### **Educational Administration: Theory and Practice**

2024, 30(7), 1328-1337 ISSN: 2148-2403 https://kuey.net/

**Research Article** 



### The Anatomy Of Recursion In Legal Discourse: Philosophical Foundations And Jurisprudential Practice

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**Citation:** Varalakshmi Tadepalli, et.al (2024), The Anatomy Of Recursion In Legal Discourse: Philosophical Foundations And Jurisprudential Practice, *Educational Administration: Theory and Practice*. 30(7), 1328-1337

Doi: 10.53555/kuey.v30i7.9793

#### ARTICLE INFO ABSTRACT

In the complex and layered architecture of legal reasoning, clarity does not always emerge from simplicity-but from the disciplined complexity of structured selfreference. This paper examines the recursive structures in Indian Jurisprudence, presenting them as technical and intangible concepts and as basic structures that preserve the consistency, depth, and integrity within legal interpretation. The study reveals how legal definitions often refer back to themselves, drawing from statutory texts, constitutional clauses, and landmark judgments-either through nested legislative frameworks or evolving judicial doctrines-mirroring the recursive logic found in philosophical and computational models. The inquiry further establishes a comparative jurisprudential dialogue between ancient Indian epistemological systems and modern legal hermeneutics. It examines how Indic philosophical frameworks-Mīmāmsā's Anvitābhidhāna, Nyāya-Tarka's Anumāna Anuvrtti, Vaiśeṣika's Dravya-Guna-Sambandha, and Anvīkṣikī's Savrttika-share striking conceptual affinities with legal doctrines such as Ejusdem Generis, Noscitur a Sociis, Expressio Unius Est Exclusio Alterius, and the Mischief Rule respectively. These parallels are not merely academic-they reveal a shared intellectual investment in context, coherence, and layered meaning-making. Through close reading of constitutional provisions like Articles 12, 13, and 19 and judicial decisions from Kesavananda Bharati to Ajay Hasia, the paper demonstrates how recursion serves as a structural necessity and a hermeneutic strength in Indian law. Far from being circular or convoluted, recursive reasoning—anchored in base doctrines and principles—allows legal interpretation to evolve while remaining tethered to foundational norms. In the era witnessing an increasing legal complexity, this work invites jurists, scholars, and philosophers alike to view recursion not as a technicality to be scared of but as a rhythm to be understood—a recursive rhythm embedded in law that sustains the coherence and continuity of legal prescriptions across time and tradition.

**Keywords:** Recursive Reasoning, Statutory Interpretation, Legal Hermeneutics, Dravya—Guṇa—Sambandha, Anvitābhidhāna, Ejusdem Generis, Indian Constitutional Law, Contextual Meaning, Jurisprudential Logic, Legal Taxonomy, Mīmāṃsā Philosophy, Legal Semantics, Judicial Interpretation, Expressio Unius Est Exclusio Alterius, Mischief Rule, Noscitur a Sociis, Comparative Jurisprudence, Recursive Legal Structures, Philosophical Foundations of Law, Interpretive Coherence

#### **Introduction:**

In the layered architecture of legal reasoning, clarity does not always emerge from simplicity—but from the disciplined complexity of structured self-reference. While the concept of a *recursive structure* is essential to mathematics, linguistics, and computer science, it finds a unique and indispensable place in legal systems—the law is rife with recursive constructs ranging from the statutory definitions that refer to terms already embedded within them to constitutional doctrines that derive legitimacy from concepts they define. They stand on a different footing from the fallacious or confusing structures. Such structures, unlike fallacies, when appropriately grounded—foster consistency, systematic approach, and depth in interpretation. This essay explains the nature of recursive structures in law, exemplifying their features, tracing their jurisprudential relevance, and illustrating their utility through statutes, constitutional clauses, and Supreme Court rulings.

#### What is a Recursive Structure?

A recursive structure is one where an element is defined or constructed in terms of itself, either directly or indirectly. In logic and language, it represents an elegant form of self-reference that terminates at a base case. In law, recursion serves as a mechanism for layered interpretation—where one term, clause, or principle finds its meaning by referring to other provisions that eventually link back to the original concept.

Definition (in Legal Context): In law, a recursive structure is a legal framework or definition in which the reference to the context and to other terms or rules, which in turn refer back to the original or similar concepts, defines a term or rule —anchored in a base statute, value, or precedent.

