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The Ontological Friction: Decentralised Autonomous Organisations, State-Sanctioned Monopolies, and the Legal Purgatory of Intellectual Property

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The Ontological Friction: Decentralised Autonomous Organisations, State-Sanctioned Monopolies, and the Legal Purgatory of Intellectual Property

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Abstract
Decentralised Autonomous Organisations (DAOs) represent a structurally novel mode of economic and creative organisation borderless, algorithmically governed, and constitutionally indifferent to the territorial logic of state law. Intellectual property regimes, by contrast, are instruments of sovereign will: conditional monopolies granted by the state to identifiable legal subjects in exchange for public disclosure and creative contribution. The collision between these two paradigms generates what this paper terms "ontological friction" a jurisprudential rupture that is not merely procedural but foundational, striking at competing accounts of legal personhood, regulatory legitimacy, and the conditions under which proprietary rights can subsist. Drawing on doctrinal analysis of Indian intellectual property statutes, the theoretical resources of common-pool resource theory, lex cryptographia scholarship, and platform regulation literature, and a comparative examination of four governance domains, this paper argues that DAO-generated intellectual property currently occupies a condition of legal purgatory: formally created, potentially valuable, but incapable of being owned, enforced, or transferred within any existing legal architecture. Resolving this condition demands not incremental statutory interpretation but a deliberate reconceptualization of legal personality, proprietary title, and the scope of the state-sanctioned monopoly in the context of algorithmic governance.

I. Introduction

There is a particular kind of legal crisis that announces itself not through dramatic judicial pronouncements but through the quiet accumulation of unanswerable questions. Who owns the copyright in a software protocol collectively developed by thousands of pseudonymous contributors across a dozen jurisdictions, governed by a smart contract, and administered through token-weighted votes recorded immutably on a public blockchain? Who is the "inventor" when the inventive step was executed autonomously by an algorithm? Who has standing to sue when the organisation asserting the right has no registered address, no human agent, no incorporated legal identity, and no jurisdictional anchor? These are not

speculative hypotheticals. They are the daily legal predicament of Decentralised Autonomous Organisations a growing and economically significant class of digital institutions that intellectual property law, as presently constituted in India and across most jurisdictions, is architecturally incapable of addressing.

The argument advanced in this paper is that this incapacity is not a technical legislative oversight remediable through creative statutory interpretation. It is the surface manifestation of a far deeper structural incompatibility what the paper designates as "ontological friction" between two irreconcilable accounts of how legal authority is generated, legitimised, and sustained. On one side stands the state-centric, positivist model of intellectual property: a system of conditional, territorially bounded monopolies granted by sovereign legislative authority to identifiable legal subjects, premised on the legal intelligibility of the creator as a rights-bearing person. On the other stands the distributed, cryptographically verified model of DAO governance: a normative order whose authority derives not from parliamentary enactment but from the mathematically verifiable consensus of a decentralised network, and whose architecture is constitutively hostile to the kind of identification, registration, and territorial attachment that intellectual property law demands.

When a DAO attempts to claim or enforce an intellectual property right, these two ontologies do not merely diverge; they collide. The result is a condition of legal purgatory a state in which creative and inventive outputs formally come into existence, circulate in commerce, and generate substantial economic value, yet cannot be owned by any legally recognised person, cannot be enforced against infringers, and cannot be transferred or licensed in compliance with any applicable statutory formality. This is not a metaphor. It is a precise doctrinal description of the situation that confronts DAO-generated intellectual property under the Copyright Act, 1957, the Patents Act, 1970, and the Trade Marks Act, 1999, as those statutes currently stand.

II. Methodology

This paper adopts a primarily doctrinal methodology, engaging in close textual analysis of Indian intellectual property statutes specifically the Copyright Act, 1957, the Patents Act, 1970, and the Trade Marks Act, 1999 alongside relevant procedural provisions of the Code of Civil Procedure, 1908. The doctrinal analysis is conducted not merely to catalogue the statutory provisions that DAOs fail to satisfy, but to illuminate the structural assumptions embedded within those provisions: assumptions about authorship, legal personhood, territorial attachment, and the capacity for intentional creative agency that, taken together, constitute the ontological premises of Indian intellectual property law.

