

Kautilya's Ethical Surplus and the Foundations of Capability Expansion

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Abstract

This article advances a new conceptual variable — *ethical surplus* — to reconcile Kautilya's political philosophy with Amartya Sen's capability approach to welfare and justice. Drawing on the *Arthaśāstra*'s model of the *rājaraṣi* (sage king), the article argues that ethical alignment of leadership generates measurable institutional advantages: reduced enforcement costs, expanded real freedoms, and enhanced social cohesion. The article demonstrates that *Yogakshema* — Kautilya's concept of acquisition and security — is not paternalistic welfare determination but a capability-expanding framework that anticipates Sen's central insight that what matters is what people are actually free to do and be. Two formal theorems are presented and proved: the Ethical Surplus Necessity Theorem, showing that democratic deliberation expands capabilities only when the ethical alignment of governance exceeds a critical threshold ($\theta > \theta^*$); and the Ethical Enforcement Minimization Theorem, showing that ethical alignment minimizes enforcement costs and maximizes total welfare. A unified mathematical model formalizing the relationship between Kautilya's ethical surplus and Sen's capability expansion is developed. The article concludes that Sen's democratic capabilities approach implicitly presupposes the ethical infrastructure that Kautilya explicitly constructs.

Keywords

Kautilya, *Arthaśāstra*, *rājaraṣi*, capability approach, Amartya Sen, ethical surplus, *Yogakshema*, welfare theory, comparative political philosophy, ethical governance

1. Introduction: Two Frameworks, One Governance Goal

Across millennia, political thinkers have converged on a single governance imperative: ensuring that people can actually live well, not merely that they possess nominal incomes or formal entitlements. The distance between what a person nominally possesses and what that person is genuinely free to do and be defines, in both classical Indian and contemporary liberal thought, the central problem of political philosophy. Kautilya and Amartya Sen articulate this imperative through different institutional lenses — one monarchical, one democratic — but their conceptual

foundations are, on sustained examination, remarkably aligned.¹

Kautilya's framework is grounded in the ethical transformation of leadership, culminating in the figure of the *rājaṛṣi* — a sage king whose conscience is cultivated through sustained discipline, compassion, truthfulness, and an encompassing care ethics. The *rājaṛṣi* does not govern through force alone; he governs through the moral authority generated by the alignment of his will with the welfare of his subjects. The *Arthaśāstra* is, in this respect, not a manual of amoral statecraft but a systematic theory of how ethical leadership produces institutional excellence and, ultimately, flourishing for all who fall within the polity.

Sen's framework, by contrast, is grounded in democratic deliberation, where capabilities are chosen and protected through public reasoning, constitutional guarantees, and participatory institutions. Sen's central claim is that development must be understood as the expansion of the substantive freedoms people enjoy — their actual ability to live the kinds of lives they have reason to value. This capability approach rejects the reduction of welfare to utility maximisation, income measurement, or the satisfaction of preferences formed under conditions of deprivation and injustice.

The difference between these two frameworks is structural, not conceptual. Both aim at expanding what individuals are free to do and be. Both reject nominal entitlements as adequate measures of welfare. Both insist on the irreducible importance of real freedom. But there is a foundational asymmetry that this article makes explicit: Sen's democratic model ultimately depends on the ethical infrastructure that Kautilya makes explicit and theorises as the constitutive variable of good governance. The present article introduces the concept of *ethical surplus* to formalise this relationship, to prove two theorems about it, and to establish it as the missing conceptual variable in modern welfare theory.

2. Democracy's Two Pillars: Conscience and Constitution

Democracy is not self-sustaining. It rests on two indispensable pillars: conscience — the ethical grounding of citizens and leaders that enables genuine deliberation and the recognition of others as bearers of equal moral standing — and constitution — the formal structure of rights, duties, and procedures that channels democratic action into stable and just outcomes. Each pillar is necessary; neither is sufficient without the other. A constitution without conscience becomes brittle and is easily subverted by those whose formal compliance conceals substantive manipulation. Conscience without constitutional structure becomes directionless and unstable, vulnerable to capture by

¹ Kautilya, *Arthaśāstra*, trans. L. N. Rangarajan (New Delhi: Penguin Books, 1992). Permission for use of this translation has been granted by L. N. Rangarajan and Penguin Books. Amartya Sen, *Development as Freedom* (New York: Oxford University Press, 1999), 18–19. The term *rājaṛṣi* (Sanskrit: *rāja* + *ṛṣi*) denotes a royal sage — a king who has attained the ethical stature of a *ṛṣi* (seer) through rigorous self-discipline. For Kautilya's elaboration, see *Arthaśāstra* 1.7.

charismatic authority or to dissolution under conditions of social conflict.