This paper undertakes a comparative examination of recursive structures embedded in the classical Indian philosophical frameworks—Mīmāmsā, Nyāya, Tarka, Vaiśeṣika, and Anvīkṣikī—with the interpretative principles underpinning the modern Law of Interpretation of Statutes. The study seeks to explore structural and functional parallels between epistemological mechanisms such as *Anvitābhidhāna*, *Anumāna Anuvṛtti*, *Dravya—Guṇa—Sambandha*, and *Savṛttika*, and legal doctrines like Ejusdem Generis, Noscitur a Sociis, Expressio Unius Est Exclusio Alterius, and the Mischief Rule. The selected Indian constitutional provisions and statutory case laws exemplify these interpretative strategies in judicial reasoning and provide a comparison to substantiate the contention. However, the study remains conscious of its limitations—mainly that the Indian philosophical systems are ontologically rooted in metaphysical and epistemic inquiry. At the same time, statutory interpretation in modern law grounds jurisprudential pragmatism and legislative intent. As such, the analysis is comparative and illustrative, not homogenizing. By identifying key intersections—such as context-sensitive interpretation, relational meaning, and recursive reasoning—this paper aims to enrich our understanding of legal interpretation through traditional Indian logical and linguistic theory without conflating fundamentally distinct intellectual traditions.

"31. The quality that is the cause of the application of all terms is intellect or Knowledge (Buddhi). It is of two kinds, Memory and Apprehension. Memory (Smriti) is the Knowledge for a state of Consciousness), which is caused by the internal reflection of previous impressions (Sankara), and Apprehension (Anubhava) is the Knowledge different from memory. Knowledge is of two kinds, the apprehension, and the false apprehension."

--Annam Bhatta In Tarka-Sangraha

### I. Recursive Structures in Legal Interpretation: Doctrinal Features and Jurisprudential Value:

The recursive structures in legal reasoning represent an essential part of the interpretation mechanism, which is marked by a set of defining features that collectively enhance doctrinal consistency and jurisprudential clarity. The recursive formulation displays a distinctive feature of the interdependence of legal terms — statutory definitions frequently invoke other defined terms within the same statute or across related statutes, generating a layered web of meaning that unfolds through interpretive chains. However, this quality of referring to self (Self-referentiality) does not devolve into ambiguity due to anchoring these structures in base legal concepts—such as constitutional principles, express statutory mandates, or foundational judicial doctrines. These anchors function as terminating clauses, ensuring the recursion remains doctrinally valid and avoids circularity.

The importance of recursive drafting lies in its ability to address complex legal realities while maintaining brevity and ease of reference within legal texts. The legislators rely on recursive constructions to incorporate multiple normative layers in a structured and referential manner that helps eliminate the overly exhaustive statutes. The Courts often resort to 'precedential recursion'—depending upon the earlier decisions that rest on prior holdings—thus constructing a dynamic, cumulative body of case law rooted in established authority. Importantly, unlike fallacious reasoning such as *petitio principii* (begging the question), legal recursion avoids infinite regress by always culminating in a definitive source—a constitutional norm, a statutory provision, or a conclusive judicial interpretation.

These two features, together, enhance the constituent part of recursive structures in maintaining the internal consistency, adaptability, and depth of legal interpretation. Far from being a technical element, recursion in law is a methodologically sound and normatively grounded device, enabling legal discourse to evolve while remaining tethered to authoritative foundations.

#### What role does Recursive Reasoning play in Legal and Philosophical Interpretation?

While it is theoretically possible to avoid recursive reasoning, it remains indispensable to legal interpretation for maintaining coherence across complex statutory frameworks. The absence of recursive structures would have complicated the process, demanding drafting each rule or definition in complete isolation, resulting in

redundancy, fragmentation, and ambiguous provisions. The legal system embraced recursive reasoning as a fundamental principle, recognizing this operational necessity and formally incorporating it into the prescriptions that govern statutory construction. Thus, rather than eliminating recursion, jurisprudence refines and regulates it to preserve clarity, consistency, transparency, and structural ease in legal texts.

### II. Hermeneutic Harmonies: Dialogues Between Ancient Taxonomies and Western Canons of Interpretation:

The origins of 'recursive thinking' in law is not merely a product of modern statutory complexity or constitutional interpretation—it has its roots in the profound knowledge-related traditions of ancient India. Long before the advent of formal logic in the West or the computational recursion of modern programming, Indian philosophical schools were already engaging with layered, self-referential systems of reasoning that resonate deeply with recursive structures as understood today. From language and semantics to logic, ontology, and meta-cognition, classical Indian thought constructed sophisticated frameworks of Knowledge that built meaning through internally referential mechanisms, always grounded in foundational concepts.

This section explores how four major schools of Indian philosophy—Mimamsa, Nyāya-Tarka, Vaisheshika, and Anvikshiki—each embodied a distinct mode of recursive logic. Whether it was the Mimamsa theorists deriving semantic meaning through contextual unity (Anvitābhidhāna) or the Nyāya-Tarka school building inferential chains through layered premises (Anumāna Anuvritti), these systems demonstrated an acute awareness of recursion as a methodological necessity for coherent reasoning. The Vaisheshika notion of substance and attributes (Dravya-Guna-Sambandha) established an ontological recursion, while Anvikshiki's introspective epistemology (Savrittika) ventured into the domain of self-reflective cognition.