The doctrinal analysis is situated within a broader theoretical framework that draws on three scholarly traditions. The first is institutional economics, specifically Elinor Ostrom's work on common-pool resource governance, which

supplies the analytical vocabulary for understanding DAOs as non-state governance institutions rather than mere technical systems. The second is the cyberlaw tradition initiated by Lawrence Lessig and extended into the blockchain context by Primavera De Filippi and Aaron Wright, whose theory of lex cryptographia provides both a description of on-chain normative ordering and a foil against which the limits of purely code-based governance can be measured. The third is the contemporary literature on platform regulation, associated with scholars such as Lina Khan and Julie Cohen, which supplies a critical corrective to idealist accounts of decentralised governance by drawing attention to the concentration of power within nominally distributed systems.

The paper further deploys a comparative sectoral methodology, examining four governance domains utility regulation, internet infrastructure, indigenous water governance, and decentralised finance in which the tension between distributed and centralised governance authority has been previously contested. This comparative dimension is not offered as direct precedent but as a heuristic, illuminating the characteristic pathologies that emerge when legal systems are confronted with distributed legitimacy claims they have not been designed to accommodate. Together, these methodological strands produce an analysis that is simultaneously doctrinal, theoretical, and comparative calibrated to the complexity of a problem that defies resolution within any single disciplinary register.

III. Conceptual Framework

The Institutional Architecture of Decentralised Autonomous Organisations

Any legally rigorous engagement with the DAO problem requires, at the outset, a careful demystification of what a DAO actually is an exercise complicated by the fact that both popular discourse and much academic writing treat DAOs simultaneously as revolutionary governance experiments, speculative investment vehicles, and elaborate software applications. For the purposes of this analysis, a DAO is best understood as an institutional technology: a novel mode of coordinating human and algorithmic action through cryptographic guarantees rather than legal or reputational ones, and through transparent, self-executing code rather than discretionary fiduciary judgment.

Conventional institutional governance whether corporate, associational, or governmental is structured around a fragile architecture of trust. Because agents may act contrary to the interests of those they serve, the traditional legal order has developed an elaborate apparatus of fiduciary duties, disclosure requirements, and civil liability to constrain and correct self-interested behaviour. Every meeting of a board of directors, every annual report filed with a regulatory authority, every shareholder vote ratified by legal counsel represents a partial and imperfect solution to the problem of ensuring that those who exercise power do so in the interests of those on whose behalf they purport to act. This architecture

is fragile because it is mediated entirely by human discretion the discretion of auditors, regulators, and judges and because the mechanisms of accountability are chronically vulnerable to the very capture and evasion they are designed to prevent. A DAO replaces this trust-dependent, legally intermediated architecture with deterministic cryptographic guarantees. Its constitution the rules governing membership, decision-making, treasury management, and the allocation of rights is codified in smart contracts: immutable, self-executing programmes deployed on a public blockchain that automatically execute predefined actions upon satisfaction of specified on-chain conditions. The critical institutional consequence is the elimination of discretion at the point of execution. A smart contract does not interpret, deliberate, or deviate. When the conditions specified in its code are satisfied, it executes. When they are not, it does not. The governance of the organisation, to the extent that such governance is on-chain, is therefore not merely transparent in the sense that its records are publicly accessible; it is mathematically verifiable in the sense that its outcomes are cryptographically provable. Within this architecture, intellectual property creation and management operate through collaborative, token-weighted ecosystems. Contributors commit creative or technical labour to the protocol. In exchange, they receive governance tokens legally ambiguous instruments that function simultaneously as economic incentives, speculative assets, and mechanisms of political franchise. Token holders exercise these instruments to vote on governance proposals, including proposals concerning the licensing, assignment, or enforcement of the DAO's collectively generated intellectual property.