The importance of this dual structure is visible across the history of democratic failure. Constitutional forms have been preserved while democratic substance has been hollowed out; conversely, ethical impulses toward justice have dissipated without the constitutional channels through which they could be institutionalised. The robustness of democratic governance depends, in the final analysis, on the alignment of constitutional form with ethical substance — precisely the alignment that Kautilya models in his account of the *rājaraṣi*.

Sen's capabilities approach, when examined carefully, presupposes a suite of ethical preconditions that democratic procedure alone cannot guarantee. It presupposes ethical citizens capable of reasoning about justice without systematic distortion by power or ideology. It presupposes ethical leaders who respect the rights and freedoms of those they govern, even when strategic advantage would counsel otherwise. And it presupposes ethical institutions that protect deliberative processes from capture, manipulation, and corruption. These ethical preconditions are not produced by democratic procedure alone; they are the conditions that make democratic procedure possible. They require ethical grounding — the very grounding that Kautilya institutionalises through the *rājaraṣi* model and that the *Arthaśāstra* theorises with systematic rigour.²

The ethical surplus generated by a *rājaraṣi* — the incremental welfare and institutional capacity that ethical leadership produces above and beyond the baseline achievable through coercive enforcement — is the moral infrastructure that makes democratic capability expansion possible. Sen's approach therefore depends, at its foundations, on the ethical approach that Kautilya articulates. This dependence is not a defect in Sen's framework; it is a structural feature that, once recognised, opens a productive dialogue between two of the most sophisticated governance theories in the history of political thought.

3. *Yogakṣhema* as Capability Expansion

Kautilya's concept of *Yogakṣhema* — acquisition (*yoga*) and security (*kṣema*) — is among the most misread concepts in the history of Indian political philosophy. It is standardly interpreted as a paternalistic welfare programme in which the monarch determines what is good for subjects and imposes that determination upon them. This interpretation is mistaken on both textual and philosophical grounds. *Yogakṣhema* is not the paternalistic determination of welfare; it is the expansion of real freedoms — a

² Sen, *The Idea of Justice* (Cambridge, MA: Harvard University Press, 2009), 321–337, on the relationship between public reasoning and institutional structure. John Rawls, *A Theory of Justice* (Cambridge, MA: Harvard University Press, 1971). Rawls's account of the original position and its derivation of principles of justice assumes participants who are rational and mutually disinterested but not comprehensively virtuous — an assumption that abstracts away precisely the ethical surplus that Kautilya theorises as the foundation of stable just institutions.

programme structurally analogous to the core of Sen's capability approach and anticipating it by more than two millennia.

The *rājaraṣi* ensures, through the institutions of the polity, safety from predation — the security without which no plan of life can be carried out. He ensures impartial justice — the institutional precondition for the effective exercise of rights. He ensures fair markets — the economic infrastructure for the transformation of resources into actual achievements. He ensures the provision of infrastructure, irrigation, and the material conditions of flourishing. And he ensures the protection of vulnerable groups — those whose capability sets would otherwise be eroded by disadvantage, discrimination, or incapacity. These are capability-enhancing conditions, not imposed preferences. Subjects retain full agency over what they value and how they pursue their valued states; the *rājaraṣi* ensures only that they can actually achieve those valued states.³

The standard charge of paternalism against Kautilya rests on a misreading that conflates the provision of enabling conditions with the determination of their use. Sen's critique of paternalism targets welfare systems in which the state substitutes its judgment for the agency of individuals — systems in which what is good for people is decided without their participation and imposed upon them regardless of their own valuations. This critique applies with force to authoritarian monarchs who impose their preferences upon subjects and suppress the expression of alternative valuations. It does not apply to Kautilya's *rājaraṣi*, who governs through persuasion, moral example, and care ethics, and who defines his own welfare as inseparable from the welfare of his subjects.

The misinterpretation arises, in part, from reading Kautilya through the lens of Western monarchical theory — in which the monarch's will is constitutive of law — rather than through the lens of Indian ethical statecraft, in which the monarch's will is itself constrained and shaped by *dharma*, by the advice of ministers, and by the principle that a king who fails his subjects forfeits his claim to rule. The *rājaraṣi*'s ethical self-discipline is not incidental to his governance; it is its constitutive foundation.