These recursive traditions did not exist in philosophical isolation—they laid the intellectual groundwork for India's jurisprudential methodologies. Striking continuities with these ancient recursive frameworks exist in the layered interpretation of Vedic injunctions, the logical analysis of duties, and even in the interpretive techniques used by modern Indian courts. Thus, classical Indian philosophy, far from being esoteric or abstract, provides a deeply rooted and intellectually rigorous foundation for understanding the recursive architecture of legal reasoning in India today.

# 1. Context as Canon: Harmonizing Mīmāṃsā's Anvitābhidhāna¹ and the Doctrine of Ejusdem Generis in Statutory Interpretation

In the Mīmāṃsā school of Indian philosophy, particularly within its linguistic and hermeneutic tradition, the theory of *Anvitābhidhāna* posits that the meaning of a sentence does not arise from an aggregate of isolated word meanings, but from recognizing the syntactic and contextual linkage (*Anvaya*) among the words. This interpretation process is inherently recursive, as the need to comprehend complex sentences arises through the repeated application of contextual interdependence, where the meaning of each compound or clause recursively relies on the contextual meanings of its constituent sub-parts. This recursive derivation was foundational to interpreting Vedic injunctions in layered imperatives and nested conditions. By analyzing primary meanings and extending them to secondary or derived usages, Mīmāṃsā scholars developed a self-referential yet logically structured model of understanding, which profoundly influenced later traditions of legal and textual interpretation in Indian jurisprudence.

The *Anvitābhidhāna* theory is not only ontologically and epistemologically rooted in classical Indian thought but was also actively employed in interpreting the *Dharma Sūtras* and other Vedic texts. The *Dharma Sūtras* are aphoristic legal and moral codes within the broader *Smṛti* corpus that prescribe social and ritual duties (*dharma*) in terse and laconic formulations.

The application of *Anvitābhidhāna* was indispensable in:

- (a) decoding ritual instructions and normative duties by determining the duties, the performer of those duties, and conditions for performing those duties through contextual linkage;
- (b) resolving ambiguities by interpreting verses within their grammatical and syntactic framework and
- (c) A key pramāṇa in Mīmāṃsā epistemology is to preserve *dharma*, which is imperceptible through empirical means (Atindriya), by discerning through proper interpretation of *śabda* (authoritative verbal testimony).

While the principle of Kumarila Bhatta's *Abhihit-Anvaya-vāda* and Sālikanātha Misra's *Anvitābhidhāna* share (regardless of their approach conflict) underlying conceptual similarities with the legal doctrine of *Ejusdem Generis*, they remain distinct in origin and application. Both context-driven interpretive tools prioritize

<sup>&</sup>lt;sup>1</sup>Dasgupta, Surendranath, A History Of Indian Philosophy Vol.1 Pg-757,758, Cambridge at the University Press; London; 1922 < <u>History of Indian philosophy vol.1: Dasgupta, Surendranath: Free Download, Borrow, and Streaming: Internet Archive</u>>

semantic coherence and syntactic structure over decontextualized literalism. They aim to preserve the intended meaning of a text by avoiding absurd or overly expansive readings. However, the fundamental difference lies in their philosophical positioning: *Anvitābhidhāna* comes from Indian metaphysics and epistemology, focusing on how language unveils *dharma* (moral-ritual duty), whereas *Ejusdem Generis* is a jurisprudential doctrine rooted in Western common law, designed to protect legislative intent in the interpretation of statutes. Thus, where *Anvitābhidhāna* operates as a general cognitive and hermeneutic model applicable across dharma texts, *Ejusdem Generis* is confined to interpreting statutory lists within legislative texts. To summarize metaphorically, where logic applies, *Anvitābhidhāna* operates; where statutory interpretation is required, *Ejusdem Generis* applies. In legal hermeneutics, this philosophical alignment justifies applying Ejusdem Generis by arguing that context (Anvaya) controls the interpretation of terms (Abhihita)

In **The Collector of Bombay Vs. Nusserwanji Rattanji Mistri & Ors.**, **AIR 1955 SC 298** the Supreme Court confronted a pivotal question of whether the Government, having acquired land under the Land Acquisition Act, could retain any residual authority—specifically the power to impose assessments—after alienating the land to another entity. The crux of the legal issue centered on constructing the phrase "free from all estates, rights, title, and interest," with the term "interest" emerging as the focal point of interpretation. Justice Venkatarama Aiyyar, delivering the judgment, navigated this terrain through a dual lens—harmonizing the classical Indian hermeneutic principle of *Anvitābhidhāna* with the Western doctrine of *Ejusdem Generis*.

Invoking *Ejusdem Generis*, the Court ruled that "interest" must be interpreted in light of its textual companions—"estates," "rights," and "title"—and not in isolation. This contextual limitation excluded sovereign functions such as the imposition of assessments, which are not of the same genus as proprietary estates. The levy of fiscal obligations, being distinct in nature and function, was held not to flow from any residual proprietary "interest" retained by the State post-acquisition.

