social Engineering: Can it be a Path to an Open Society?

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## Abstract:

A cornerstone of Karl Popper's vision for an open society is his concept of "piecemeal social engineering," which offers an alternative to utopian, large-scale reform efforts. Piecemeal social engineering, as articulated by Popper, refers to the practice of addressing specific social problems through small-scale, incremental changes rather than attempting sweeping, utopian transformations. Opposing totalitarian regimes, Popper stated that "the future is open" and the social and political systems are fallible. It becomes our responsibility to foster new initiatives and take by piecemeal approach to social engineering so that we can correct the errors in our political and social systems, thereby creating a favorable social atmosphere and effective form of governance. Therefore, the question of 'who should rule?' can be justifiably replaced in our opinion, too, as Popper remarked, by the question 'How can we so organize political institutions that incompetent rulers can be prevented from doing too much damage? The second question can be answered only when we reconstruct our society and public policies with the help of 'piecemeal social engineering'. The components of an open society, like individual autonomy, democracy, openness, and pluralism, facilitated the application of 'piecemeal social engineering'. This paper is an attempt to show how piecemeal social engineering embodies the spirit of an open society, fostering resilience, adaptability, and inclusivity in the face of social challenges.

**Keywords:** Totalitarian, Utopian, Piecemeal, Social Engineering, Open Society, Democracy.

## Introduction

With the emergence of the Second World War, Popper developed his groundbreaking methodological concepts in political philosophy. After identifying the psychological factors contributing to totalitarianism (the strain of civilisation) and the erroneous philosophical concepts (historicism, holism, and essentialism), Popper articulated his perspective on the values and institutions essential for maintaining an open society in the modern era. He regarded contemporary Western liberal democracies as open societies, asserting they represent "the best of all political worlds of whose existence we have any historical knowledge" (Popper, 1999, p. 90), while opposing authoritarian and totalitarian regimes founded on the principle of historicism, or historical inevitability. Popper stated, "The future is open" (Popper, 1999, p. 143), and given our fallibility, our social and political systems are likewise fallible. Our actions together influence the decision. We collectively bear responsibility for future outcomes. We all have an obligation to foster initiatives that may contribute to a more favourable future, rather than anticipating negative outcomes. Holistic experiments and the readiness to sacrifice one's life for the greater good should be rejected in favour of a more piecemeal approach to social engineering, allowing for the correction of errors and

societal improvement without violence. He contended that the same applies to political systems: the popular alternative of governments is fundamental to democracy, which, despite its numerous flaws, is the most effective system of governance identified so far.

### **Popper on Democracy**

Popper's perspective on democracy was uncomplicated, yet not reductionist, and minimalist. Ignoring the question regarding who should rule, Popper introduced a critical question in political philosophy: "How can we so organize political institutions that bad or incompetent rulers can be prevented from doing too much damage?" (Popper, Reprinted 1947, p. 107) The question of who should rule the state is one of the fundamental Socio-Political issues in Plato's theory of justice. Popper's conviction is that "by expressing the problem of politics in the form 'Who should rule?' or 'Whose will should be supreme?', etc., Plato created a lasting confusion in political philosophy. It is clear that once the question 'Who should rule?' is asked, it is hard to avoid some such reply as 'the best' or 'the wisest' or 'the born rulers' (or, perhaps, 'The People' or 'The General Will' or 'The Master Race' or 'The Industrial Workers'). But such a reply, convincing as it may sound for who would advocate the rule of 'the worst' or 'the stupid' or 'the born slave'? is, as Popper said quite useless" (Popper, Reprinted 1947, pp. 106-107).

Initially, such a response may lead us to believe that a fundamental issue in political thought has been resolved. However, if we examine political thought from an alternative perspective, we discover that rather than addressing any basic issues, we have simply avoided them by presuming that the inquiry 'Who shall rule?' is the highest priority. Even the scholars who agree with Plato's assumption acknowledge that political are not consistently sufficiently 'good' or 'smart' (the exact definitions of these terms need not concern us), and that establishing a government wherein goodness and knowledge can be implicitly trusted is somewhat challenging. If that is permitted, we must consider whether political philosophy should initially confront the potential for poor governance; whether we ought to anticipate the worst leaders while hoping for the best. However, this necessitates a novel perspective on the issue of governance, compelling us to reconsider the query: Who should be the ruler? by the latest question: Popper stated, "How can we organize political institutions so that bad or incompetent rulers can be prevented from doing too much damage?" (Popper, Reprinted 1947, p. 107).