4. Ethical Surplus: The Missing Variable in Modern Welfare Theory

Kautilya introduces into political philosophy a variable that has remained largely absent from modern welfare theory: *ethical surplus*. Ethical surplus is the incremental welfare generated when leadership is ethically aligned with public welfare — the additional institutional capacity, social trust, and achieved freedom that ethical

³ *Arthaśāstra* 1.19.34: "In the happiness of his subjects lies the king's happiness; in their welfare, his welfare." Trans. Rangarajan. Sen, *Development as Freedom*, 35–53, on the critique of welfarism and paternalism. The distinction between facilitative and coercive governance is central to Kautilya's theory. The *rājaraṣi* creates the conditions for flourishing without determining its content — a structural parallel to what Sen calls "process freedoms." See also Patrick Olivelle, *King, Governance, and Law in Ancient India* (New York: Oxford University Press, 2013), 67–89, for an authoritative account of the normative constraints on royal power in classical Indian legal and political thought.

governance produces above and beyond what coercive enforcement alone could secure. It manifests in a cluster of related phenomena: reduced enforcement costs, as voluntary compliance replaces coercive compliance; increased institutional trust, as citizens experience governance as responsive to their interests; higher administrative efficiency, as officials who are themselves ethically aligned execute their functions without the friction of corruption and self-dealing; greater voluntary compliance with public norms; and enhanced social cohesion, as the experience of just governance generates the reciprocal commitments that sustain collective action.

Ethical surplus is not a sentimental concept. It is economically productive, institutionally generative, and formally tractable. It is the surplus created when governance is grounded in conscience rather than merely in capacity for coercion. Its absence is, correspondingly, a source of institutional deficit — a form of governance failure that cannot be remedied by constitutional redesign alone, because the problem lies not in the formal structure of institutions but in the ethical quality of those who inhabit them.

Modern welfare economics, from Pigou's welfare function through Rawlsian primary goods to Sen's capability approach, has modelled the effects of institutional design, income distribution, and social choice on welfare outcomes with increasing sophistication. What these frameworks do not model explicitly is the effect of the ethical character of leadership on welfare outcomes.⁴ This is the variable Kautilya supplies.

Sen's framework implicitly assumes ethical surplus — it assumes truthful deliberation, respect for agency, and institutional fidelity to constitutional norms — but does not model it as an independent productive variable whose magnitude varies across governance systems and whose variation explains variation in welfare outcomes. Kautilya models it explicitly, and the *Arthasāstra's* extensive treatments of the ethical training of kings, the conditions for honest administration, and the mechanisms of anti-corruption surveillance all constitute, in formal terms, a theory of the determinants of ethical surplus. They constitute an answer to the question: what must be institutionally in place for the ethical surplus to be generated, sustained, and protected against the centrifugal forces of self-interest that are, in Kautilya's realistic assessment, always present in political life?

⁴ Arthur C. Pigou, *The Economics of Welfare* (London: Macmillan, 1920), on the welfare function tradition and its assumptions. Elinor Ostrom, *Governing the Commons* (Cambridge: Cambridge University Press, 1990), on voluntary compliance and institutional trust as parallel to ethical surplus. Ostrom's finding that communities with strong norms of reciprocity and trust achieve collective action outcomes superior to those achievable by coercive enforcement alone is a precise empirical analog to Kautilya's theoretical claim about ethical surplus. See also Robert D. Putnam, *Making Democracy Work: Civic Traditions in Modern Italy* (Princeton: Princeton University Press, 1993), on the relationship between social capital, civic engagement, and institutional performance — a body of empirical evidence that supports the core formal claim advanced in this article.

5. Mathematical Representation of Ethical Surplus

The conceptual relationships articulated in the foregoing sections admit of precise mathematical representation. The following unified formal model is offered not as a replacement for philosophical analysis but as a supplement to it — a means of making the structural relationships explicit and of identifying the logical implications of the framework with the rigour that formal methods afford. All variables and partial derivatives are interpreted below in full prose.

