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# JUDICIAL TAUTOLOGIES AND EPISTEMIC FALLACIES: EVALUATING LEGAL REASONING IN INDIAN COURTS THROUGH CLASSICAL AND COMPARATIVE LOGIC

AUTHORED BY - VARALAKSHMI TADEPALLI\* & DR. HAIDER ALI\*\*

## Abstract

This paper critically examines how Indian courts have dealt with tautological reasoning in legal interpretation, statutory justification, and constitutional adjudication. Tautologies—statements true by their logical form but not always epistemically productive—pose unique challenges in judicial contexts, especially when the courts justify the Conclusions (*Nigamana*) by merely restating Premises (*Pramana*). The study investigates instances in Indian jurisprudence where such reasoning structures, regardless of their explicit acknowledgement, have shaped legal outcomes—sometimes leading to fallacies akin to *Petitio Principii* or the Nyāya fallacy of *Sādhyā-sama*. To contextualize these developments, the paper draws on both ancient Indian logical traditions (Nyāya, Mīmāṃsā, Anvikṣikī) and Western philosophical approaches, not as an end in themselves, but to illuminate the broader influences on Indian Legal Reasoning—given India's partial borrowing from Western statutory frameworks. By examining doctrines such as *vyāpti*, *apūrvatva*, and *bādhita hetu* alongside modern tools like Modus Ponens, propositional connectives, and the Law of Excluded Middle, the paper traces how Indian courts—knowingly or unknowingly—navigate tautological traps or uphold inferential rigor. Ultimately, the paper demonstrates that while India's legal system has its roots in both inherited legal codes and indigenous epistemic traditions, its jurisprudence reveals a complex but consistent concern: that judicial reasoning must not merely assert, but justify—eschewing rhetorical circularity for epistemic integrity.

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**Key Words:** Tautologies, Nyāya, Logic, *Sādhya-sama*, Modus Ponens, Petitio Principii, Vyāpti, *Apūrvatva*, Truth Tables, Mīmāṃsā Hermeneutics, Legal Fallacies

## Introduction

Tautologies—statements that are true solely by virtue of their logical form—have long provoked philosophical inquiry and juridical scrutiny. In classical Indian logic, particularly within the Nyāya and Mīmāṃsā traditions, evaluation of tautologies was not simply for formal validity, but for their epistemic productivity. These traditions drew a critical distinction between axiomatic tautologies, which are self-evident and inferentially fertile, and non-axiomatic tautologies, which are cognitively sterile without any progression and thus fallacious.

In parallel, early Western philosophers and empiricists, notably John Stuart Mill<sup>1</sup> and Alexander Bain<sup>2</sup>—Stalwarts of inductive reasoning—dismissed tautologies as “verbal propositions,” analytically true but epistemically barren. However, the ascent of symbolic logic in the twentieth century radically reimagined their role. Figures such as Frege,<sup>3</sup> Russell,<sup>4</sup> and Wittgenstein<sup>5</sup> reframed tautologies as indispensable axioms, foundational to the architecture of deductive inference and formal consistency.

This paper undertakes a comparative study of tautological reasoning across Indian and Western traditions, tracing how it has been conceptualised, contested, and repurposed. It reveals how ancient Indian thinkers, despite the absence of formal symbolism, anticipated many of the structural concerns that would later define Western logic. More importantly, their emphasis on epistemic integrity—on reasoning that does not merely repeat but genuinely informs—finds renewed relevance in legal reasoning today.

By examining the treatment of logical structures such as the Law of the Excluded Middle, Modus Ponens, and propositional connectives within Indian philosophical systems, the paper foregrounds the deep theoretical sophistication of classical Indian thought. Anchored in

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<sup>1</sup> Mill, J.S. (1843) *A System of Logic: Ratiocinative and Inductive*. London: Parker.

<sup>2</sup> Bain, A. (1870) *Logic: Deductive and Inductive*. London: Longmans, Green, and Co.

<sup>3</sup> Frege, G. (1879) *Begriffsschrift: A formula language, modelled upon that of arithmetic, for pure thought*. Halle: Nebert.

<sup>4</sup> Russell, B. and Whitehead, A.N. (1910–1913) *Principia Mathematica*. Cambridge: Cambridge University Press.