At the same time, the judgment exemplifies the Mīmāṃsā interpretive method of *Anvitābhidhāna*, which posits that meaning is not extracted from words in isolation but arises syntactically and contextually from their relationship within the sentence structure. The Court's interpretive strategy displayed this classical Indian framework, stressing that "interest" must be interpreted within the syntactic unity of the statutory phrase, not as an atomistic semantic unit.

By disentangling overlapping proprietary and sovereign powers through such layered interpretation, the Court reaffirmed that the Government's rights—possession or taxation—stand extinguished once the land is alienated. This judgment thus becomes a jurisprudential exemplar where indigenous epistemology and Western legal methodology coalesce to produce doctrinal clarity and interpretative precision.

In **Ajay Hasia Vs. Khalid Mujib Sehravardi**, (1981) 1 SCC 722, the Supreme Court's interpretation of the expression "other authorities" within Article 12 of the Indian Constitution presents a striking example of contextual and syntactic reasoning akin to the Mīmāṃsā principle of Anvitābhidhāna. The Court derived the phrase's meaning not in isolation but by examining its linguistic surroundings —namely, "Government," "Parliament," and other instrumentalities of the State. This approach reflects the principle underlying Anvitābhidhāna doctrine, which emphasizes that semantic meaning emerges not from isolated lexical units but from the arrangement of words within a sentence. The judgment held that bodies substantially financed and controlled by the State and performing public functions fall within the ambit of "other authorities," drawing from the structural logic of the constitutional text. Simultaneously, this reasoning also reflects the Western canon of Ejusdem Generis, where the interpretation of general words following specific ones is in light of their genus. Thus, the Court harmonized indigenous philosophical hermeneutics with classic common law interpretive tools—an eloquent confluence of Anvitābhidhāna and Ejusdem Generis in Indian constitutional jurisprudence.

### 2. Inference and Interpretation: Converging Paths of Nyāya's Anumāna Anuvṛtti and the Doctrine of Noscitur a Sociis

The Nyāya school, known for its analytical rigor, promotes the concept of Anumāna (inference) as a means of valid Knowledge (pramānā). The process of inference as postulated in Nyāya is inherently recursive, structured through the five-member syllogism (pañcāvayava vākya): (1) Pratijna (proposition), (2) Hetu (reason), (3) Udaharana (example), (4) Upanaya (application), and (5) Nigamana (conclusion). Each step is built upon a previous cognitive state or accepted truth, recursively drawing upon previously validated inferences to construct new conclusions. The principle of Anuvritti carries forward into successive reasoning layers of the elements from prior premises—further embedding recursion. Legal reasoning displays similar patterns when courts build upon judicial precedents, analogical reasoning, or layered constitutional interpretation, mirroring the recursive logic of Nyāya-Tarka.

In both Indian and Western traditions, contextual reasoning serves as a foundation for accurate interpretation.

Analogously, the Western doctrine of Noscitur a Sociis operates on the presumption that a word derives meaning from its syntactic and semantic companions. Just as *hetu* and *upanaya* in Nyāya draw upon prior propositions, Noscitur a Sociis interprets ambiguous statutory terms by referencing their contextual peers. For example, in analyzing the word "bank" in the phrase "river, stream, bank," Nyāya's method would require recursive cognitive grounding through known experience (*vyāpti*) and logical demonstration. At the same time, Noscitur a Sociis would isolate the term's intended meaning by examining its linguistic neighbors—both avoiding decontextualized literalism.

Though born of different philosophical traditions—Anumāna Anuvṛtti from Indian logic and the epistemology of Noscitur-a-Sociis from Roman-Common Law hermeneutics—both converge on the principle of relational meaning. Nyāya seeks epistemic certainty through structured recursive inference, while Noscitur a Sociis ensures statutory coherence by preventing absurd interpretations. Where Nyāya recursively validates truth claims through internal logic--Noscitur a Sociis binds interpretation to legislative intent through semantic proximity. Both thus reflect a recursive architecture: one in knowledge formation, the other in legal meaning.

To explain more precisely, Anumāna Anuvṛtti is the path-- Noscitur a Sociis is the footstep. The mind guides the reader through words with the help of Knowledge about the other elements.

In Rohit Pulp and Paper Mills Ltd. Vs. Collector of Central Excise, Baroda, AIR 1991 SC 754, the Supreme Court was called upon to interpret the scope of a tax exemption notification under the Central Excise regime, particularly the expression "coated paper." The notification excluded specific categories of paper—such as cigarette tissue, glassine paper, grease-proof paper, and paper not exceeding 25 grams per square meter—from the benefit of excise duty concession. The ambiguity lay in whether "coated paper" included all types of coated paper or was confined to only those used for industrial purposes. The Court employed the doctrine of noscitur a Sociis to resolve this ambiguity, holding that an ambiguous term in a list derives its meaning from the company it keeps. Since all other items enumerated in the list were industrial, "coated paper" had to be interpreted in the same context. The Court accordingly construed the term as limited to 'coated paper' for industrial use. This excludes art or chromo paper used for writing and printing. This decision demonstrates the classical application of Noscitur a Sociis, anchoring the interpretation in semantic and functional proximity.

