Anarchy is Mathematically Superior to Statism in Providing Peace

Free Range Egghead

International Relations theory is dominated by pro-statist perspectives, while game theory is close to neoliberal economics and cybernetics. I was surprised, therefore, to find an article developed from these baselines which basically confirms that anarchist systems are more stable than statist systems.

The article develops a formal theory of political order to compare the efficiency of monopolized versus distributed coercion in sustaining peace. Using a game-theoretic framework, the authors show that while both institutional arrangements can support peaceful equilibria, they differ sharply in their costs, welfare properties, and incentive compatibility. The authors don't actually look at any empirical examples; the whole article is conducted using mathematical modelling.

The analysis demonstrates that distributed coercion is generally more efficient than a monopoly of violence, particularly when "players" have similar coercive effectiveness. The analysis is largely based on comparing state-dominated domestic political orders to the international system, which is conventionally assumed to be anarchic. When coercive power is evenly balanced, maintaining a monopoly requires substantially higher total investment than the least-cost equilibrium under distributed force. In other words, if the population can fight back against the state, the state has to invest a lot of resources to keep its repressive forces stronger than the population. As coercive asymmetry increases, however, the inefficiency gap narrows: when one actor has a large coercive advantage, monopoly and distributed arrangements converge in cost, and monopoly may even become the least-cost option. In other words, when someone already has dominance, it is cheaper to coerce others than to share power with them.

Two key propositions establish an important asymmetry. First, if a monopoly of violence can sustain peace, then distributed coercion can also sustain peace, often at lower cost. Second, distributed coercion can sustain peace at higher total levels of coercive investment than a monopoly, reflecting the monopolist's need to be compensated for foregone expropriation. This implies that

political systems with distributed force allow for a wider range of peaceful but potentially inefficient equilibria.

The authors extend the model to allow for economies of scale in coercion, where effective force increases exponentially with investment. While economies of scale reduce the inefficiency of monopolies, they are not sufficient to make monopoly efficient unless accompanied by a significant initial imbalance in coercive effectiveness. With symmetric players, distributed coercion remains the cost-minimizing peaceful arrangement even with increasing returns. Someone with a monopoly on violence has an interest in maintaining this monopoly and thus in conflict, rather than peace. Actors with balanced capabilities can maintain peace at lower levels of spending than a monopoly power can, because they do not need to deter challenges so strongly.

Introducing private information further complicates the welfare analysis. When actors are uncertain about others' coercive strength, guaranteeing peace may require excessive investment to deter rare but strong types. In such cases, the socially efficient outcome may involve a positive probability of conflict rather than assured peace. Thus, conflict can be welfare-improving relative to the coercive costs required to eliminate it entirely.

Overall, the findings challenge the conventional view that monopolies of violence are natural or efficient foundations of political order. While monopolies may persist, the model shows this is not due to social efficiency but rather to distributional incentives: powerful actors prefer monopolized coercion because it maximizes their private payoffs, even when it imposes higher social costs. Distributed coercion, by contrast, is more welfare-enhancing but harder to sustain politically, as it requires coordination on equilibria that do not favour dominant actors. The authors conclude that monopolies on violence are usually inefficient ways to obtain peace – and what's more, monopolies on violence lead to monopoly rents, i.e. economic monopolies, as well. The state persists, not because it meets a rational need for order, but because of false beliefs in its effectiveness, and/or interests of dominant groups.

What it means for radicals: This basically confirms what anarchists and Marxists have said all along. In my view, the grounds for the conclusions are rather weak, because they involve purported reasoning of abstract actors who are very different from real human beings. People act irrationally all the time, and there's no good reason to assume that wars between states or conflicts between individuals have any kind of rational basis. Even so, the fact that the conclusions are so conducive to anarchism *even using tools rigged against it* is strong evidence for them.