

POLIS V12: The Complete Law & Jurisprudence Series – 12 Giants

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This document combines two companion papers:

*“Tensional Reinterpretation of Six Founders of Legal Philosophy”
and “Tensional Reinterpretation of Six More Jurisprudential Pioneers”.*

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Abstract

Within the POLIS V12 tensional ontology, every legal system is a polis constituted by three meshes (solid, liquid, gaseous) and governed by the closure condition $\epsilon = \sum K_m(2 + K_m) = 0$, with $T = K_{\min}$ as the tensional origin. This paper applies the framework to six foundational figures of legal philosophy: Plato (natural law), Aristotle (justice), Thomas Aquinas (divine law), Hugo Grotius (natural rights), Thomas Hobbes (social contract), and John Locke (government by consent). Each classical contribution is reinterpreted as a tensional configuration: Plato's ideal law as $K = 1$; Aristotle's distributive justice as proportional K ; Aquinas's hierarchy as nested polises; Grotius's rights as inviolable K minima; Hobbes's Leviathan as a super-polis that enforces $\epsilon = 0$; and Locke's consent as voluntary submission to a legal mesh. The universal equations remain unchanged; no free parameters are introduced.

1 Introduction

POLIS V12 is a closed, parameter-free tensional conservation theory built on four axioms (Tensional Ontology, Harmonic Ground $H = 1$, Tensional Conservation, Data Origin $T = K_{\min}$). The governing equation, after normalisation, is

$$\epsilon = \sum_{m=1}^n K_m(2 + K_m) = 0,$$

with $K_m = (v_m - T)/(v_{\max} - T) \in [0, 1]$. The disequilibrium index is $\text{IDT}^* = \epsilon/(1 + \epsilon)$. All real legal systems reside in Phase 4 ($\text{IDT}^* \geq 0.70$) unless artificially uniform. The Rolling Law $2\pi r_p = V_{\text{orb}}T_{\text{rot}}$ applies fractally at all scales.

This paper reinterprets six key legal contributions within this tensional ontology. No classical primacy is assumed; tension is the primitive.

2 Plato – Ideal Laws and the Republic

Plato's *Republic* describes an ideal state ruled by philosopher-kings with perfect justice. In POLIS V12, the ideal law is a polis where all K values are at their optimal levels (Phase 4, not too low, not too explosive). The philosopher-king is a superior polis (the guardian) that can see the Form of Justice ($K = 1$) and calibrate the legal mesh accordingly.

The "noble lie" (myth of metals) assigns each citizen a fixed K (gold, silver, bronze) – a caste system. Plato's three parts of the soul (reason, spirit, appetite) correspond to solid (reason), liquid (spirit), and gaseous (appetite) meshes. Justice as harmony occurs when each part does its own work: $\epsilon = x_{\text{reason}} + x_{\text{spirit}} + x_{\text{appetite}} = 0$.

3 Aristotle – Justice and Equity

Aristotle distinguished distributive justice (proportional distribution of goods) and corrective justice (restoring balance after wrongs). In POLIS V12, distributive justice means that each person receives a share proportional to their K_{merit} : $K_{\text{share}} = \lambda K_{\text{merit}}$. Corrective justice takes a value v (damage) and transfers K from the wrongdoer to the victim to reset ϵ .

Equity (*epieikeia*) corrects the law when the general rule (solid mesh) fails in a specific case (liquid mesh). It is a Phase 5 adjustment that prevents ϵ from rising. Aristotle's "golden mean" (virtue as the midpoint between excess and deficiency) is the tensional optimum $K_{\text{mid}} = 0.5$, between extremes $K = 0$ and $K = 1$.

4 Thomas Aquinas – Natural Law and Divine Law

Aquinas integrated Aristotelian ethics with Christian theology. In POLIS V12, natural law is the set of K values that are objectively correct for human flourishing (e.g., life, procreation, knowledge). Divine law (scripture) provides a higher normalisation (T_{divine}) that overrides human laws when they deviate too far.

The four kinds of law (eternal, natural, human, divine) are nested polises: eternal law is the universal polis of God (max K); natural law is its projection onto human reason; human law is the specific legal mesh of a society; divine law corrects errors in human law. The principle of double effect (an action with both good and bad consequences may be allowed if the good outweighs the bad) is a tensional trade-off: the net change in ϵ must be negative.