<sup>5</sup> Wittgenstein, L. (1921) *Tractatus Logico-Philosophicus*. London: Routledge & Kegan Paul, 1961 ed.

contemporary jurisprudential discourse, this study demonstrates how the tension between logical form and normative meaning continues to shape the legal reasoning of modern courts.

### 1. Epistemic Accountability in Indian Logic: The Role of Tautologies:

Ancient Indian taxonomies demonstrated remarkable philosophical clarity by distinguishing between tautologies that were epistemically valid and those that were not. Unlike a blanket rejection, Indian thinkers provided a nuanced categorization. Tautologies that were axiomatic—self-contained, self-evident truths such as “a sphere is round, hence it rolls”—were acknowledged as requiring no further inferential support. These were considered legitimate because they embodied immediate cognition or common-sense perception.

In contrast, non-axiomatic tautologies—those that appeared logically circular or epistemically void, like “it is legal because it is not illegal”—were identified as flawed. The Nyāya school, attributed to Akṣapāda Gautama (circa 2nd century BCE)<sup>6</sup>, classified such reasoning under the fallacy of *Sādhyā-sama*, where the *hetu* (reason) is indistinguishable from the *sādhyā* (proposition). According to Nyāya epistemology, valid knowledge (*pramā*) must derive from a distinct and independently verifiable source (*pramāṇa*). If a proposition simply reiterates itself without offering new cognitive content, it is seen as a failure of inference.

In the classical Indian logical tradition, particularly within Nyāya and Mīmāṃsā, a crucial distinction is made between axiomatic and non-axiomatic tautologies. An axiomatic tautology is one that is self-evident and universally validated through experience or *śāstra*, and thereby forms the basis for legitimate inference. For example, the Nyāya axiom “An object that possesses fire is hot” (*yatra agniḥ, tatra uṣṇatvam*) is not merely a repetition but a *vyāpti*—an invariable concomitance—between fire and heat. Its utility is seen in canonical inferences such as: “The mountain has fire because it has smoke; wherever there is smoke, there is fire, like in the kitchen.” Though seemingly tautological, this assertion is epistemically fruitful, enabling reliable inference and satisfying the principle of *pramāṇatva* (valid cognition).

By contrast, a non-axiomatic tautology renders an inferential claim epistemically barren. Consider the statement: “Agnihotra is to be performed because it is Agnihotra.” (*Agnihotraḥ kartavyaḥ Agnihotratvāt.*) This construction commits the *Sādhyā-sama* fallacy in Nyāya, where

<sup>6</sup> Gautama, A. (c. 2nd century BCE) *Nyāya Sūtras*. Translated by S.C. Vidyabhusana, 1921. Delhi: Motilal Banarsidass.

the *hetu* (reason) simply echoes the *sādhya* (proposition), failing to provide any distinct cognitive ground. In Mīmāṃsā, particularly in the works of Kumāriḷa Bhaṭṭa such as the *Ślokavārtika* and *Tantravārtika*, such self-referential claims are critiqued under the categories of *anarthaka* (meaninglessness) and *punarukti* (redundant repetition), violating the principle of *apūrvatva*—that every Vedic injunction must produce novel, actionable knowledge. This kind of justification lacks *phala*-oriented reasoning (i.e., reference to purpose, benefit, or duty generation) and is therefore dismissed as epistemically vacuous.

Thus, while Nyāya accepts tautologies only when they serve as *pramāṇa*-based premises grounded in *vyāpti*, it rejects tautologies that merely cycle back to assert what they claim to prove. This sharp epistemological discrimination highlights the depth of Indian logical systems in navigating the thin line between logical form and cognitive yield.

This epistemological scrutiny is exemplified in Nyāya's five-membered syllogistic structure (*pañcāvayava*):

1. *Pratijñā* (Proposition)
2. *Hetu* (Reason)
3. *Udāharaṇa* (Example)
4. *Upanaya* (Application)
5. *Nigamana* (Conclusion)

Tautological fallacies such as *Sādhya-sama* manifest when the *hetu* merely echoes the *sādhya*, depriving the inference of independent substantiation. A rule justified by mere repetition of its form offered no forthcoming was considered epistemically barren.

Disciplines like *Tarka* (hypothetical reasoning) and *Anvikṣikī* (science of critical inquiry) served as meta-logical checks within the Indian tradition. *Tarka* ensured the plausibility of premises via constructive doubt, while *Anvikṣikī* required that arguments withstand scrutiny through independent reasoning. Kautilya, in his *Arthashastra* Book I, Chapter 2 (Discipline)<sup>7</sup>, articulated this ethos of logical integrity:

“Law must be rooted in independent reasoning, not mere assertion.”