Popper stated that this is essentially a query of institutional structure. Democracy is the greatest political system as it effectively addresses this issue by offering a peaceful, institutionalised, and systematic method for removing ineffective leaders, specifically through the electoral process. According to Popper, the merit of democracy is not rooted in the sovereignty of the citizens. He stated, "The people do not rule anywhere; it is always governments that rule" (Popper, 1999, p. 93). Popper mostly advocated for democracy based on practical or empirical considerations, rather than the "essentialist" perspective that defines democracy as rule by the people or the notion that democratic participation had intrinsic value. Through this action, Popper might entirely circumvent numerous conventional queries of the democratic concept, such as what justifications exist for the sovereignty of the citizens? Who, precisely, will be considered "the citizens"? In what manner should they be represented? The function of the populace is to facilitate a consistent and nonviolent method for removing inadequate, corrupt, or abusive leaders.

Popper dedicated minimal consideration to the architecture of democratic institutions which enable citizens to overthrow their leaders or minimise potential harm. He highlighted the significance of implementing balances and safeguard inside the democratic structure. Democracies should pursue "institutional control of the rulers by balancing their power against other powers" (Ibid.). This concept, a

fundamental element of the 18th-century "new science" of politics, was articulated most notably by James Madison in Federalist Paper 51. Madison stated, "While reliance on the populace is undoubtedly the principal constraint on government, experience has demonstrated the need for supplementary safeguards." The government should be structured so that determination must counteract determination. Popper contended that "two-party organizations", exemplified by the U.S and U.K., are more effective than a proportional electoral process; he posited that in a two-party structure, citizens can more readily attribute success or failure to a specific political group, namely, the one in power during an election. This consequently engenders self-criticism in the vanquished party: "Under such a system ... parties are from time to time forced to learn from their mistakes" (Popper, 1999, p. 97). Consequently, governance within the system of two-party policy, more accurately reflects the 'trial-and-error' methodology inherent in scientific inquiry, resulting in superior public policy. Conversely, Popper contended that proportional electoral systems generally yield several parties and coalition leadership, wherein no single party exerts authority over the ruling party. This complicates voters' ability to attribute accountability for public policy, rendering elections less significant and the government unable to respond properly. It is important to acknowledge that Popper overlooked the fact that division in government is a common result in the system of the United States. It is somewhat uncommon for a single party to dominate the presidency and each house of the U.S. Congress, complicating voters' ability to ascertain accountability for public policy outcomes.

Significantly, Popper's notion of democratic society was not dependent on knowledgeable and discerning people. The people, although being poorly educated, did not need to exercise a type of collective wisdom. Popper expressly rejected "vox populi vox dei" as a "classical myth". "We are democrats," Popper wrote, "not because the majority is always right, but because democratic traditions are the least evil ones of which we know" (Popper, 1962, p. 351). Democracies facilitate the transition of government without violence more effectively than any other form of government. Popper conveyed the belief that the opinion of general public and its influencing institutions (such as colleges and universities, the media, political groups, the film industry, and television) could evolve towards greater rationality by adopting the scientific culture of critical discourse, which entails the readiness to subject opinions to public scrutiny and the practice of considering alternative perspectives.

### **Popper's Notion of Piecemeal Social Engineering**

The primary function for a citizen, therefore, in Popper's democratic state is the minor yet significant task of overthrowing ineffective leaders. How can such a policy supposed to be developed and executed? Who creates it? What are its objectives? Popper established the notion of "piecemeal social engineering," which he proposed as a more effective method than utopian engineering. In contrast to utopian engineering, Popper asserted that "piecemeal social engineering" must be "small scale," indicating that societal changes must concentrate on altering a single institution at one time. In contrast, while "utopian engineering" aspires to elevated and theoretical objectives (such as faultless justice, genuine equality, and an elevated form of pleasure), piecemeal social engineering focusses on resolving specific social issues (including hunger, violence, joblessness, pollution, and financial inequality). It accomplishes this by establishing new social structures or reconfiguring old ones. The newly established or modified institutions are thereafter evaluated by implementation and adjusted continuously based on their outcomes. Institutions may consequently experience gradual enhancement over time, leading to a progressive alleviation of social evils. Popper paralleled piecemeal social engineering with physical engineering. Similar to physical

engineers who modify machinery via small modifications to established models, social engineers progressively advance societal structures through “piecemeal tinkering.” In this way, “the piecemeal method permits repeated experiments and continuous readjustments” (Popper, Reprinted 1947, p. 144). According to Popper, only these social experimentations can provide dependable evaluation for social designers. Conversely, as previously mentioned, extensive and intricate social reform involving several institutions will yield social experiments where disentangling causes and consequences becomes exceedingly challenging. The utopian engineers exhibit a form of hubris, mistakenly and fatally assuming they possess dependable empirical information regarding the functioning of the social environment. However, “piecemeal engineer knows, like Socrates, how little he knows. He knows that we can learn only from our mistakes” (Popper, 1964, p. 21).