The jurisprudential significance of this architecture is profound and largely unappreciated by the Indian legal literature. The DAO operates as an autonomous normative order: a self-contained legal system whose rules of engagement are transparent, rigorously enforced by code, and constitutively indifferent to the physical location or legal identity of participants. It is, in the vocabulary of legal pluralism, a non-state legal order of a kind that formal legal theory has not previously encountered in this degree of institutional completeness. However, this internal sophistication exists in permanent tension with a fatal structural limitation: the DAO's normative order possesses no external legal currency whatsoever. While a smart contract can execute the transfer of billions of dollars of digital assets within the native ledger instantaneously and verifiably, it cannot petition the Indian Controller General of Patents, Designs and Trade Marks. An algorithmic protocol cannot file an infringement suit in the Bombay High Court. The DAO's architecture, precisely because it is designed to make the external legal system redundant to its internal operations, renders itself legally helpless when it needs that system's protection.

The State-Sanctioned Monopoly: Historical Foundations and Jurisprudential Logic

To understand why the external legal environment is structurally hostile to DAOs, it is necessary to examine the theoretical architecture of the legal regime they seek to access. Intellectual property law is not merely monopolistic in its practical effect; it is unapologetically and deliberately so in its theoretical foundations. The grant of an intellectual property right is the state's conscious decision to manufacture scarcity in an informational domain that is, in the absence of legal intervention, characterised by non-rivalry and non-excludability. A software protocol, once published, can be replicated at near-zero marginal cost by anyone with an internet connection. A patented mechanism, once disclosed, is conceptually available to any competitor. Without the artificial barrier of legal exclusivity, the market for information goods would systematically underinvest in creation, because creators cannot reliably internalise the social value of their contributions. Intellectual property rights correct this market failure by granting creators a temporary, conditional monopoly as the price of public disclosure.

This insight has deep historical roots in the common law tradition. The Case of Monopolies Darcy v Allen, decided in 1602 represents a watershed in the legal history of exclusionary privilege: the court's refusal to uphold a royal grant of monopoly over playing cards on the ground that it raised prices, impaired quality, and undermined the economic welfare of craftsmen established the principle that monopolies require affirmative justification, not merely sovereign will. The Statute of Monopolies of 1624 codified this principle by prohibiting monopoly grants except for genuine inventions and those authorised by Parliament. The crucial doctrinal inheritance from this lineage is not the opposition to monopoly as such, but the insistence that monopoly is a legislative grant that it flows from the sovereign's deliberate choice and carries with it the full apparatus of legislative accountability.

Modern intellectual property law is the structured descendant of this tradition. It is a conditional social contract: the state grants a monopoly, and the right-holder discloses, uses, and eventually surrenders the exclusive privilege to the public domain. What makes this contract possible what gives it legal substance is the requirement of an identifiable counterparty. The state cannot grant a monopoly to no one. It cannot confer exclusive rights upon a borderless, pseudonymous network. It cannot enforce the conditions of the social contract against an entity it does not recognise. Under Indian law, the Copyright Act, 1957, the Patents Act, 1970, and the Trade Marks Act, 1999 are each premised on the existence of an identifiable legal subject an "author," an "inventor," an "applicant" who is either a natural human being or a formally incorporated juridical entity. This requirement is not a procedural technicality; it is the epistemological foundation of the entire system. Legal personality, in the intellectual property context, is not

merely the prerequisite for claiming a right; it is the precondition for the right's legal intelligibility.

IV. Discussion

The Ontological Friction: Two Irreconcilable Legal Epistemologies

The intersection of DAO governance and intellectual property law does not produce a mere policy tension or a correctable statutory gap. It produces an ontological friction a clash between two fundamentally irreconcilable accounts of how normative authority is generated, what constitutes a legal subject, and under what conditions proprietary rights can intelligibly subsist.

The state-centric model of intellectual property operates, at its deepest level, on a series of foundational propositions. Rights flow downward from the sovereign. Legal personality is a concession granted by the state, not a natural attribute of collective organisation. Ownership is traced to an identifiable originating act performed by an identifiable legal subject. Territory is the framework within which rights are enforceable and obligations are imposed. From within this model, an unincorporated DAO is precisely what the law is designed not to accommodate: it has no registered existence, no territorial attachment, no identifiable membership, no legal agent, and no capacity to perform the acts application, assignment, licensing, litigation through which intellectual property rights are exercised and vindicated. The DAO is not merely unrecognised; it is, from the perspective of the state-centric model, unintelligible.