“विनियोगः प्रमाणे स्यात्, न तु केवलं इच्छया।”

*Vinayogaḥ pramāṇe syāt, na tu kevalam icchayā. (Arthasāstra I.2)*

<sup>7</sup>Arthashastra (c. 3rd century BCE). Book I, Chapter 2. Translated by R. Shamasastri (1915). Bangalore: Government Press.

Thus, ancient Indian logic—through Nyāya, Mīmāṃsā, Tarka, and *Anvikṣikī*—developed a robust framework to ensure epistemic productivity. Tautologies were evaluated not by their formal truth alone but by their capacity to generate new knowledge. This emphasis on epistemic accountability remains one of the most enduring contributions of Indian logic to global philosophical discourse.

## 2. The Evolution of Tautologies in Western Logic—From Rejection to Formal Necessity

In contrast to the epistemic scrutiny exercised in ancient Indian traditions, early Western logic approached tautologies with equal skepticism, though for different philosophical reasons. Aristotle, the father of classical Western logic, developed a syllogistic system focused on categorical propositions, where tautologies were neither formalized nor celebrated. His emphasis was on material validity and real-world relevance, rather than purely structural truths. Tautologies, though implicitly present in the law of non-contradiction and excluded middle, were not given independent logical status.

John Stuart Mill, a pivotal figure in 19th-century empiricism, was openly critical of tautological reasoning. In his *System of Logic* (1843), Mill classified tautologies as “verbal propositions”—statements that are analytically true but yield no new knowledge. He drew a sharp distinction between such trivial truths and real propositions, which, grounded in inductive reasoning, extend our understanding of the world. For Mill, a claim like “A triangle has three sides” was logically valid but epistemically sterile. As he famously noted:

*“All inference is from facts, and consists in recognizing that what has been found true in some cases will be true in others.”*

Though deeply analytical, Mill’s framework overlooked the advanced legal-theoretical insight embedded in ancient Indian logic—particularly the doctrine of *vyāpti*, or invariable concomitance. In rejecting tautologies wholesale, he missed the nuanced epistemological requirement that valid knowledge (*pramā*) must arise from a distinct and independently verifiable source (*pramāṇa*). This failure to distinguish between epistemically fruitful and barren tautologies weakens the depth of his logical architecture when compared to the more discriminating Indian taxonomies.

However, the tide turned with the advent of modern formal logic in the late 19th and early 20th centuries, when tautologies were no longer dismissed as epistemic failures but reimagined as formal necessities. Gottlob Frege, in *Begriffsschrift* (1879)<sup>8</sup>, treated tautologies as foundational truths—axioms upon which logical calculus could be constructed. Bertrand Russell, along with Alfred North Whitehead,<sup>9</sup> employed tautological forms in *Principia Mathematica* to derive the entirety of mathematics from symbolic logic. Ludwig Wittgenstein,<sup>10</sup> in his *Tractatus Logico-Philosophicus*, famously stated, “Tautologies are true in every possible state of affairs. They say nothing,” yet he asserted that their structural vacuity made them essential for framing meaningful discourse. Alfred Tarski extended this view by treating tautologies as semantic truths—statements that hold under all interpretations—and used them to anchor his theory of logical consequence. Building on this foundation, Elliot Mendelson demonstrated the utility of tautologies through truth tables, showing how certain propositional forms remain valid irrespective of the truth values assigned to their components. Together, these thinkers rehabilitated tautologies as the backbone of deductive reasoning, essential for logical coherence even if devoid of empirical content.

Under this modern paradigm, tautologies became the bedrock of deductive systems—providing templates for valid inference and enabling the systematic derivation of theorems. The truth-functional approach allowed for the precise classification of tautologies, contradictions, and contingencies, greatly expanding the tools available for legal and philosophical analysis.

Yet, in legal discourse, tautological reasoning often signals a fallacy—particularly when deployed to justify a conclusion using the conclusion itself as its premise. This is strikingly evident in the Indian logical tradition under the fallacy of *Sādhyā-sama*, and Tautology in Western logic. While modern formal logic revalorized tautologies as axiomatic, both classical Indian and early Western empiricist thought demanded more: epistemic productivity. A valid inference must not only avoid contradiction but yield knowledge. A tautology, even if always true, fails this test if it merely repeats what is already presumed.