Consequently, akin to his advocacy for electoral processes in a democracy, Popper’s rationale for piecemeal social engineering fundamentally relies on its alignment with the “trial-and-error” methodology of the natural sciences: a hypothesis is posited and examined, discrepancies in the hypothesis are identified and rectified, leading to the emergence of a refined theory, thereby initiating the cycle entirely. The piecemeal approach to social engineering reflects the advancement of social mobility is akin to scientific advances. Popper asserts that “piecemeal social engineering” is the sole method of ‘public policy’ that can be authentically scientific: “This—and no Utopian planning or historical prophecy—would mean the introduction of the scientific method into politics, since the whole secret of the scientific method is a readiness to learn from mistakes” (Popper, Reprinted 1947, p. 144).

### **Applicability of Piecemeal Social Engineering in The Open Society**

A cornerstone of Popper’s vision for an open society is his concept of “piecemeal social engineering,” which offers an alternative to utopian, large-scale reform efforts. Piecemeal social engineering, as articulated by Popper, refers to the practice of addressing specific social problems through small-scale, incremental changes rather than attempting sweeping, utopian transformations. According to Popper, large-scale social experiments often lead to unintended consequences, particularly when they are guided by ideological purity rather than empirical evidence. Piecemeal social engineering, in contrast, minimizes risk by allowing for the continuous evaluation and adjustment of policies.

Popper’s preference for piecemeal reform is rooted in his broader epistemological stance, particularly his critique of historicism—the idea that history unfolds according to immutable laws. Popper argues that historicism’s deterministic outlook often underpins utopian projects, which seek to impose grand visions of societal perfection. Instead, Popper emphasizes a trial-and-error approach, grounded in humility and the recognition of human fallibility.

Prior to examining the relationship between piecemeal social engineering and open society, we shall first underscore key aspects of Popper’s notion of an open society that relate to “piecemeal social engineering”. Individual autonomy is seen as the fundamental principle of ‘an open society’. The state and its governing bodies must protect and promote the maximum freedom for all persons. In ‘an open society’, “there exists minimal coercion resulting from a non-authoritarian system of social control and the utmost neutrality of the state” (Stelzer, 2006, p. 233). A significant portion of this can be attributed to the division of powers and the associated legislative and constitutional principles. Consequently, in ‘an open society’, individuals receive the same safety from both one another and the state. Popper, in his advocacy for democracy, underscores the necessity of public oversight of politicians, particularly through the mechanism of electoral removal. This reflects his profound skepticism towards any form of power consolidation. He

emphasizes the significance of institutions that can effectively mitigate abuse of power and facilitate power regulation. A democratic state permits improvements in accordance with the preferences of the populace, without any violence. Consequently, it facilitates the progressive restructuring of society in a non-violent manner. This is also associated with the desire for tolerance of diverse perspectives, ideas, definitions of the good, and ways of life. The variety of viewpoints, ideas, and objectives is not only indicative of an open society but also essential for societal advancement, as it facilitates new advancements and answers to problems. Consequently, pluralism extends beyond the acknowledgement of diversity; it is a fundamental goal for an open society, serving as a crucial prerequisite for rational optimisation processes within the sociopolitical domain. The components of ‘an open society’—namely, individual autonomy, democracy, openness, and pluralism—facilitate the application of reasoning and collaboration in resolving political conflicts and making sensible policy decisions. "The notion of an open society incorporates various elements of Popper's philosophy of science to introduce rationality into politics". Both science and politics are founded on the readiness to recognize critical debates and to derive insights from experience, with criticism regarded as a constructive component of discourse and decision-making in the political realm. It is essential to identify and rectify problems promptly while effectively considering the comprehensive spectrum of societal information. The focus on criticism simultaneously reflects the rigorous antidogmatic and anti-authoritarian stance of Popper's critical rationalism.

The strong association of piecemeal social engineering with the fundamental components of the open society levels it as the preferred option for policy execution. Piecemeal engineering prioritizes the avoidance of violations or infringements of people's rights in the execution of a societal strategy, a prevalent issue in various social engineering methodologies. "The most effective kind of social engineering in liberal democratic countries is one that facilitates reforms in accordance with the desire of the governed and adheres to the rule of law". Moreover, as a methodical approach, it is not just subject to scrutiny regarding laws and governmental activities, but may also be viewed as the foundation of reasoned politics. "Piecemeal social engineering" is predicated on four fundamental conventions: "(a) we inhabit a realm of perpetual change, which cannot be halted or entirely controlled; (b) one must commence with the existing social and political framework, along with its associated challenges and institutions, rather than an idealised societal blueprint; (c) the cornerstone of logical policymaking is criticism and self-criticism, as only through critique can political and social progress be achieved; and (d) our social initiatives invariably yield unintentional and often unexpected results, necessitating that interventions in social and political domains be executed with utmost caution and progressively, while remaining vigilant to possible errors and emerging issues. Linking piecemeal social engineering to the notion of ‘an open society’—and consequently to ‘Western liberal democracies’, regardless of their persisting deficiencies—renders it less susceptible to the drawbacks associated with alternative social engineering methods, such as coercion, undemocratic, or even totalitarian inclinations.