The DAO's internal normative order operates on the opposite premises. Authority flows horizontally from cryptographic consensus. Legitimacy derives not from parliamentary enactment but from the verifiable agreement of network participants. Ownership is established by contribution by the expenditure of creative or technical labour recorded on-chain and is allocated through the token-weighted governance mechanisms of the protocol. Territory is irrelevant because the network exists nowhere and everywhere simultaneously. The rules are not interpreted but executed; disputes are not adjudicated but resolved algorithmically. This is not a deficient version of a legal system; it is a different kind of normative order entirely, operating on different premises and requiring different categories for adequate description.

When a DAO attempts to assert an intellectual property claim when it seeks to register a copyright, resist an infringement, or license its protocol to a commercial partner these two normative systems are forced into direct contact. The collision is not simply procedural. The DAO presents a proprietary claim grounded in its internal logic of contribution and consensus; the legal system responds by asking for credentials legal personality, registered identity, written instruments that the

DAO's architecture is constitutively incapable of producing. The result is not merely that the claim fails. The result is that the claim is not legally cognisable at all. The DAO's intellectual property does not merely go unprotected; it exists, from the perspective of the state, as no one's property. This is the condition of legal purgatory: the creative output is real, the value is real, but the proprietary right is void, suspended in an institutional vacuum that neither the DAO's internal normative order nor the state's legal system can fill.

Automation, Agency, and the Problem of Legal Intentionality

One dimension of the ontological friction deserves particular attention because it is simultaneously the most technically complex and the most legally decisive: the distinction between automation and agency, and the question of whether a DAO can exhibit what might be called legally relevant intent.

Legal systems have, since at least Savigny, drawn a fundamental distinction between two modalities of action that bear on the attribution of rights and obligations. The first is mechanical causation the production of an effect by a physical or algorithmic process without any accompanying mental state directed toward a purposive end. The second is intentional agency action accompanied by a will, a deliberate orientation toward a goal, a capacity to choose among alternatives and bear responsibility for the choice. The entire edifice of intellectual property law, as developed in common law and civil law traditions alike, rests on the second modality. Copyright subsists in a work of "original" authorship because originality connotes the expression of a creative personality; it is, in the language of the European Court of Justice's Infopaq decision and its Indian doctrinal equivalent in Eastern Book Company v D.B. Modak, a "personal intellectual creation." Patent law requires an "inventive step" not merely a novel outcome but a contribution attributable to inventive human intelligence. Even trademark law, which does not require creative authorship, presupposes a trading entity capable of intentionally associating a sign with a commercial origin.

A smart contract has conditions, not intentions. It executes deterministically when specified on-chain events occur; it does not deliberate, exercise judgment, or express a creative personality. The intellectual outputs of a DAO a software protocol developed through collective on-chain governance, an algorithmic artwork generated by a deployed smart contract are not, in any technically accurate sense, the product of the kind of intentional agency that intellectual property law has historically required. This is not merely a conceptual quibble. It is a legally operative distinction that determines whether the preconditions for intellectual property rights are satisfied at the point of creation.

The response sometimes offered that the relevant human intention can be located upstream, in the programmers who wrote the smart contract code or the token-holders who voted on its deployment is seductive but ultimately unavailing. If rights vest in the upstream programmers, the result is individual ownership by software developers, not DAO ownership an outcome incompatible with both the open-source ethos of most DAO ecosystems and the practical reality that DAO codebases are iteratively modified by communities with no stable membership over time. If rights vest in the token-holders as a collective, the result is a form of joint authorship that the Indian Copyright Act's provisions are ill-equipped to accommodate, because the Act's conception of joint authorship presupposes a stable, identifiable co-ownership relationship fixed at the moment of creation a conception entirely at odds with the continuous, fluid, pseudonymous membership of a DAO. The agency problem, in other words, cannot be dissolved by disaggregation; it is reproduced at every level of the analysis.

Token Governance as Pseudo-Democracy: A Critical Appraisal

The intellectual property problem is further complicated by a feature of DAO governance that its advocates tend to celebrate but its critics rightly interrogate: the claim that token-weighted voting constitutes a form of genuine collective decision-making that ought to attract legal recognition as a kind of organisational intent.