Beyond this explicit use of a Western interpretative tool, the Court's reasoning structure also aligns with the Indic philosophical framework of *Anumāna Anuvṛtti* from the Nyāya school of logic. The Court's analytical method mirrors the five-fold syllogistic inference system. The asserted that "coated paper" is ambiguous—then mirrors the pañcāvayava vākya (five-member syllogism) of Nyāya inference, mainly through the principle of Anuvṛtti—the carrying forward of premises from earlier steps to later reasoning;

First	it begins with a Proposition ( <i>Pratijna</i> )	only statute intended to exclude an industrial paper
Second	offers a Reason (Hetu)	all other listed types are industrial
Third	supports it with Examples (Udaharana)	tissue paper, glassine, etc.,
Fourth	Application ( <i>Upanaya</i> )	applies this reason to the ambiguous item "coated paper
," and Fifth	finally Fifth reaches a Conclusion (Nigamana)	coated paper also must be read as industrial-use

Thus, in this case, the recursive structure of legal reasoning implicitly mimics *Anumāna Anuvṛtti*. The recursive progression of logic, through each step building upon the validation of the previous one-- reflects *Anuvṛtti*—the carrying forward of inference through layered reasoning. While *Noscitur a Sociis* anchors the word within its textual environment, *Anumāna Anuvṛtti* ensures the interpretive conclusion is epistemically sound through recursive validation. Thus, the Court's findings harmoniously combine common law maxims' precision with the depth of logical inference, illustrating how legal interpretation in Indian jurisprudence can be context-sensitive and structurally recursive. This case clarifies statutory ambiguity and demonstrates the philosophical plurality of Indian legal reasoning, where *Noscitur a Sociis* and *Anumāna Anuvṛtti* converge to uphold legislative intent through contextual coherence and structured inference.

In **S. Sundaram Pillai Vs. V.R. Pattabiraman**, **AIR 1985 SC 582**, the Supreme Court's interpretive approach to the word "wilful default" beautifully illustrates the convergence of Indian and Western hermeneutics. The Court invoked the principle of noscitur a Sociis by reading "wilful" in the company of neighboring terms like "neglect" and "refusal," interpreting it contextually to mean intentional default, not an inadvertent lapse. Simultaneously, the reasoning structure mirrors *Anumāna Anuvṛtti* of the Nyāya school, where successive legal premises—precedent, statutory intent, and analogous case law—were recursively employed to conclude. The judgment layered meaning by dissecting tenant conduct, intention, and statutory purpose, thereby constructing a nuanced interpretive framework. This case is a classic example of the jurisprudential convergence of context-driven textual reading and recursive logic, offering a model of legal reasoning where semantic proximity and epistemic inference blend seamlessly to uphold justice.

First	it begins with a proposition ( <i>Pratijna</i> )	"Wilful default" implies intentional failure, not mere omission.
Second	offers a reason (Hetu)	A literal reading could unfairly penalize tenants without fault.
Third	supports it with examples ( <i>Udaharana</i> )	Surrounding terms like "neglect" and "refusal" suggest degrees
		of culpability.
Fourth	applies ( <i>Upanaya</i> )	"Wilful" must be read in context to mean deliberate default, not
		accidental. and
Fifth	finally the Conclusion (Nigamana)	Only intentional non-payment qualifies as a wilful default
	-	under the Act.

This layered and context-sensitive logic mirrors the Nyāya school's inferential reasoning structure. It upholds Noscitur a Sociis by deriving the precise meaning of an ambiguous statutory term through its linguistic and syntactic environment.

### 3. Recursive Ontology in Legal Interpretation: Bridging Vaisheshika's Dravya-Guṇa Framework with Expressio Unius Est Exclusio Alterius

The Vaisheshika school of Indian philosophy, known for its analytical taxonomy of reality, posits that guṇas (attributes) define its dravya (substance), and these attributes derive meaning only from the substance they inhere in. This recursive ontology—where substance and attribute continuously reinforce each other—offers a powerful conceptual lens for understanding legal identities. For instance, a corporation is not merely a nominal legal entity; it acquires meaning through its express legal capacities, such as juridical personhood, liability, and contractual capability. These properties, in turn, shape our understanding of what constitutes the corporation itself. This cyclical and mutually constitutive relationship is not unlike interpretive challenges in legal discourse, where statutory definitions often derive meaning through contextual cross-reference across provisions, reinforcing and limiting one another in the process.

