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## Social Choice and Judicial Decision Making

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Social choice theory studies the differences between individual and group (or social) decision making and the implications of these differences for the structure and outputs of institutions. Social choice begins with the insight that while it is reasonable to assume as a condition of rationality that individuals hold transitive preference orderings (A preferred to B preferred to C implies that A is preferred to C), this assumption cannot be extended to groups of three or more when they are selecting among three or more options. Three people, each holding the following transitive preference orderings (P1: ABC; P2: BCA; P3: CAB), will reveal a collective intransitivity, or cycle, if they vote sincerely in the three possible direct binary comparisons. Thus, while P1 and P3 prefer A to B, and P1 and P2 prefer B to C (implying A preferred to C, had an individual held these preferences), P2 and P3 instead prefer C to A, thus presenting a cycle.

One implication of collective intransitivity is that if participants vote sincerely based on individual preferences, and if the number of votes is fewer than the number of options, the order in which choices are presented will control the outcome. In the prior example, but for the final vote (C versus A), which revealed the cycle, the series of two votes produced C. The sequence C versus A followed by C (the winner) versus B would instead produce B; and the sequence B versus C followed by B (the winner) versus A would instead produce A. Thus, if the members vote sincerely in accordance with their ordinal preferences when presented with binary comparisons (thus adhering to independence of irrelevant alternatives or *independence*), an agenda setter can produce any result given two paired votes over three options.

## Arrow's Impossibility Theorem

In a famous essay for which he received the Nobel Prize in Economics, Kenneth Arrow demonstrated the impossibility of developing rules for a decisionmaking body that would simultaneously guarantee transitive group outputs, meaning that the rules would prevent cycling, and ensure adherence to a set of norms that he considered fundamental to fair or democratic decision making. The fairness factors include *independence* (demanding sincere voting in direct binary comparisons), *nondictatorship* (not vindicating the preferences of one member against the contrary preferences of the group as a whole), *unanimity* (the Pareto criterion), and *range* (requiring that

the outcome be consistent with the unrestricted ranking by all members of the three available options in any order). Arrow's Theorem ultimately establishes that the price for guaranteeing noncyclical outcomes is to violate at least one of Arrow's fairness norms.

## Legislatures versus Appellate Courts

Several economists and legal scholars have suggested that because legislatures are collective decisionmaking bodies, Arrow's Impossibility Theorem demonstrates their incompetence or irrationality and thus justifies shifting substantial control over legal policy to appellate courts, and in particular the U.S. Supreme Court. Of course, appellate courts are also collective decision-making bodies, and this insight has led some scholars to claim that Arrow's Theorem leaves legal policy makers nowhere to turn. Because a critical feature of judicial decision-making rules involves when to leave the resolution of questions of public policy to the political branches, it is important to evaluate such claims. A rigorous appreciation of the [p. 1385 ↓ ] implications of social choice reveals the limits of these broad claims by demonstrating important synergies between legislatures and courts that together improve their overall rationality and fairness.

Although appellate courts and legislatures both engage in collective decision making, they operate differently and serve different functions. The Arrow's Theorem criteria, including collectively transitive outputs and the fairness conditions, provide valuable benchmarks for evaluating which of Arrow's stated conditions must be relaxed to facilitate decision making in each institution. By comparing legislatures and appellate courts against these common benchmarks (and bearing in mind that the theorem proves that every institution will fall short against at least one benchmark), one can more systematically assess arguments for shifting decisional responsibility between these branches of government.

Arrow's Theorem demonstrates the impossibility of satisfying the requirements of rationality and the four identified fairness conditions. For our purposes, independence and range are the most important. Independence requires that when confronted with binary comparisons, the participants decide based solely on the merits and without considering extraneous agendasetting concerns, even though agenda setting can

affect outcomes. Legislators routinely consider agenda setting when voting as needed to further constituent interests, thus violating independence. In doing so, legislators are better able to attach weights to their preferences, rather than merely rank those preferences ordinally, as they seek to further various constituent interests.

In contrast, while appellate judges do not always vote sincerely, the practice of defending decisions in published opinions substantially inhibits judges from systematically thwarting prior expressed views of legal policy. While appellate judges thus generally adhere to independence, they instead relax range. Range holds that for any combination of three options, the outcome must be consistent with the participants' selection from all conceivable rank orderings. Consistent with range, and given options ABC, the decision makers would be permitted to select among the six possible combinations (three factorial)—ABC, ACB, BAC, BCA, CAB, or CBA—prior to taking binary comparisons.

However, some of these orderings combine to reveal collective preferences that cycle. With the selected orderings ABC, BCA, CAB or CBA, BAC, ACB, binary comparisons reveal a collective intransitivity, ApBpCpA or CpBpApC respectively, where *p* means *preferred to*.

One common mechanism for preventing cycling is to limit the number of binary comparisons relative to the number of options. With two votes over three options (and with sincere voting), either of the prior combined rank orderings generates a stable outcome, but the outcome turns on the voting path. Within appellate courts, *stare decisis* limits the effective number of comparisons relative to the theoretical number of doctrinal options, thus breaking cycles by presumptively proscribing those positions that the court had rejected in prior binding precedents. At the same time, however, *stare decisis* grounds doctrinal outcomes in the order in which judges decide cases. Strategic litigants, or interest groups, thus have an incentive to manipulate case orders to affect legal outcomes.

Various justiciability doctrines, most notably standing, limit (although they do not eliminate) the power of groups to control the path of case decision making by requiring litigants to demonstrate fortuitous circumstances—an event causing a remediable injury beyond the litigant's control—as a precondition to presenting a case. Although

this does not eliminate the importance of the decisional path, it improves fairness by presumptively grounding the path in fortuitous circumstances. The combined doctrines—*stare decisis* and justiciability—improve both rationality (by breaking cycles) and fairness (by encouraging resort to legislative decision making) in the creation of legal policy.

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See also

- [Appellate Courts](#)
- [Economic Models](#)
- [Legislatures and Lawmaking](#)
- [Public Choice](#)
- [Rational Choice and the Rational Actor](#)
- [Utility Maximization](#)

#### Further Readings

Arrow, Kenneth Joseph. (1963). *Social Choice and Individual Values*, 2d ed. New York: Wiley.

Mueller, Dennis C. (2003). *Public Choice III*. Cambridge: Cambridge University Press.

Stearns, Maxwell L. "The Misguided Renaissance of Social Choice." *Yale Law Journal* 103 (1994). 1219–93. <http://dx.doi.org/10.2307/797119>

Stearns, Maxwell L. (2002). *Constitutional Process: A Social Choice Analysis of Supreme Court Decision Making*. Ann Arbor: University of Michigan Press.

Stearns, Maxwell L., and Todd Zywicki. (2008). *Public Choice Concepts and Applications in Law*. Eagan, MN: Thomson-West.