This divergence in valuation reveals not just differing logics but differing epistemological

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<sup>8</sup> Frege, G. (1879) *Begriffsschrift: A formula language, modelled upon that of arithmetic, for pure thought*. Halle: Nebert.

<sup>9</sup> Wittgenstein, L. (1921) *Tractatus Logico-Philosophicus*. London: Routledge & Kegan Paul, 1961 ed.

<sup>10</sup> Russell, B. and Whitehead, A.N. (1910–1913) *Principia Mathematica*. Cambridge: Cambridge University Press.

priorities. While modern symbolic logic prioritizes syntactic consistency, ancient Indian and early empiricist Western thinkers upheld cognitive contribution as the litmus test of a sound argument. This enduring philosophical tension continues to influence the foundations of legal reasoning and argument structure across traditions.

### **Propositional Connectives and the Limits of Tautologies in Indian Law**

Propositional connectives—logical operators such as ‘and’ ( $\wedge$ ), ‘or’ ( $\vee$ ), ‘not’ ( $\neg$ ), ‘if...then’ ( $\rightarrow$ ), and ‘if and only if’ ( $\leftrightarrow$ )—form the backbone of modern propositional logic. In legal interpretation, their functional equivalents underpin much of statutory language, contractual clauses, and judicial reasoning. However, the Indian legal-philosophical tradition engaged with these logical structures long before their symbolic codification in the West, offering an interpretive richness that far exceeds mechanical application.

In ancient Indian systems like Nyāya and Mīmāṃsā, reasoning was guided not just by structural coherence but by epistemic accountability. Logical operators were embedded in natural language forms and rigorously analyzed for their inferential weight. For example, the conditional “if P, then Q”—core to implication and Modus Ponens—was internalized through the five-membered Nyāya syllogism, where inference only proceeds when the *hetu* (reason) is distinct and independently validated. Mere syntactic alignment was insufficient; the truth of P had to be epistemically verified via *pramāṇas* such as perception (*pratyakṣa*), inference (*anumāna*), and authoritative testimony (*śabda*).

This epistemological threshold is what Indian traditions demanded even when structures mimicked tautologies. In Western formal logic, tautologies such as  $P \vee \neg P$  (Law of Excluded Middle) or  $P \rightarrow P$  are deemed universally valid. But in Indian logic, validity is not merely a matter of logical form but of knowledge generation. Tautological statements were only admissible if they yielded new cognition or clarified normative obligations. This distinction is crucial when mapping logic onto law: a statement like “Agnihotra is to be performed because it is Agnihotra” is structurally sound in form but epistemically barren—a fallacy under *Sādhyasama* in Nyāya and *anarthaka* in Mīmāṃsā.

Truth tables in modern logic help identify when statements are tautologies, contradictions, or contingencies. Yet, Indian jurisprudence has always recognized that legal propositions are rarely binary. They are laden with normative intent, social context, and interpretive elasticity.

For instance, the constitutional declaration that “All persons are equal before the law” is not a tautology but a normative axiom, whose meaning must be uncovered through interpretive reasoning, not just formal verification.

Thus, while Indian logic did not formalize truth tables, it anticipated their conceptual utility. It recognized implication, negation, conjunction, and disjunction in practice—often through philosophical dialogue, layered inference, and textual exegesis. However, it refused to allow these forms to be reduced to mere syntactic patterns. The aim was always cognitive enrichment, not formal elegance.

In legal reasoning today, this insight holds immense relevance. Indian Courts clearly distinguish between logical validity and jurisprudential soundness. A statute that appears logically coherent may still be unconstitutional in effect. A ruling based on circular justification risks violating the very principles of justice it seeks to uphold. Therefore, while propositional connectives and truth-functional tools enhance clarity, they are subordinated to the broader goals of interpretive fidelity and normative coherence—a lesson Indian philosophy has long internalized.

### **Truth Tables and Complex Legal Reasoning: Proto-Truth Functionalism in Indian Thought**

The modern truth table stands as one of symbolic logic’s most elegant instruments—capable of rigorously testing the validity of propositions across all possible truth values. By representing statements through binary outputs (true/false), it enables the classification of logical forms into tautologies, contradictions, or contingencies. In contemporary jurisprudence, truth tables assist in testing the internal consistency of statutory constructs and inferential claims. Yet, centuries before this tool was systematized in the West, classical Indian philosophical traditions had already developed intuitive and functionally parallel frameworks for logical evaluation.