This ontological framework finds a striking parallel in the legal maxim *Expressio Unius Est Exclusio Alterius*, which holds that the express mention of one thing implies the exclusion of others. The **Supreme Court in GVK Industries Ltd. Vs. ITO [2011] 332 ITR 130 (SC)** applied this principle to affirm that when legislation explicitly enumerates certain powers or categories, others not mentioned are presumed to be excluded, thereby requiring courts to exercise judicial restraint in expanding statutory intent beyond its express terms. Much like the *dravya* in Vaisheshika thought, legal powers and institutions are ontologically shaped by the attributes and functions expressly conferred upon them, and the absence of certain features reinforces definitional limits.

In Express Newspapers (Pvt.) Ltd. Vs. Union of India (AIR 1958 SC 578), the Supreme Court intricately blended the legal maxim *Expressio Unius Est Exclusio Alterius* with a deeper, recursive ontological reasoning that resonates with the Vaisheshika concept of *dravya-guṇa sambandha*. In the *Express Newspapers* case, the Court reinforced that the explicit mention of one form of taxation—such as income tax—implies the exclusion of others not named, like capital tax, thereby invoking *Expressio Unius* to maintain statutory fidelity. Yet, this was not a mechanical application. The Court's reasoning subtly reflected a recursive structure, treating the State's power to tax not as a standalone authority but as a *dravya*—a substance defined and limited by its *guṇas*, namely constitutional constraints, legislative clarity, and the structured scope of financial imposition. These legal attributes not only arose from the statute but, in turn, reaffirmed and reinforced the very identity and legitimacy of the State's taxing power.

A similar recursive structure emerges in **Ramdev Food Products Private Limited Vs. State of Gujarat (2015) 6 SCC 439**--where the Court acknowledged the benefits and the dangers—of over-relying on *Expressio Unius*. Here, a nuanced analysis of its functional attributes like administrative fairness, federal respect, and legislative intention for evaluating the regulatory identity of the State. These *guṇas* were not merely descriptors—they shaped the interpretation of the statute and, in doing so, recursively defined the essence of State regulation itself. In both judgments, therefore, we see a formalist application of a legal maxim and a philosophical method akin to Vaisheshika reasoning, where legal entities derive meaning through the interdependent play of their form and function. This integration of legal interpretation and ontological recursive structures truly enriches the jurisprudence—that protects statutory precision while remaining sensitive to the deeper identity of legal power.

This interpretive convergence is evident in the case of **Directorate General Doordarshan & Ors. Vs. Anand Patwardhan & Anr.** (*Father, Son, and Holy War*) **AIR 2006 SC 3346**, where the Court examined Doordarshan's refusal to broadcast the documentary under vague apprehensions of communal unrest. The Court implicitly treated Doordarshan as a dravya, a public institution whose identity is based on nominal designation and on its core *guṇas*—public accountability, neutrality, and constitutional duty to facilitate free expression. The denial of broadcast contravened these essential attributes, rendering Doordarshan's action not just procedurally flawed but structurally inconsistent with its statutory and constitutional character. Simultaneously, by applying the *Expressio Unius* maxim, the Court held that the

Programme Code's enumerated grounds for refusal—like threats to sovereignty or public order—precluded speculative or unstated reasons. This interpretation ensured that state discretion remained confined within the bounds of statutory expression, further reinforcing the institution's definitional integrity.

Together, these cases reveal a more profound jurisprudential method that combines the bounded logic of Western statutory interpretation with the recursive ontology of classical Indian thought. In each instance, the legal entity or power is not static but dynamically defined through its express attributes, and those attributes, in turn, reaffirm and limit the entity's identity. This confluence reflects a philosophically grounded model of legal interpretation, where semantic precision, structural coherence, and functional identity converge to uphold constitutional principles and institutional integrity.

### 4. Interpreting Law's Purpose Through Itself: The Mischief Rule and Anvikshiki's Doctrine of Savrttika (Self-Referential Awareness)

"Anvikshaki, as Kautilya calls it, "is one of the four sciences—which is most beneficial to the world, keeps the mind steady and firm in weal and woe alike, and bestows excellence of foresight, speech, and action." Anvikshiki, the classical Indian science of rational inquiry, emphasizes not only cognition but metacognition—the awareness of being aware—conceptualized through Savṛttika. This principle denotes recursive self-awareness, wherein the subject not only apprehends an object but is simultaneously conscious of its apprehension. In jurisprudential terms, this corresponds to the judiciary's self-reflective capacity—its ability to interpret the law and its constitutional role, limitations, and institutional morality. Such self-referential reasoning is integral to judicial review, constitutional morality, and institutional integrity, where the law is called upon to interpret its purpose and scope.

This philosophical paradigm finds compelling expression in **Indra Sawhney Vs. Union of India (1992) Supp (3) SCC 217**— the Supreme Court applied the Mischief Rule here for interpreting Articles 15(4) and 16(4) of the Constitution in dealing with the case on reservations for socially and educationally backward classes. Drawing from *Heydon's Case* (1584), the Court identified constitutional mischief as systemic exclusion, entrenched discrimination, and representational deficits in public employment. The purposive interpretive lens of these provisions reveals that the design of these provisions was to advance substantive equality alongside preserving formal symmetry.