Token governance is frequently described in democratic terms. Proposals are submitted, debated in forum threads, and ratified by majority vote a process that, on its surface, resembles the deliberative procedures of an incorporated association or cooperative society. If a DAO's token-holders collectively vote to license a software protocol, it is argued, this decision should be treated as the expressed will of the organisation, sufficient to constitute the kind of organisational intent that licensing requires.

This argument conflates the form of democratic procedure with its substance. Democratic governance, in the legal tradition, is meaningful not merely because it aggregates preferences but because it aggregates preferences on terms of rough equality, through a process that is accountable, transparent, and susceptible to challenge. Token governance systematically undermines each of these conditions. Governance tokens are not distributed equally; they are distributed in proportion to capital contribution, investment timing, and technical sophistication. Early developers and venture capital investors typically hold token concentrations that allow them to determine the outcomes of governance votes unilaterally or in small coalition. The governance of many prominent DAOs including several of the largest decentralised finance protocols is effectively controlled by a handful of addresses holding a majority of outstanding tokens. This is not democracy; it is an algorithmic plutocracy in which the rhetoric of

decentralisation serves to obscure the reality of concentrated power. The legal significance of this observation is considerable. If token governance is, in substance, a mechanism through which large capital holders exercise control over a protocol while distributing liability and regulatory exposure across a nominally diffuse membership, then granting full legal recognition to token-governance decisions including decisions purporting to license or assign intellectual property would be to lend the authority of law to a structure designed to evade its accountability mechanisms. The literature on platform regulation, developed most rigorously by Lina Khan in the antitrust context and Julie Cohen in the information law context, provides the analytical vocabulary for this concern: systems of nominally distributed private power require accountability frameworks calibrated to their actual structures of authority, not their rhetorical self-descriptions.

The Scholarly Literature: Theoretical Resources and Their Limits

The theoretical resources available for understanding the DAO's relationship to formal law are rich but partial, and their limitations are as analytically important as their contributions. Three scholarly traditions are particularly relevant: the institutional economics of common-pool resource governance, the cyberlaw theory of lex cryptographia, and the political economy of platform regulation.

Elinor Ostrom's foundational research on common-pool resource institutions remains the most compelling empirical demonstration that non-state governance arrangements can achieve sophisticated, durable outcomes without either privatisation or centralised state management. Her identification of the design principles characteristic of robust institutions clear boundary rules, collective-choice arrangements, effective monitoring, graduated sanctions, and, critically, recognition by external governmental authorities maps with remarkable precision onto the structural features of well-designed DAOs. Token-gated access operates as a boundary rule; on-chain voting constitutes a collective-choice arrangement; cryptographic staking and slashing mechanisms function as graduated sanctions. The Ostromian framework provides an important theoretical rebuttal to the reflexive assumption that effective governance requires a hierarchical sovereign.

However, the most consequential element of Ostrom's analysis for present purposes is the caveat that DAO advocates routinely omit: successful common-pool resource institutions, in Ostrom's empirical observation, typically require at least minimal recognition by external governmental authorities. The irrigation cooperatives of Valencia, the alpine meadow communities of Törbel, the lobster fishermen of Maine all operated within a state legal environment that, while it did not control their internal governance, recognised their existence, respected their boundary rules, and provided a backstop of legal enforcement for their fundamental entitlements. The current situation of DAOs is characterised by the

total absence of this external recognition. The digital commons they govern is, from the perspective of state law, unenclosed legally open to any external predator willing to invoke the coercive machinery of the state against an entity that cannot respond in kind. De Filippi and Wright's theory of lex cryptographia provides an indispensable description of the on-chain normative order that DAOs instantiate and its relationship to state law. Their central claim that distributed ledgers permit parties to coordinate, transact, and enforce agreements entirely independently of state legal systems, creating a self-contained transnational normative order accurately captures the internal autonomy of well-designed DAOs and the genuine challenge they pose to state regulatory authority.