Popper underscores the necessity of utilising our inherently partial and imperfect knowledge to optimally enhance the current social conditions through gradual reforms. The objective of politics and social action is not to achieve an ideal state, but to manage societal development through gradual alterations of social institutions at every given time. Popper adopts a pragmatic approach focused on transformation (Magee, 1985, p. 87).

The current social structure serves as the foundation for reforms, with societal issues acting as motivation for these changes. "Piecemeal social engineering is aligned with the systematic fight against preventable suffering, concrete forms of unfairness, and exploitation" (Popper, Reprinted 1947, p. 158). The necessity



to identify and eliminate the most significant and significant social injustices aligns with Popper's "theory of error elimination". It also underpins his "rejection of holistic social technologies and his discharge of utopian ideas and violent revolutionary upheavals" (Popper, 1964, pp. 64-67). Based on his rejection of historicism, Popper characterizes "holistic social planning as the undertaking to remodel the society as a whole in accordance with some defined plan, linked to centralization, suppression of dissent, and the use of violence" (Popper, Reprinted 1947, p. 139). Therefore, it can be considered that Popper's primary objective was to demonstrate the ineffectiveness of holistic methods and the negative results that would follow if applied.

Piecemeal social engineering serves as a suitable methodology for achieving these objectives, since it presents a "synthesis of the possible and the permissible in pursuit of the desirable" (Duff, 2005, p. 68). Moreover, it advances beyond "non-ideal theory in the direction of action-design and implementation" (Robeyns, 2008, p. 349). The notion of piecemeal social engineering outlined above allows us to consider the entire spectrum of feasible limitations and unintended repercussions. It accomplishes this through an examination of the situational analysis of problems, the exploration of potential solutions, and a continuous critical feedback mechanism associated with this continual methodology. Consequently, it also establishes connections to the fields of social sciences. Popper's primary concern, namely his critique of totalitarianism, prompts him to view "the state as a necessary evil that should be constrained as much as possible to safeguard individual freedom" (Popper, *The Open Society and Its Enemies II*, 1947, p. 155). According to Duff, "This may have resulted in an excessively pessimistic view of the state, constraining both holistic planning and piecemeal social engineering"<sup>1</sup> (Duff, 2005, p. 69).

## Conclusion

"Piecemeal social engineering" is a legitimate approach to social change, despite being perceived as more focused on objectives and less protective than Popper's critique of holistic design. The attraction of piecemeal social engineering lies in its connection to Popper's "philosophy of science", which significantly impacted the latter half of the twentieth century. This paper demonstrates that both political and scientific endeavours rely on the process of "trial-and-error", which can be refined further towards a critical rationalist approach of learning. "Piecemeal social engineering" can significantly contribute to the ongoing discourse over ideal and non-ideal concepts. Formulated as a framework for societal evolution, it incorporates non-ideal (not fixed or determined) elements into action planning and its execution. A comprehensive analysis of incremental social engineering must also address the institutional context, encompassing issues of procedural justice and challenges associated with decision-making under unpredictability. Furthermore, the axiological foundation is insufficiently developed, as the mere minimisation of suffering fails to address all enquiries on distributive justice, particularly when considering global and multigenerational dimensions.

Therefore, Popper's concept of piecemeal social engineering remains a compelling approach to governance and reform in contemporary open societies. By prioritizing incremental progress and the continuous critique of policies, this method offers a pragmatic and ethically sound alternative to utopian projects. While not without limitations, piecemeal social engineering embodies the spirit of an open society, fostering resilience, adaptability, and inclusivity in the face of ever-changing challenges. This

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<sup>1</sup> Although the issues associated with coercion in piecemeal social engineering could be mitigated through deontological ethics, which recognise particular moral rights that have to be upheld irrespective of outcomes, as noted by Duff (2005, 69), Popper's framework offers distinct protections, emphasising individual liberty and opposing totalitarian inclinations.

article does not deliver a conclusive judgment on piecemeal social engineering; instead, it serves as a preliminary framework for further exploration.

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