5 Hugo Grotius – Natural Rights and the Law of Nations

Grotius secularised natural law, arguing that it would be valid even if God did not exist. In POLIS V12, a natural right is an inviolable minimum K below which a person cannot be reduced by others (e.g., right to life, liberty, property). The law of nations (*jus gentium*) is the set of K norms that all polises agree upon, forming a superior mesh above individual states.

Grotius's concept of "just war" (rules restricting warfare) sets a threshold: if the K of the *casus belli* is above a certain level, war is justified, but the means used must not exceed a proportional K limit (discrimination, necessity). His defence of the freedom of the seas (*Mare Liberum*) asserted that the sea cannot be owned (no one has a K_{property} over it) – it remains a gaseous mesh accessible to all.

6 Thomas Hobbes – Leviathan and the Social Contract

Hobbes described the state of nature as a war of all against all: life is nasty, brutish, and short. In POLIS V12, the state of nature has no legal mesh, so each individual's K is unconstrained, leading to high ϵ (perpetual conflict). The social contract is an agreement to transfer part of one's K to a sovereign (Leviathan). The sovereign then enforces laws, reducing the sum of residuals toward zero.

Leviathan is a superior polis that holds a monopoly on legitimate force: its $K_{\text{authority}}$ is higher than that of any individual, deterring rebellion. Hobbes's view that covenants without the sword are empty words means that a legal polis must have a solid mesh (enforcement) to give the liquid mesh (promises) any meaningful K . The goal of the state is to minimise ϵ – i.e., to secure peace and safety.

7 John Locke – Government by Consent and Property

Locke argued that legitimate government derives from the consent of the governed, and that individuals have natural rights to life, liberty, and property. In POLIS V12, consent is the voluntary submission of one's K to a legal mesh; without consent, the mesh has no authority ($K_{\text{authority}} = 0$). The right to property is the right to exclude others from a resource, i.e., to lower their K relative to yours.

Locke's proviso (one may appropriate from the commons as long as "enough and as good" remains for others) limits $K_{\text{appropriation}}$: the appropriator's increase in K must not decrease others' K below a minimum. The right of revolution (to overthrow a government that violates trust) is a Phase 4 explosion when the government's K becomes too high (tyranny) and the social contract is broken.

8 Conclusion

The six foundational contributions to legal philosophy are coherently reinterpreted within the POLIS V12 tensional ontology. Ideal laws, natural justice, natural law, natural rights, social contract, and consent all become natural consequences of the closure condition $\epsilon = \sum K_m(2 + K_m) = 0$ and the fractal hierarchy of legal polises. No free parameters are added.

Zenodo references

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Abstract

This paper extends the POLIS V12 tensional reinterpretation to six additional legal giants: Montesquieu (separation of powers), Cesare Beccaria (penal reform), Jeremy Bentham (utilitarianism and legal positivism), John Austin (command theory), Hans Kelsen (pure theory of law), and H. L. A. Hart (legal positivism and the concept of law). Each is re-read as a tensional configuration: Montesquieu's tripartite as three meshes; Beccaria's proportionality as K matching; Bentham's utility as minimisation of ϵ ; Austin's command as imperative K ; Kelsen's Grundnorm as the initial T ; and Hart's primary/secondary rules as solid/liquid meshes. The universal equations remain unchanged; no free parameters are introduced.

9 Introduction

As in the companion paper, POLIS V12 rests on four axioms. After normalisation the mother equation is

$$\epsilon = \sum_{m=1}^n K_m(2 + K_m) = 0,$$

with $IDT^* = \epsilon/(1 + \epsilon)$. All real legal systems are in Phase 4 ($IDT^* \geq 0.70$) unless artificially uniform. The Rolling Law $2\pi r_p = V_{orb}T_{rot}$ applies fractally.

This paper reinterprets six more foundational contributions to law.

10 Montesquieu – Separation of Powers

Montesquieu proposed dividing government into legislative, executive, and judicial branches. In POLIS V12, these correspond to the three meshes: legislative = solid (creation of rules), executive = liquid (implementation), judicial = gaseous (adjudication). Separation prevents any one mesh from dominating and raising ϵ (tyranny). Checks and balances are tensional feedback mechanisms that keep each branch's K within a range.

The corruption of a branch (e.g., executive bribed) increases its K artificially, disturbing the equilibrium. Montesquieu's "spirit of the laws" (climate, geography, customs) sets the external T and v_{max} that shape the legal polis. His classification of governments (republic, monarchy, despotism) corresponds to different K distributions (horizontal vs vertical vs concentrated).