However, lex cryptographia as a normative programme founders on precisely the problem this paper identifies: it is entirely insufficient when a DAO must interact with real-world assets, resist external predation, or seek the coercive remedies that only a state civil court can provide. Code can govern what happens inside the network. It cannot compel a commercial publisher to cease infringing a protocol's documentation, cannot prevent a competitor from registering a confusingly similar trademark, and cannot enforce a licensing agreement against a counterparty who defaults and disappears into the off-chain world. The limits of lex cryptographia are, precisely, the limits of legal purgatory.

Sectoral Comparisons: Historical Encounters Between Distributed Governance and Monopoly Law

The tension this paper identifies between a distributed, consensus-based governance system and a centralised, state-sanctioned monopoly regime is not without historical precedent, though its technological instantiation in the DAO is genuinely novel. Examining how legal systems have managed analogous tensions in other domains illuminates both the characteristic pathologies of the encounter and the range of responses available.

The regulation of the English and Welsh water industry following privatisation in 1989 offers an instructive illustration of the structural vulnerabilities inherent in relying on formally centralised monopoly structures to accommodate decentralised accountability demands. The privatisation legislation preserved regional monopoly franchises correctly recognising the natural monopoly character of water distribution infrastructure but attempted to inject competitive discipline through comparative performance assessment, multi-regulatory oversight, and mandated information disclosure by regulated entities. The subsequent history of systematic underinvestment, environmental degradation, and concealed regulatory non-compliance by the privatised water companies validated, in vivid empirical terms, the Stiglerian theory of regulatory capture: the combination of information asymmetry and structural dominance allowed regulated monopolists to bend the regulatory apparatus to their private interests.

The lesson for DAO regulation is sobering: formal legal structures cannot compensate for fundamental information asymmetries, and governance systems that rely on regulated entities to generate accurate performance data are predictably vulnerable to manipulation. For DAOs, who's on-chain data is technically transparent but whose interpretation requires sophisticated technical literacy, this represents a genuine and underappreciated regulatory risk.

The governance of ICANN over the Domain Name System presents a more ambiguous case study a global institution managing what is, in functional terms, a monopoly over critical digital infrastructure, operating through a multi-stakeholder model designed to replicate the legitimacy mechanisms of democratic governance without recourse to sovereign authority. ICANN's technical achievements are genuine: it has successfully coordinated the global Domain Name System across political boundaries and commercial rivalries for more than two decades. However, critics from Milton Mueller to the scholars of the Internet Governance Project have persistently identified its structural legitimacy deficits the systematic advantage it extends to technically sophisticated actors over ordinary users, the weakness of its accountability mechanisms, and the due process concerns associated with its dispute resolution procedures. The ICANN experience suggests that multi-stakeholder decentralised governance can effectively manage global coordination at a technical level while simultaneously failing to replicate the substantive legitimacy and rule-of-law guarantees that state-sanctioned authority, for all its inefficiencies, continues to provide.

The most direct precursor to the DAO intellectual property crisis is the emergence of decentralised finance the family of smart-contract-based protocols that replicate the economic functions of banks, exchanges, and clearing houses without identifiable central intermediaries. The U.S. Commodity Futures Trading Commission's enforcement action against the Ooki DAO represents the most consequential judicial engagement with the liability question to date. Confronted with an entity that had no legal personality, no fixed address, and no identifiable management, the court classified the DAO as an unincorporated association and held that governance token-holders who had participated in protocol votes were individually liable for the regulatory violations that resulted. Whatever the doctrinal merits of this classification and they are, as Part V of this paper demonstrates, deeply contestable the case illustrates with brutal clarity the default response of a legal system that lacks a nuanced framework for recognising distributed governance: it will retrofit the most available punitive doctrine, imposing liability without adequate attention to the degree of participation, knowledge, or control of the individuals affected. This is not merely an American problem. It is the predictable consequence of any legal system that allows the ontological friction to persist unaddressed.