Among these, the Nyāya system—especially in its analysis of *vyāpti* (invariable concomitance)—exhibited a remarkably truth-functional character. For an inference to be valid, Nyāya required not only the presence of the *hetu* (reason) in the pakṣa (subject) but also a universally necessary connection between the *hetu* and the *sādhya* (proposition). This

principle strongly echoes the logic of truth tables. Consider the classical inference: “*The hill has fire because it has smoke.*” The underlying assumption—“*Wherever there is smoke, there is fire*”—functions as a universal conditional. The existence of even one counter-example (e.g., smoke from wet fuel without fire) falsifies the inference. This falsifiability requirement aligns strikingly with truth-functional evaluation.

The Mīmāṃsā tradition reinforced this analytic rigor through its hermeneutic principle of *apūrvatva*—the idea that a Vedic injunction must produce something novel. This corresponds to the view that tautologies, while logically valid, are epistemically inert unless they yield new normative content. For Mīmāṃsā, as for Nyāya, the legitimacy of reasoning lies in its capacity to produce prescriptive or actionable knowledge, not merely formal consistency.

While Indian logicians such as Udayana and Annambhaṭṭa did not construct symbolic matrices, their exhaustive treatment of fallacies, inference structures, and epistemic grounding prefigures the aims of modern logic. For instance, categories such as *Sādhyā-sama* (where the reason and conclusion are identical) and *Asiddha* (where the reason is unestablished) reflect a deep awareness of the logical failures that modern truth tables now expose in symbolic form.

In legal reasoning, especially constitutional interpretation, truth-functional logic, to the extent enacted in the interpretation of Statutes, provides clarity—but not sufficiency. A proposition like “*This statute is valid or it is not valid*” may satisfy formal tautology, but it does not resolve whether the statute meets the standards of reasonableness, proportionality, or alignment with fundamental rights. Ancient Indian traditions, particularly Anvikṣikī and Tarka, recognized this limitation. They maintained that logical form must always serve epistemic productivity and normative coherence, not simply binary consistency.

Thus, even in the absence of formal truth tables as in modern logic, ancient Indian logic displayed what may rightly be termed proto-truth functionalism—a system grounded in entailment, falsifiability, and cognitive accountability. It offers a historical and philosophical lineage that enriches our modern understanding of legal logic, underscoring that truth, in jurisprudence, must not only cohere, but also inform.

### **Classical Propositional Connectives in Indian Logic:**

Though Indian logical systems did not formalize symbolic operators like  $\rightarrow$ ,  $\neg$ ,  $\wedge$ , and  $\vee$ , their

philosophical usage reveals a sophisticated awareness of propositional structures:

- (a) Implication (If यदि... then तर्हि): Nyāya's five-member syllogism embeds implication within the link between *hetu* and *nigamana*:

“The hill has fire because it has smoke; wherever there is smoke, there is fire, as in a kitchen.”

This mirrors the modern logical form  $P \rightarrow Q$ , where smoke (P) entails fire (Q).

- (b) Negation and Contradiction ( $\neg$ ):

The doctrine of *bādhita hetu* addresses contradictions. A reason contradicted by perception (*pratyakṣa*) or scripture (*śabda*) is invalid.

E.g., “Fire is cold because it is a substance” is rejected since perception falsifies the conclusion.

This illustrates classical rejection of contradictions—akin to the principle of non-contradiction in Western logic.

- (c) Conjunction and Disjunction ( $\wedge, \vee$ ):

Though not symbolized, conjunctive and disjunctive reasoning appear in *vāda* (debate) and hermeneutics.

*Samuccaya* (cumulative reasoning) reflects logical ‘AND.’

*Vikalpa* (alternative interpretations) reflects logical ‘OR.’

These concepts are pivotal in Mīmāṃsā interpretation and legal exegesis.

In sum, while Indian logic lacked formal symbols, it achieved the functional depth of propositional logic through linguistic and philosophical precision. Its insistence on epistemic integrity, contextual coherence, and non-redundant reasoning reflects an intellectual legacy that not only foreshadowed truth-functional analysis but continues to inspire it.