5.1 Variables

The model employs the following variables:

- I = nominal income — the individual's command over resources as ordinarily measured in welfare economics.
- S = state support — the institutional provision of justice, security, and public infrastructure that constitutes the enabling environment for the exercise of capabilities.
- $\theta \in [0, 1]$ = ethical alignment of leadership and institutions, ranging from $\theta = 0$ (a purely selfish ruler maximising personal advantage) to $\theta = 1$ (the fully realised *rājārṣi* whose will is perfectly aligned with public welfare).
- $D \in [0, 1]$ = degree of democratic deliberation — the extent to which public reasoning, participatory institutions, and constitutional accountability shape governance outcomes.
- C = capability set — the set of actual freedoms available to individuals: what they are genuinely free to do and be.
- E = ethical surplus — the incremental expansion of capability attributable to ethical alignment above and beyond what institutional structure alone would produce.
- $Cost(\theta)$ = enforcement cost — the social resources expended on compelling compliance through coercive means.
- W = total welfare — the aggregate measure of achieved capability, net of enforcement costs.
- $\theta^* \in (0, 1)$ = minimum ethical threshold — the critical value of θ below which democratic deliberation fails to produce genuine capability expansion.

5.2 The Capability Function

The capability set is modelled as a function of nominal income, state support, ethical alignment, and democratic deliberation:

$$C = f(I, S, \theta, D)$$

with the following partial derivative conditions:

$$\begin{aligned} \partial C / \partial I > 0, \quad \partial C / \partial S > 0, \quad \partial C / \partial \theta > 0 \\ \partial C / \partial D > 0 \quad \text{only if } \theta > \theta^* \end{aligned}$$

The first three conditions are standard: greater nominal income, greater state support, and greater ethical alignment each independently expand the capability set. The fourth condition — the conditional monotonicity of C in D — is the formal innovation of this model. Democratic deliberation expands capabilities only when a minimum ethical threshold has been achieved. Below that threshold, deliberative procedures are captured, distorted, or subverted, and the formal apparatus of democratic participation generates no genuine capability expansion.

5.3 Ethical Surplus

Ethical surplus is defined as the increment to the capability set attributable to ethical alignment, relative to the counterfactual of zero ethical alignment:

$$E(\theta, D) = C(\theta, D) - C(0, D)$$

with the monotonicity condition:

$$\partial E / \partial \theta > 0$$

Ethical surplus is increasing in ethical alignment: as governance becomes more ethically grounded, the surplus it generates increases. When $\theta = 0$, ethical surplus is zero by definition; the governance system is operating without ethical advantage. When $\theta = 1$, ethical surplus achieves its maximum value: the *rājaraṣi* has fully aligned institutional operation with public welfare.

5.4 Enforcement Cost

Enforcement cost is modelled as a function of the deficit of ethical alignment:

$$\text{Cost} = g(1 - \theta), \text{ with } g' > 0 \text{ and } g(1) = 0$$

Enforcement costs are decreasing in ethical alignment: as governance becomes more ethical, coercive enforcement is progressively displaced by voluntary compliance, institutional trust, and the normative authority of just leadership. At $\theta = 1$, enforcement cost reaches zero — a limiting idealisation, as in all theoretical models, but one that captures the structural direction of the relationship. The *rājaraṣi*'s authority is grounded not in the threat of punishment but in the moral alignment of his will with the welfare of those he governs.

5.5 Total Welfare

Total welfare integrates capability expansion, ethical surplus, and enforcement costs:

$$W = C(I, S, \theta, D) + E(\theta, D) - \text{Cost}(\theta)$$

Total welfare is thus a function of institutional inputs (I, S), of the ethical quality of governance (θ), and of the degree of democratic deliberation (D), conditional on ethical alignment exceeding the threshold θ^* . The model identifies two limit cases of particular theoretical importance:

- *The rājaraṣi limit:* As $\theta \rightarrow 1$, ethical surplus $E \rightarrow \max E$, enforcement $\text{Cost} \rightarrow 0$, and total welfare $W \rightarrow \max W$. This is the Kautilyan ideal of perfectly aligned ethical governance.
- *The democratic limit:* When $\theta > \theta^*$ and $D \rightarrow 1$, both capability C and total welfare W increase via the mechanism of democratic deliberation. This is the Senian ideal of fully participatory capability expansion, which is achievable

only when ethical foundations are already in place.⁵

6. Comparative Analysis: Ethical Surplus and Democratic Capabilities

The structural relationships among Kautilya's ethical surplus framework, Sen's capability approach, and Acemoglu and Robinson's institutional theory are best brought into relief through systematic comparative analysis. The table below presents a structured three-way comparison across nine dimensions of governance theory. The comparison is not intended to collapse the genuine differences among the three frameworks — differences that reflect their distinct historical contexts, institutional assumptions, and philosophical vocabularies — but to make explicit the deep structural homologies that underlie those differences. Most significantly, the addition of Acemoglu and Robinson's institutional framework to the comparison makes a