Simultaneously, the judgment exhibits the *Savṛttika* dimension of *Anvikshiki* through a deep jurisprudential self-awareness. The Court interpreted the text and engaged in institutional introspection—evaluating its role in shaping social policy, the boundaries of judicial activism, and the normative architecture of affirmative action. The evolution of doctrines such as the "creamy layer" and the 50% ceiling emerged not from rigid textualism but from reflective constitutional engagement rooted in judicial humility and moral responsibility. Thus, *Indra Sawhney* exemplifies a moment where the judiciary interprets the law's purpose while contemplating its constitutional function—marking the intersection of purposive rule and philosophical self-reflexivity.

A parallel synthesis is evident in K.S. Puttaswamy (Retd.) Vs. Union of India [(2017) 10 SCC 1], where the Supreme Court recognized the right to privacy as fundamental to human dignity and autonomy. Employing the Mischief Rule, the Court located the mischief in the unchecked expansion of state surveillance and the erosion of informational self-determination. Privacy, thus, was not derived as a textual entitlement alone but as a constitutional necessity aimed at remedying contemporary threats to liberty.

What distinguishes *Puttaswamy* is the Court's profound *Savṛttika*-like reasoning. The judgment repeatedly reflects on the judiciary's interpretive mandate, the evolution of rights in a changing society, and the need for courts to remain ethically anchored while legally progressive. The Indian jurisprudence did not treat Constitutional morality as an abstract doctrine but as a guiding principle for judicial interpretation, underscoring the Court's dual obligation: to safeguard fundamental rights and to evolve their meaning through deliberative introspection. In this sense, *Puttaswamy* demonstrates that constitutional interpretation is not a mechanical application of doctrine but a reflective exercise in aligning legal norms with human dignity, institutional legitimacy, and democratic evolution.

*Indra Sawhney* and *Puttaswamy* illustrate a jurisprudence that seamlessly blends the Mischief Rule's purposive interpretive framework with Anvikshiki's recursive awareness of judicial function. These judgments affirm that constitutional adjudication is not merely about answering *what* the law is but also asking *why* it is, *how* it functions, and *to what ends* it must evolve.

<sup>&</sup>lt;sup>2</sup> Kautilya, *Arthasastra*, trans. R. Shamasastry (Mysore: Mysore Printing and Publishing House, 1960), Chapter II, 5–6.

## III. Illustrative Applications of Recursive Reasoning in Indian Constitutional and Statutory Interpretation

1. Similarly, Article 13, which deals with the **definition of "law,"** encapsulates within its scope the ordinances, rules, regulations, notifications, customs, and usages having the force of law. The General Clauses Act of 1897 defines each sub-terms, which may further reference additional subordinate legislation. This layered definitional architecture exemplifies recursive legal formulation, as the meaning of "law" is constructed through a nested chain of references in **Keshavan Madhava Menon Vs. State of Bombay AIR 1951 SC 128**, the Court addressed the retrospective operation of Article 13 by recursively interpreting "law in force" through the lens of pre-constitutional legislative instruments and their continuity.

Definition of 'Law' - Article 13, Constitution of India

<u>Recursive Element</u>: 'Law' includes any ordinance, rule, regulation, notification, custom, or usage having the force of law.

The General Clauses Act of 1897 defines each sub-term (e.g., regulation, rule), which may include other subordinate legislation.

Case Law: Keshavan Madhava Menon Vs. State of Bombay AIR 1951 SC 128.

2. In the context of **Article 19(2) to (6)**, which authorizes *reasonable restrictions* on fundamental freedoms, recursion is observed in the interpretive evolution of the term "reasonable." While not explicitly defined in the Constitution, its meaning has developed through judicial precedent, which draws upon constitutional values such as proportionality, necessity, and public interest, for instance, in **Chintaman Rao Vs. State of Madhya Pradesh**, **AIR 1951 SC 118**, the Court adjudged the reasonableness of restrictions through a proportionality lens, thereby recursively reinforcing prior understandings of constitutional permissibility.

'Reasonable Restrictions' – Article 19(2)–(6)

Recursive Use: 'Reasonable' is not explicitly defined; courts rely on earlier precedents, which depend on constitutional values.

#### Case Law: Chintaman Rao Vs. State of MP AIR 1951 SC 118

- reasonableness is judged based on proportionality and public interest.
- 3. The Income Tax Act of 1961 provides a statutory example, where Section 2(31) **defines "person" to include individuals**, Hindu Undivided Families (HUFs), firms, companies, associations of persons (AOPs), bodies of individuals (BOIs), local authorities, and *artificial juridical persons*. Including artificial juridical persons introduces a recursive interpretive challenge, as courts must refer to broader legal doctrines to determine what constitutes juridical personality in **CIT Vs. Sodra Devi, AIR 1957 SC 832**, the Court interpreted "individual" in a contextually recursive manner, drawing upon previous jurisprudence and statutory purpose.