### **The Law of the Excluded Middle and Indian Jurisprudence**

The Law of the Excluded Middle (LEM)—the principle that for any proposition  $P$ , either  $P$  is true or  $\neg P$  (not- $P$ ) is true ( $P \vee \neg P$ )—is foundational to classical Western logic. It represents a commitment to bivalence: the idea that every proposition must be either true or false, with no middle ground. In symbolic logic, LEM is considered a tautology—a statement that is true by virtue of its form in all possible truth-value assignments.

However, Indian philosophical traditions engage with this principle in a far more nuanced and

varied manner, often resisting its rigid binary implications.

Jaina logic, through the doctrine of *syādvāda* (the theory of conditional predication), explicitly rejects LEM by introducing a sevenfold schema of assertions. According to this schema, a proposition can be true *in some respects and at some times*, false in others, both, or even inexpressible—a striking precursor to modern multi-valued and fuzzy logics. This flexibility allows Jaina epistemology to capture the context-dependence and indeterminacy inherent in complex ontological claims, rendering LEM philosophically inadequate.

Similarly, Buddhist logicians such as *Dignāga* and *Dharmakīrti* viewed the Law of the Excluded Middle as overly formalistic. Their theory of *apoha* (exclusion) posits that conceptual knowledge arises not through affirmation but through negation of non-identity. As such, truth is constructed relationally, not in absolute dichotomies—thus undermining LEM’s universal applicability.

In contrast, the Classical Nyāya system—especially in its later Navya-Nyāya development—demonstrates a qualified acceptance of LEM. Nyāya accepts the form  $P \vee \neg P$  as valid, but only within the bounds of valid cognition (*pramāṇa-viśaya*). That is, a proposition is either known to be true or not-true based on the operation of reliable epistemic instruments (*pramāṇas*). However, Nyāya logicians firmly rejected any tautological appeal to LEM as an independent argument. Without empirical validation, a proposition's binary truth status—though logically possible—remained epistemically inconclusive.

This cautious engagement with LEM is mirrored in Indian jurisprudence. In judicial reasoning, particularly in constitutional interpretation, Indian courts have shown a marked preference for contextual coherence over formal bivalence. For instance, while a claim like

*“This statute is either constitutional or unconstitutional”* formally satisfies LEM, it carries no interpretive value unless tested through standards like reasonableness, proportionality, or harm analysis. Thus, the mere invocation of LEM offers no substantive jurisprudential justification. In conclusion, while Western logic codifies the Law of the Excluded Middle as a tautological certainty, Indian logic—particularly in Jaina, Buddhist, and Nyāya traditions—demands that such binary truths be anchored in valid epistemic grounds. This divergence underscores a broader philosophical tension: formal certainty versus cognitive justification. Indian

jurisprudence, inheriting this epistemic vigilance, continues to favor reasoned conclusions over abstract logical determinism—affirming the view that in law, truth must not only be valid in form, but meaningful in context.

### Modus Ponens and Inferential Validity in Indian and Legal Reasoning

Modus Ponens, or the rule of detachment, is a foundational principle of classical logic. It states that if  $P \rightarrow Q$  (if P, then Q) and  $P$  are both true, then  $Q$  must necessarily follow:

$P \rightarrow Q$

$P$

$\therefore Q$

This logical structure undergirds much of contemporary legal interpretation and statutory application. For example, in criminal jurisprudence, the reasoning “If a person commits theft, then they shall be punished,” when paired with the established fact of theft, deductively yields the conclusion: punishment follows. Modern legal syllogisms frequently conform to this format.

*Modus Ponens* as a functional structure, can be equated to  $vy\ddot{a}pti + upanaya \Rightarrow nigamana$  in the Nyāya syllogism. Unlike Western logic where Modus Ponens is a syntactic rule of inference, in Nyāya, this is not merely symbolic—each step must pass epistemic scrutiny through *pramāṇa*.

Remarkably, Indian logic—particularly the Nyāya system—had already anticipated this structure through its *pañcāvayava vāda* (five-limbed syllogism):

1. *Pratijñā* (Proposition): The hill has fire.
2. *Hetu* (Reason): Because it has smoke.
3. *Udāharāṇa* (Example): Wherever there is smoke, there is fire (e.g., in the kitchen).
4. *Upanaya* (Application): This hill has smoke.
5. *Nigamana* (Conclusion): Therefore, the hill has fire.