⁵ Amartya Sen, "Capability and Well-Being," in *The Quality of Life*, ed. Martha Nussbaum and Amartya Sen (Oxford: Clarendon Press, 1993), 30–53. The monotonicity of C in θ formalises the intuition that ethical governance is institutionally productive. The discontinuity condition — $\partial C / \partial D > 0$ only when $\theta > \theta^*$ — captures the empirical observation that democratic institutions produce genuine deliberation only in societies with a sufficient ethical substrate. For related formal work, see Daron Acemoglu and James A. Robinson, *Why Nations Fail* (New York: Crown Publishers, 2012), 79–83, on the distinction between inclusive and extractive institutions, which maps onto the distinction between high- θ and low- θ governance systems in the present model. Acemoglu and Robinson's analysis is among the most powerful accounts in contemporary political economy of why institutions determine the long-run prosperity or stagnation of nations. Yet their framework raises an immediate question that it does not fully resolve: what sustains inclusive institutions over time? Institutions do not maintain their inclusivity spontaneously. They require the sustained ethical commitment of the actors who administer them — truthfulness, fidelity to rules, respect for individual agency, and active resistance to corruption and capture. Without that ethical substrate, inclusive institutions degenerate, often gradually and imperceptibly, into extractive ones. In this respect, Acemoglu and Robinson's institutional analysis presupposes the same ethical foundation that Sen's capabilities approach presupposes — and that Kautilya explicitly theorises. Their framework is therefore not independent of Kautilya's; it is, in structural terms, a special case of it. The ethical alignment parameter θ in the model presented here captures precisely what both Sen and Acemoglu and Robinson require but do not formally supply: the ethical grounding that causes institutions to function as designed rather than being captured, subverted, or hollowed out by the actors they are meant to constrain. The convergence across the three frameworks that have most shaped contemporary thinking on justice, welfare, and institutional performance is, on reflection, striking. Sen's capabilities approach, Acemoglu and Robinson's institutional theory, and Rawls's contractarian theory of justice each presuppose ethical actors, ethical leaders, and ethical institutions as conditions of their operation. None provides a systematic theory of how that ethical foundation is constructed, reproduced, and — when threatened — restored. Kautilya is the thinker who does so; and it is on that account that the *rājaraṣi* model, far from being a historical curiosity of antiquarian interest, constitutes an indispensable complement to the most rigorous frameworks that contemporary scholarship has produced.

convergence unmistakable that a two-way comparison might obscure: all three frameworks identify ethical governance as the deep condition of welfare, capability, and prosperity, yet only Kautilya explicitly theorises how that ethical foundation is constructed and sustained. Sen and Acemoglu-Robinson identify what ethical governance produces; Kautilya theorises how it comes to exist.

What the comparison reveals, above all, is the foundational asymmetry noted in the introduction: Kautilya's system is self-sufficient in its ethical foundations, deriving the conditions for governance excellence from its account of the ethical transformation of the ruler; Sen's approach presupposes ethical citizens and ethical institutions without theorising the mechanisms through which that ethical substrate is generated and sustained. This is not a defect in Sen's framework but a lacuna that Kautilya, uniquely among classical political philosophers, fills with systematic rigour.⁶

Table 1. Kautilya's Ethical Surplus, Sen's Capability Approach, and Acemoglu-Robinson's Institutional Theory — A Structural Comparison

Dimension	Kautilya — <i>Rājaraṣi</i> Model	Sen — Capability Approach	Acemoglu & Robinson — Institutional Theory
<i>Foundation</i>	Ethical conscience; <i>dharma</i> as constitutive norm of legitimate governance	Public reasoning; constitutional guarantees of rights and freedoms	Inclusive vs. extractive institutions; secure property rights and distributed political power
<i>Mechanism</i>	Ethical transformation of leadership through discipline, care ethics, and moral example	Democratic deliberation through participatory institutions and	Institutional design; broad distribution of political and economic power constrains elite extraction

⁶ The addition of Acemoglu and Robinson's framework to the comparison makes the convergence unmistakable. All three frameworks — Sen's capabilities approach, Acemoglu and Robinson's institutional theory, and Kautilya's ethical surplus model — identify ethical governance as the deep condition of welfare and prosperity. Sen and Acemoglu-Robinson identify what ethical governance produces; Kautilya theorises how it is constructed. The structural asymmetry this reveals is of considerable theoretical importance: Kautilya's system is self-sufficient in its ethical foundations, generating them through the cultivated discipline of the *rājaraṣi*, whereas both Sen's and Acemoglu-Robinson's frameworks presuppose ethical citizens, ethical leaders, and ethical institutions whose genesis neither theorises. This is not a defect in either framework but a shared lacuna that Kautilya fills — and filling which constitutes one of the most significant contributions of classical Indian political philosophy to contemporary welfare theory and political economy.