11 Cesare Beccaria – Penal Reform and Proportional Punishment

Beccaria argued against cruel and arbitrary punishment, advocating that the severity of punishment should be proportional to the crime. In POLIS V12, a crime is a deviation ΔK that harms society. Punishment should restore ϵ by applying a counter- K (fine, imprisonment) proportional to ΔK . Excessive punishment (torture, death for minor crimes) increases ϵ rather than reducing it.

Beccaria's principle that punishment must be certain (predictable) and swift (short time lag) ensures that the deterrent effect ($K_{\text{deterrence}}$) is high. His opposition to capital punishment argued that society has no right to kill because a citizen never consented to that maximal K (death) in the social contract. The "social contract" itself is the baseline T : the level of K that citizens are willing to cede.

12 Jeremy Bentham – Utilitarianism and Legal Positivism

Bentham's utilitarianism (greatest happiness principle) measures law by its consequences. In POLIS V12, happiness is the sum of K_{pleasure} minus K_{pain} . The goal of law is to maximise net K (utility) while keeping ϵ near zero. Bentham's felicific calculus (calculus of pleasure and pain) is a tensional algorithm for policy decisions.

Bentham's legal positivism separated law as it is (positive law) from law as it ought to be (natural law). Positive law is the solid mesh (statutes, commands) regardless of morality. The concept of "sovereign" (in Austin, but Bentham anticipated) is the polis with the highest K that is habitually obeyed. Bentham's panopticon prison design is a zero- K environment (total surveillance) that minimises the prisoners' ability to raise K (misbehave).

13 John Austin – Command Theory of Law

Austin defined law as the command of a sovereign backed by a sanction. In POLIS V12, a command is an imperative K issued by a superior polis (sovereign) to inferior polises (citizens). The sanction is a negative K (punishment) that follows disobedience, raising the cost of non-compliance. The sovereign must be habitually obeyed but not obey anyone else – it is the highest K node in the legal mesh.

Austin's distinction between laws proper (commands) and laws improperly so called (custom, judicial decisions, positive morality) is a boundary issue: the former have sovereign backing (high K), the latter have lower K or no sanction. His omission of international law (since there is no global sovereign) reflects the lack of a superior polis – ϵ is high between nations.

14 Hans Kelsen – Pure Theory of Law

Kelsen's pure theory separates law from morality and sociology, focusing on norms and the Grundnorm (basic norm) as the foundation. In POLIS V12, the Grundnorm is the initial $T = K_{\min}$ of the legal polis – the presupposition that the constitution is valid. All lower norms derive their K from higher norms in a hierarchy (a "stagings" of legal stratification). The legal system is a tensional pyramid where each norm's validity depends on the norm above it.

Kelsen's "ought" is the tensional direction from higher to lower norms. The concept of a "legal act" (e.g., a court decision) is a Phase 5 reorganisation that applies a general norm to a specific case. The "basic norm" cannot be itself validated – it is the axiomatic T . Kelsen's theory of international law (a "monistic" view) posits a single legal system with a global Grundnorm (pacta sunt servanda) – i.e., a universal legal polis.

15 H. L. A. Hart – Primary and Secondary Rules

Hart refined legal positivism by distinguishing primary rules (obligations, duties) and secondary rules (rules of recognition, change, adjudication). In POLIS V12, primary rules are the solid mesh (the content of law); secondary rules are the liquid mesh (how to create, modify, interpret primary rules). The rule of recognition is the supreme criterion that identifies the K of valid law – it is the fundamental K norm.

Hart's concept of "open texture" (vagueness in legal language) means that for any rule, there is a penumbra of borderline cases where K is ambiguous. The internal aspect of law (acceptance) is the subjective $K_{\text{compliance}}$ that citizens feel; without it, the law's effectiveness depends solely on sanctions (external K). His "minimum content of natural law" (rules against violence, theft, etc.) are universal K constraints that any functional legal polis must incorporate to avoid Phase 4 collapse.

16 Conclusion

Six additional jurisprudential pioneers are reinterpreted within the POLIS V12 tensional ontology. Separation of powers, penal proportionality, utilitarianism, command theory, pure law, and primary/secondary rules all become natural consequences of the closure condition $\epsilon = \sum K_m(2 + K_m) = 0$ and the fractal hierarchy of legal polises. No free parameters are added; the same equations that describe a physical system or a social system also describe the structure of law.

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