V. The Condition of Legal Purgatory: Synthesis and Reform Trajectory

The analysis conducted in the preceding sections converges on a diagnosis that is, simultaneously, a theoretical proposition and a practical prescription. DAO-generated intellectual property currently exists in a condition of legal purgatory. This designation is not rhetorical; it describes a precise doctrinal state of affairs. Creative and inventive outputs software protocols, generative artworks, technical standards, branded identifiers come into existence through the collaborative labour of DAO communities. They circulate in the digital economy, command substantial commercial value, and attract the attention of infringers and commercial exploiters. Yet they cannot be owned by any legally recognised person, because the DAO that created them is not a legal person and its token-holders hold no statutory title. They cannot be enforced by any identified rights-holder, because the standing requirements of civil procedure demand a plaintiff whose legal existence the court can verify. They cannot be transferred by assignment, because the formalities of the Copyright Act, 1957 which require written instruments signed by identifiable legal parties cannot be satisfied through on-chain governance votes authenticated by pseudonymous cryptographic keys. They cannot be licensed on terms that a counterparty can rely upon, because the entity purporting to grant the licence has no legal capacity to do so. The property exists; the right does not. This is legal purgatory.

The condition is not merely inconvenient for DAO participants. It is dangerous for the broader intellectual property ecosystem. When valuable creative and inventive outputs exist without legal owners, they are available for capture by any party willing to go through the formality of registration including infringers who had no part in their creation. The open-source protocols developed by DAO communities are particularly vulnerable to this form of predatory registration, whereby a commercial actor registers the trademark in the distinctive branding of a community project, or files a patent on a protocol mechanism that the DAO community had treated as prior art freely available to all. Legal purgatory, in this respect, does not merely fail the DAO; it actively subverts the public interest objectives that intellectual property law is designed to serve.

The resolution of this condition cannot be achieved through interpretive ingenuity alone, though the Indian judiciary's tradition of purposive constitutional interpretation offers resources that a creative court might deploy. The structural incompatibilities identified in this paper the absence of legal personality, the inapplicability of authorship and inventorship requirements, the impossibility of satisfying statutory assignment formalities through on-chain mechanisms are not gaps in the legislation. They are consequences of foundational onto logical premises that the legislation does not question, because it was drafted before the institutional reality of the DAO existed. Addressing them requires deliberate legislative intervention: a statutory framework that recognises DAOs as a new

category of legal person for specific, defined purposes; that adapts the ownership and assignment provisions of the copyright and patent statutes to accommodate the realities of collective, algorithmically mediated creation; and that establishes a liability regime calibrated to the actual degree of participation and control exercised by different classes of DAO participants rather than the blunt instruments of partnership law or agency doctrine.

The comparative experience of jurisdictions that have begun this legislative work Wyoming's recognition of DAOs as limited liability companies, the Swiss civil law's adaptation of the association form to accommodate decentralised governance, the European Union's Markets in Crypto-Assets Regulation's explicit engagement with distributed governance structures is instructive without being determinative. Each of these responses reflects the particular institutional resources and regulatory traditions of its jurisdiction. What they share is the recognition that the ontological friction cannot be managed by ignoring it, and that the longer it is left unaddressed, the more disruptive and expensive the eventual reckoning will be.

For India, the case for legislative action is particularly pressing. The Indian digital economy is among the world's fastest-growing, and DAOs are an increasingly significant organisational form within it. Indian entrepreneurs and developers participate extensively in global DAO ecosystems, contributing creative and technical labour to protocols that generate substantial commercial value. Yet the Indian legal system currently offers them neither protection nor clarity. Their contributions exist in legal purgatory, vulnerable to appropriation, incapable of enforcement, and excluded from the innovation incentive structures that intellectual property law is designed to provide. A legislative framework for DAOs in the Indian context what this paper's associated dissertation proposes as a Limited Liability DAO model would need to confront, sequentially and in their full complexity, the questions of legal personality, proprietary title, assignment formalities, and civil liability that the present analysis has identified as the core doctrinal fault lines.

VI. Conclusion

This paper has argued that the relationship between Decentralised Autonomous Organisations and intellectual property law is not one of mere incompatibility but of ontological friction: a collision between two fundamentally different accounts of legal personhood, normative authority, and the conditions under which proprietary rights can be said to exist. The state-sanctioned monopoly model of intellectual property demands an identifiable legal subject, territorial attachment, and the kind of human intentional agency that both the Copyright Act's requirement of authorial originality and the Patents Act's requirement of inventive human contribution presuppose. DAO governance, precisely in its most

innovative and valuable features its pseudonymity, its borderlessness, its algorithmic execution, its collective and continuously shifting membership systematically refuses to satisfy any of these demands.