Dimension	Kautilya — <i>Rājarṣi</i> Model	Sen — Capability Approach	Acemoglu & Robinson — Institutional Theory
		social choice	
<i>Agency</i>	Fully preserved; <i>rājarṣi</i> enables rather than substitutes for individual agency	Central and explicitly protected as the constitutive value of the approach	Protected under inclusive institutions; systematically suppressed under extractive ones
<i>Welfare concept</i>	<i>Yogakshema</i> : acquisition and security as enabling conditions for a flourishing life	Capability expansion: substantive freedoms to do and be what one has reason to value	Long-run prosperity through inclusive economic institutions that reward innovation and investment
<i>Motivation</i>	Care ethics; the king's welfare is defined as inseparable from the welfare of subjects; persuasion over coercion	Respect for agency; social choice informed by deliberation; rejection of utility maximization	Rational self-interest constrained and redirected by institutional rules and credible enforcement
<i>Paternalism</i>	None in the <i>rājarṣi</i> model; the standard charge rests on a misreading of the text	Explicitly rejected; capabilities are chosen by individuals, not determined by the state	Not applicable; the framework is structural and descriptive rather than prescriptive about individual welfare
<i>Economic insight</i>	Ethical surplus reduces enforcement costs and generates institutional trust as productive capital	Capabilities expand effective freedoms beyond what income or utility measures can capture	Inclusive institutions drive innovation, productive investment, and compounding long-run growth
<i>Ethical dependency</i>	Self-sufficient: ethical system generates its own foundations through the training	Presupposes ethical citizens, ethical leaders, and ethical institutions without	Depends on ethical actors to sustain institutional inclusivity over time — the

Dimension	Kautilya — <i>Rājarṣi</i> Model	Sen — Capability Approach	Acemoglu & Robinson — Institutional Theory
	of the <i>rājarṣi</i>	theorising their genesis	Kautilyan lacuna
<i>Deep structure</i>	Ethics → welfare → justice → stability — an internally grounded developmental sequence	Ethics → deliberation → capabilities — dependent on an antecedent ethical substrate	Institutions → incentives → prosperity (or failure) — dependent on ethical actors to sustain the institutional form

7. Two Formal Theorems

The formal model developed in section 5 supports two theorems of central importance for the comparative argument of this article. The first establishes the ethical preconditions for democratic capability expansion; the second establishes the relationship between ethical alignment, enforcement costs, and total welfare. Together, the theorems demonstrate that ethical surplus is not merely a moral ideal but a mathematically demonstrable institutional force.

Theorem 1 — Ethical Surplus Necessity Theorem

Statement. Let C denote the capability set of individuals in a polity, D the degree of democratic deliberation, and θ the ethical alignment of leadership and institutions. Then:

$$\partial C / \partial D > 0 \text{ only if } \theta > \theta^*$$

where $\theta^* \in (0, 1)$ is the minimum ethical threshold required for democratic deliberation to produce genuine capability expansion.

Interpretation

Theorem 1 formalises the central claim of section 2: that democratic deliberation is not self-sufficient as a mechanism of capability expansion but depends on a prior ethical substrate. The theorem does not deny that democratic institutions are valuable; it specifies the conditions under which they are effective. Below the threshold θ^* , increases in the formal degree of democratic deliberation produce no genuine expansion of capabilities — deliberative procedures are captured, distorted by strategic manipulation, or rendered ineffective by institutional failure. Above the threshold, democratic deliberation is a genuine mechanism of capability expansion, with $\partial C / \partial D > 0$. The theorem identifies the ethical infrastructure of democratic success as a variable

rather than a constant — as something that must be achieved, maintained, and defended, not something that democratic procedure itself guarantees.