Definition of 'Person' in Income Tax Act, 1961

Recursive Aspect: 'Person' includes individuals, HUFs, firms, companies, AOPs, BOIs, local authorities, and artificial juridical persons.

The definition of an artificial juridical person has broader legal doctrines, referencing back to legal personhood. *Case Law:* CIT Vs. Sodra Devi AIR 1957 SC 832.

4. Another example is the **Basic Structure Doctrine**, laid down in **Kesavananda Bharati Vs. State of Kerala (1973) 4 SCC 225**. The doctrine identifies core features of the Constitution—such as *judicial review*, rule of law, and fundamental rights—as inviolable. However, each feature is not independently static; instead, they recursively define and reinforce one another. Rule of law encompasses judicial review, which protects fundamental rights and embodies the essence of constitutional supremacy. This interpretive interdependence demonstrates how recursive logic stabilizes foundational doctrines while preserving interpretive flexibility.

'Basic Structure Doctrine' – Kesavananda Bharati Case (1973)

Recursive Component: The 'basic structure' includes judicial review, rule of law, and fundamental rights—concepts that define each other.

Recursive Interpretation: The rule of law includes judicial review, and judicial review protects fundamental rights.

Case Law: Kesavananda Bharati Vs. State of Kerala (1973) 4 SCC 225.

5. The application of recursive reasoning is not limited to abstract doctrinal principles. It finds its source in the structural fabric of Indian constitutional and statutory interpretation. Article 12 of the Constitution is a compelling illustration, which **defines the term** "State" to include the Government and Parliament of India, State Legislatures, and "other authorities" within the territory of India or under the control of the Government of India. The recursive dimension arises when courts, in determining whether a particular body qualifies as

"State," examine criteria such as the extent of governmental control or performance of public functions—factors that themselves derive meaning from the constitutional definition of the State—the Supreme Court's decision in **Ajay Hasia Vs. Khalid Mujib Sehravardi (1981) 1 SCC 722** is a landmark where the interpretive methodology relied heavily on syntactic and contextual coherence, mirroring the recursive interpretive framework.

Definition of 'State' - Article 12, Constitution of India

<u>Recursive Element</u>: Article 12 defines 'State' as the Government and Parliament of India, State Legislatures, and "other authorities" within India or under government control.

<u>Recursive Criterion</u>: Courts examine whether a body performs public duties or is under state control—criteria that reference back to the definition of 'State' itself.

Case Law: Ajay Hasia Vs. Khalid Mujib (1981) 1 SCC 722.

#### IV. Disjunctions, Connectives, and Recursive Legal Grammar

The role of disjunctions and logical connectives—such as "and," "or," and "either…or"—in statutory language reflects the grammar of recursive legal reasoning. These connectors enable branching interpretations and semantic layering. A classic example appears in **R.M.D. Chamarbaugwala Vs. Union of India AIR 1957 SC 628**, where the interpretation of "games of skill or chance" hinged on the disjunctive phraseology. The recursive parsing of legal clauses permitted a nuanced distinction between different categories of gaming activities, demonstrating the importance of syntactic structures in statutory interpretation.

These constitutional, statutory, and judicial examples affirm that recursive formulations are not merely linguistic patterns but essential instruments of legal meaning-making. They reinforce coherence, allow layered interpretation, and enable courts to preserve the unity and integrity of the legal system while responding to evolving contexts.

### Conclusion: The Recursive Rhythm of Legal Reasoning

These classical traditions, Mimamsa's syntactical recursion, Nyāya's inferential layering, Vaisheshika's ontological interdependence, and Anvikshiki's reflective cognition—form the recursive reasoning in Indian legal thought. They shaped metaphysical and linguistic analysis and contributed enduring frameworks for layered interpretation, statutory construction, and constitutional adjudication. Far from being abstract theories, these philosophical systems offered early models of structured reasoning that continue to inform legal analysis today, demonstrating India's rich heritage of recursive logic long before its modern formalization in computer science or Western jurisprudence. These philosophical frameworks laid foundational thinking for interpretative reasoning in law.

Recursive structures in law are not merely semantic or structural coincidences. They represent the style of legal reasoning—where interpretation deepens with each referential loop yet finds stability in base statutes or foundational doctrines. These self-referential frameworks offer a layered lens through which the judges, legislators, and scholars decode the law. Whether it is the evolving idea of the State, the interplay of constitutional values, or the hierarchy of legal personhood, recursion helps preserve coherence and adaptability within legal systems. In embracing recursive structures, jurisprudence sustains a system where enriching and anchoring the interpretation is achieved—affirming that its structured logic lies in the complexity of the law.

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