The scholarly literatures engaged in this paper each illuminate a different facet of this friction without fully resolving it. Oestrum's institutional economics demonstrates that non-state governance can be genuinely effective but requires external recognition to be durable. De Filippi and Wright's lex cryptographia captures the internal sovereignty of on-chain normative orders but founders on their external legal impotence. The platform regulation tradition correctly identifies the concentration of power within nominally decentralised structures but does not yet supply an adequate framework for the specific intellectual property problems that result.

What emerges from this convergence is a thesis: DAO-generated intellectual property exists in a condition of legal purgatory that is simultaneously dangerous to innovators, destructive of public interest values, and symptomatic of a broader institutional failure to adapt the premises of property law to the realities of algorithmic governance. Addressing this failure is not merely a matter of updating statutory definitions or amending procedural rules. It requires a deliberate jurisprudential choice a decision about whether the state-sanctioned monopoly model can accommodate a new kind of legal subject whose identity, location, and creative agency are distributed across a global network of cryptographic participants.

The answer to that question will shape not only the fate of individual DAO communities but the capacity of Indian intellectual property law to remain a functional engine of innovation in a digital economy whose organisational forms are evolving faster than its legal frameworks. The present paper has established the theoretical foundations of that inquiry. The doctrinal examination of its specific implications for legal personality under the Code of Civil Procedure, for proprietary title under the copyright and patent statutes, and for civil liability under the frameworks of partnership and tort law constitutes the analytical task of the larger work of which this paper forms the opening argument.

Biblography

Cases:

1. Darcy v Allen (Case of Monopolies) (1602) Noy 173; 74 ER 1131
2. Eastern Book Company v D.B. Modak (2008) 1 SCC 1
3. Commodity Futures Trading Commission v Ooki DAO, No. 22-cv-04762 (ND Cal 2023)
4. Shreya Singhal v Union of India (2015) 5 SCC 1

Statutes:

1. Copyright Act, 1957 (No 14 of 1957) (India)
2. Patents Act, 1970 (No 39 of 1970) (India)
3. Trade Marks Act, 1999 (No 47 of 1999) (India)
4. Code of Civil Procedure, 1908 (No 5 of 1908) (India)
5. Companies Act, 2013 (No 18 of 2013) (India)
6. Statute of Monopolies, 1624 (21 Jac I c 3) (UK)
7. Wyoming Decentralised Autonomous Organisation Supplement, Wyo Stat Ann § 17-31-101 et seq (2021)
8. Regulation (EU) 2023/1114 on Markets in Crypto-Assets (MiCA)

Secondary Sources:

1. Cohen JE, Between Truth and Power: The Legal Constructions of Informational Capitalism (OUP 2019)
2. De Filippi P and Wright A, Blockchain and the Law: The Rule of Code (Harvard UP 2018)
3. Hadfield GK and Weingast BR, 'Law Without the State: Legal Attributes and the Coordination of Decentralized Collective Punishment' (2013) 4 Journal of Legal Analysis 3
4. Khan LM, 'Amazon's Antitrust Paradox' (2017) 126 Yale Law Journal 710
5. Lessig L, Code and Other Laws of Cyberspace (Basic Books 1999)
6. Mueller M, Networks and States: The Global Politics of Internet Governance (Polity 2010)
7. Ostrom E, Governing the Commons: The Evolution of Institutions for Collective Action (CUP 1990)
8. Posner RA, 'Natural Monopoly and Its Regulation' (1999) 21 Stanford Law Review 548
9. De Sousa Santos B, Toward a New Legal Common Sense (2nd edn, Butterworths 2002)
10. Stigler GJ, 'The Theory of Economic Regulation' (1971) 2 Bell Journal of Economics 3
11. Wright A and De Filippi P, 'Decentralized Blockchain Technology and the Rise of Lex Cryptographia' (SSRN Working Paper, 2015)

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