Proof Sketch

1. *Democratic deliberation requires truthful communication.* Truthfulness is an ethical property; in its absence, deliberation collapses into strategic manipulation in which participants advance their own interests through the selective presentation, distortion, or suppression of relevant information. Deliberative outcomes under such conditions reflect power rather than reason, and capability expansion — which requires the genuine identification of what individuals have reason to value — cannot occur.
2. *Deliberation requires respect for agency.* Respect for agency is an ethical property; in its absence, deliberative outcomes are coercive rather than participatory. Participants whose agency is not respected cannot genuinely contribute their valuations to the deliberative process; the process therefore fails to identify the capability expansions that matter to those whose lives are at stake.
3. *Deliberation requires institutional trust.* Trust is generated by ethical conduct sustained over time; in its absence, citizens withdraw from deliberative processes, participation declines, and the processes that remain are captured by organised interests that exploit the vacuum left by general disengagement. Capability expansion requires broadly participatory deliberation; without trust, broad participation is not achievable.
4. *Deliberation requires constitutional fidelity.* Fidelity to constitutional norms is an ethical property; in its absence, the formal structures of democratic deliberation are subverted by those who retain formal compliance while violating the substantive purposes those structures are designed to serve. Constitutional forms without ethical fidelity are shells within which anti-democratic power operates effectively.

Conclusion. Each of the four necessary conditions for effective democratic deliberation is an ethical property. Formally:

If $\theta < \theta^*$, deliberation fails ($\partial C / \partial D = 0$)

If $\theta > \theta^*$, deliberation succeeds ($\partial C / \partial D > 0$)

Theorem 2 — Ethical Enforcement Minimization Theorem

Statement. Let $\theta \in [0, 1]$ denote ethical alignment, $Cost(\theta)$ enforcement cost, and $W(\theta)$ total welfare. Then:

$$\partial Cost / \partial \theta < 0 \quad \text{and} \quad \partial W / \partial \theta > 0$$

Moreover:

$$\lim_{(\theta \rightarrow 1)} \text{Cost}(\theta) = 0 \quad \text{and} \quad \lim_{(\theta \rightarrow 1)} W(\theta) = \max W$$

Interpretation

Theorem 2 formalises the relationship between ethical alignment, enforcement costs, and total welfare. The first result — $\partial \text{Cost} / \partial \theta < 0$ — establishes that enforcement cost is everywhere decreasing in ethical alignment: every increment of ethical improvement in governance is associated with a reduction in the resources that must be expended on coercive compliance. The second result — $\partial W / \partial \theta > 0$ — establishes that total welfare is everywhere increasing in ethical alignment: every increment of ethical improvement expands the total welfare achievable by the governance system. The limit results identify the *rājaṛṣi* ideal as the welfare-maximising limit of governance — a limit that is approached asymptotically and that serves as the standard by which actual governance systems can be evaluated and improved.

Proof Sketch

1. *Coercion reduction.* As ethical alignment increases, governance increasingly relies on the normative authority of just leadership rather than on the threat or application of force. The marginal cost of compliance decreases as ethical alignment increases, because ethical governance generates intrinsic motivation for compliance that reduces the marginal productivity of coercive enforcement to zero in the limit.
2. *Voluntary compliance.* Ethical governance generates voluntary compliance through two mechanisms: the recognition by citizens that the governance system is operating in their genuine interest, and the internalisation of the norms that just governance exemplifies. Both mechanisms are increasing in θ , and both reduce the need for coercive enforcement as substitutes for normative compliance.
3. *Institutional trust.* Ethical alignment generates institutional trust, which reduces transaction costs, enables cooperative behaviour, and expands the domain of collective action that can be sustained without the friction of coercive enforcement. Trust is a form of institutional capital that accumulates with sustained ethical governance and depreciates with governance failure — establishing the long-run importance of maintaining θ above the threshold θ^* .
4. *Capability expansion.* Reduced enforcement costs free resources for the provision of capability-enhancing public goods and increased institutional trust reduces the informational and participation costs of deliberative processes, enabling more effective identification and pursuit of genuine capability expansion. Both effects contribute to the positive relationship between θ and W .
5. *Zero coercion at $\theta = 1$.* At the *rājaṛṣi* limit, governance is fully aligned with

public welfare. All citizens recognise the governance system as expressing their genuine interests; compliance is fully voluntary; and the marginal product of coercive enforcement is zero. Enforcement costs accordingly reduce to zero in the limit: $\lim_{(\theta \rightarrow 1)} \text{Cost}(\theta) = 0$.

6. *Maximum welfare at $\theta = 1$.* At the *rājaraṣi* limit, all resources previously devoted to coercive enforcement are redirected to capability expansion; ethical surplus achieves its maximum value; and no welfare is lost to the friction of misaligned governance. Total welfare accordingly achieves its maximum value in the limit: $\lim_{(\theta \rightarrow 1)} W(\theta) = \max W$.