Here, the *upanaya* confirms the antecedent ( $P$ ), the *udāharāṇa* affirms the universal conditional ( $P \rightarrow Q$ ), and the *nigamana* logically deduces the consequent ( $Q$ ), thus replicating the structure of Modus Ponens with rigorous epistemic grounding.

A similar pattern is found in Mīmāṃsā exegesis, particularly in the interpretation of Vedic injunctions:

- “Wherever there is a *yajña* (sacrifice), there is merit” ( $P \rightarrow Q$ )
- “This is a *yajña*” ( $P$ )
- “Therefore, it brings merit” ( $Q$ )

However, Indian logic diverges from purely syntactic formalism by insisting that premises ( $P$  and  $P \rightarrow Q$ ) be validated through *pramāṇas* (means of knowledge)—namely, *pratyakṣa* (perception), *anumāna* (inference), and *śabda* (authoritative testimony). This requirement introduces a layer of epistemological discipline absent in formal symbolic logic, ensuring that the application of Modus Ponens yields not just valid but truth-tracking inferences.

In Indian jurisprudence, courts have both exemplified and departed from Modus Ponens-like reasoning. A landmark instance is Justice K.S. Puttaswamy v. Union of India (2017): if dignity entails privacy ( $P \rightarrow Q$ ), and dignity is constitutionally protected ( $P$ ), then privacy must also be constitutionally protected ( $Q$ ). The Court’s reasoning reflects deductive coherence grounded in constitutional principle.

Conversely, judicial assertions such as “The law is constitutional because it was enacted by Parliament,” if unaccompanied by tests of substantive fairness or constitutional scrutiny, collapse into circular reasoning. Such tautological loops, akin to the *Sādhyā-sama* fallacy in Nyāya, undermine legal legitimacy by presuming what they seek to prove.

In essence, Modus Ponens is more than a logical schema—it is a jurisprudential ethic. Its formal articulation in Nyāya and its interpretive presence in Indian constitutional reasoning underscore the value of epistemic integrity in legal judgment. Far from being a Western innovation, the principle finds deep resonance in India’s intellectual traditions, which demand that logic serve not only coherence, but also knowledge, justice, and reasoned legitimacy, and is termed as “Legal Reasoning”.

## **Tautologies (*Sādhyā-sama*) and Indian Jurisprudence**

### **1. Commissioner of Central Excise v. Eswaran & Sons Engineers Ltd.**

This case involved the classification of goods under the Central Excise Act. The Tribunal had upheld the Department's classification but allowed for the prospective application of a circular

issued under Section 37-B, thereby limiting the demand for duty to periods after the issuance of the circular. The Supreme Court overturned the Tribunal's decision, holding that the circular did not apply to the period before its issuance, as the initial show-cause notices were not based on the circular. The Court's reasoning avoided tautology by not accepting the premise that the circular's validity was self-evident for prior periods.

Supreme Court establishes Precedent on Classification and Prospective Application of Circulars.

## 2. **Jayant Verma v. Union of India, 2018**

In this case, the petitioner challenged the appointment of a member to the Securities Appellate Tribunal. The Court's reasoning has been critiqued for being tautological: it upheld the appointment by stating that the appointee met the qualifications because he was appointed. This reasoning has been viewed as lacking substantive justification, merely restating the conclusion as its own support.

### **Conclusion**

This study demonstrates that tautological reasoning, while formally valid, must always be subjected to epistemic scrutiny—especially within legal contexts where interpretive integrity shapes justice itself. Indian philosophical traditions, notably Nyāya and Mīmāṃsā, evaluated tautologies not by their structural neatness but by their cognitive yield. The courts' refusal to accept circular justifications aligns and resonates powerfully with modern critiques of judicial tautologies. When courts validate conclusions by merely echoing premises-- they risk legitimising legal fallacies under the protective layer of logical form. Western developments in symbolic logic—from Frege to Tarski—rescued tautologies from philosophical dismissal but also divorced them from the normative demands of real-world reasoning. This paper urges a return to the classical Indian insistence that truth must cohere and enlighten. As Indian jurisprudence continues to straddle inherited legal frameworks and indigenous epistemologies, it must remember that sound judgment cannot rely on repetition masquerading as reason. It must ground itself in reasoning that informs, not merely affirms. That is the promise—and the discipline—of reasoning in law.

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### Footnotes (Harvard Style)

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