Ethical surplus is not merely a moral ideal; it is a mathematically demonstrable institutional force. The two theorems establish that the ethical quality of governance is a primary determinant of both the effectiveness of democratic deliberation and the total welfare achievable by any governance system, whether monarchical or democratic.⁷

8. Conclusion: Ethical Surplus as the Foundation of Flourishing

The comparative analysis developed in the preceding sections reveals a foundational truth that has been underappreciated in comparative political philosophy: ethical surplus is the constitutive variable in all successful governance systems, whether monarchical or democratic. Kautilya makes this variable explicit, theorises its determinants with systematic rigour, and models its institutional consequences across the full range of governance functions — from the administration of justice to the management of markets to the provision of public goods. Sen assumes it implicitly, building his account of democratic capability expansion on an ethical substrate whose genesis and determinants his framework does not theorise. The contribution of this article has been to make this relationship explicit, to formalise it in a unified mathematical model, and to prove two theorems that establish the precise logical structure of the dependence.

Both thinkers aim at expanding what individuals are free to do and be. Both reject the reduction of welfare to nominal income, utility satisfaction, or formal entitlement. Both insist that flourishing requires real freedoms — the substantive ability to live the kinds of lives that individuals have reason to value — rather than the nominal entitlements that formal institutional arrangements may guarantee without delivering.

⁷ James S. Coleman, *Foundations of Social Theory* (Cambridge, MA: Belknap Press of Harvard University Press, 1990), on social capital, trust, and their role in enabling collective action — the theoretical foundation for the trust mechanisms central to the proof sketch of Theorem 2. Douglass C. North, *Institutions, Institutional Change, and Economic Performance* (Cambridge: Cambridge University Press, 1990), on enforcement costs and institutional design — the formal economic literature most directly relevant to the enforcement cost function $\text{Cost}(\theta)$. The formal result that $\text{Cost}(1) = 0$ is a limiting idealisation, as in all theoretical models. Kautilya himself was alert to the possibility of institutional failure and devotes substantial portions of the *Arthasāstra* to anti-corruption surveillance — the very mechanisms that sustain high θ in practice and that constitute, in formal terms, the institutional technology for maintaining the ethical alignment variable above the critical threshold.

Both frameworks are, in this respect, profound critiques of the impoverished welfare concepts that have dominated mainstream economics: concepts that measure what people have, rather than what they can do and be with what they have.

But Kautilya goes further than Sen in one crucial respect: he identifies the mechanism through which flourishing becomes possible. The ethical transformation of leadership — the cultivation of the *rājaraṣi* through discipline, reflection, care ethics, and the systematic subordination of private interest to public welfare — is not merely a moral aspiration in Kautilya's framework. It is the institutional technology through which the conditions for flourishing are created and sustained. It is the answer to the question that Sen's framework raises but does not answer: where does the ethical substrate of effective democratic governance come from?

The two theorems demonstrated in this article establish the precise structural importance of this question. The Ethical Surplus Necessity Theorem shows that democratic deliberation — Sen's central mechanism of capability expansion — presupposes ethical alignment above a critical threshold. Below that threshold, deliberation fails; formal democratic procedures become instruments of strategic manipulation rather than genuine mechanisms of capability expansion. The Ethical Enforcement Minimization Theorem shows that ethical alignment minimises enforcement costs and maximises total welfare, identifying the *rājaraṣi* ideal as the welfare-maximising limit of governance theory.

Kautilya's contribution to welfare theory is therefore not merely historical. It is systematic and foundational. His ethical surplus model provides the conceptual and mathematical infrastructure for understanding why societies flourish and why they fail — why some governance systems generate the institutional trust, voluntary compliance, and capability expansion that constitute the hallmarks of just and effective governance, while others remain trapped in cycles of coercion, institutional decay, and welfare deficit. His framework offers a unified theory of justice, welfare, and governance that remains unmatched in its coherence, its scope, and its integration of ethical, institutional, and economic analysis into a single theoretical structure.

The standard reading of Kautilya as a theorist of realpolitik, unconcerned with ethics and concerned only with power, rests on a selective reading of the *Arthaśāstra* that has impoverished comparative political philosophy. The *Arthaśāstra* is, in its deepest structure, a theory of the relationship between ethical governance and institutional excellence — a theory that anticipates, grounds, and completes the most sophisticated account of welfare and justice developed in the contemporary analytic tradition.

Sen's capabilities approach does not stand apart from Kautilya. It stands upon him.⁸

⁸ This article is part of a larger research programme examining the contributions of classical Indian thinkers — including Kautilya and Caraka — to contemporary welfare theory, political philosophy, and the economics of governance. Earlier work in this programme includes Balbir S. Sihag (2014, 2019, 2024, 2026).

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