

Split-Domain Cognition in Urban Planning and Environmental Impact Assessment

Canonical variant. Version 1.0, April 2026.

Preface

About this document. This is a domain-specific variant of Split-Domain Cognition, addressed to urban planning and Environmental Impact Assessment. It examines the EIA as an approval-carrying artefact in which descriptive observations are reliably buried beneath verdicts that look like findings, and traces the same collapse upward into the planning-authority decision that the EIA accompanies. The variant grounds the argument in specific Indian sites — the Sabarmati riverfront, the development around the Statue of Unity, the GIFT City zone, coastal regulation conflicts in Mumbai and Goa, tribal-and-forest-land contests around major infrastructure. Its philosophical underpinning draws on James C. Scott (legibility and simplification), Ramachandra Guha (Indian environmentalism), Henri Lefebvre (production of space), and Jane Jacobs (planning and street-level reality).

Where this sits in the corpus. The canon home is splitdomaincognition.org. The variants index is at [/variants/](#); this variant in particular at [/variants/urban-planning-and-eia/v1/](#). The principle this variant interprets is articulated long-form in *Split-Domain Cognition* and short-form in *A Principle, Not a Pattern*. The protocol by which this variant was derived is at [/derivation-protocol-v1/](#).

Authority and version. Canonical, v1.0. April 2026. The website is the source of record. If this PDF and the website disagree, follow the website.

Use. Openly citable. See [Governance](#) for the one-person canon and how variants are admitted.

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Opening

An Environmental Impact Assessment (EIA) is a legally mandated document that sits between a proposed project and the state's permission to build it. Indian planning law, like the laws of many jurisdictions, requires that a project of significant scale be preceded by an EIA that describes the site, assesses the project's likely impacts, and recommends mitigation. The document's public self-image is scientific — a report in which neutral experts examine the land and the proposal and produce an evidence-based judgement. The document's actual structure, examined carefully, is an approval-carrying artefact whose descriptive base is buried beneath verdicts that look like findings. The collapse is not the failure of any individual consultant. It is the genre's institutional shape.

The urban planning process around an EIA is the larger instance of the same pattern. A planning authority receives a project proposal. The authority is meant to examine the proposal against the law (the Development Control Regulations, the Master Plan, the environmental statutes, the Coastal Regulation Zone notifications where relevant, the tribal-and-forest-land protections where applicable). The authority's examination should produce a verdict, with the verdict traceable to the law and to the facts of the site. In practice, the verdict is bundled inside a document whose structure carries approval without exposing the reasoning that produced it. Applied to the development landscape of Indian cities — Ahmedabad's Sabarmati riverfront, the expansions around the Statue of Unity, the GIFT City zone, the coastal regulation violations in Mumbai and Goa, the tribal displacement debates around major infrastructure — the collapse has political consequences that affect what the cities become.

The language work in this domain

The language work in this domain is the literal description of the site and of the proposed project. The site description consists of: the ecological inventory (species present, habitat quality, hydrological conditions, soil composition, groundwater table, climate regime); the social survey (who lives there, for how long, in what relationship to the land, with what recognised rights); the land-use history (what the land has been used for, who has used it, under what legal or customary regime); the cultural context (sacred sites, ritual uses, community narratives); and the physical-environmental baseline (air quality, water bodies, noise, light). The project description consists of: what will be built, on what footprint, using what materials, drawing on what resources, discharging what outputs,

employing how many people doing what, and displacing how many people from what prior uses.

Good language work in this domain is literal. It uses plain nouns and plain verbs. It does not use *significant, minor, limited, acceptable, minimal, adequate, satisfactory, commensurate*. Those words do judgement-work against unstated thresholds while appearing to describe. A literal site description says "twelve hectares of scrub forest, two seasonal streams, a reported population of 400 individuals from the Bhil community with documented land-use claims going back three generations." It does not say "an area of limited ecological value with minor community presence." The first sentence can be checked, contested, or revised by further observation. The second has already closed the question.

The language layer also includes community voice. Consultations with the community should be recorded in participants' own words, in their own languages, preserved as transcripts rather than as summaries. The summarising act is the judgement move; keeping the voice literal keeps Layer 1 intact. In Indian planning practice, community consultation is often summarised by the consultant drafting the EIA, and the summary carries the consultant's interpretation forward without marking it. A consultation recorded verbatim would allow a court or a community member to return to what was actually said.

Language work alone is insufficient. Even the most thorough site description does not, by itself, produce a permit decision. The description makes the facts available; it does not tell the planning authority whether the facts meet the thresholds the law specifies. Closure requires the judgement layer — the law and the ecological and social framework that defines what counts as acceptable impact. Without the judgement layer the description sits as a report that the authority can ignore, selectively quote, or summarise into approval. The discipline of SDC in this domain therefore does not end at producing good descriptions. It requires the description to be held against an explicit rubric, and the application of the rubric to be a separate and contestable step.

The judgement work in this domain

The judgement work is the impact verdict and the permit decision. The rubric is the law (the Environment Protection Act 1986, the EIA Notification 2006 as amended, the Forest Conservation Act 1980, the Biological Diversity Act 2002, the Wildlife Protection Act 1972, the relevant state-level planning and land-use regulations, the Coastal Regulation Zone

notifications, the tribal-land protections under PESA and FRA), plus ecological principles from established science (habitat connectivity requirements, threshold species counts, cumulative-impact analysis), plus community-consent frameworks (the requirement of free, prior, and informed consent where tribal communities are affected, the Gram Sabha's role under PESA, the public-hearing requirements under the EIA Notification). The rubric is explicit in principle — it is written down in statute and guideline — but its application in any given case is rarely as explicit as its existence would suggest.

The rubric specifies thresholds: what levels of impact are permissible, where, under what conditions, with what compensatory action. It specifies procedures: which authority decides which class of project, what public consultation is mandatory, what documentation must be produced, what appeals are available. It specifies exclusions: what kinds of projects cannot be permitted regardless of mitigation (certain activities in protected areas, on forest land, in coastal regulation zones, on tribal-community-held land without consent). A permit decision that is faithful to the rubric is one that cites the specific thresholds, applies them to the specific facts of the site, and shows the reasoning by which the verdict follows.

Most EIA-based permit decisions in India do not operate this way. The rubric exists but the decision does not explicitly cite it. The verdict appears in the executive summary as a conclusion: *No significant adverse environmental impact is anticipated; the project may proceed subject to the mitigation measures proposed.* The sentence carries the verdict; the rubric is not visible in it; the facts of the site are compressed into the adjective *significant* without showing which threshold *significant* was measured against. The judgement layer has been collapsed into the description layer, and the description layer has been summarised into the verdict.

The collapse, with examples

The EIA and planning genre institutionalises specific rhetorical moves that carry the collapse:

"The site does not contain significant biodiversity." *Significant* is a legal term — significance is defined by thresholds in statute and guideline. Used in an EIA sentence it appears ecological. The reader cannot tell whether the consultant is reporting a finding (applying the statutory threshold to a survey) or issuing a verdict (claiming the finding without applying the threshold). In practice the sentence usually means: the consultant's

survey found species, but the consultant has decided the species do not cross the threshold, without showing the threshold.

"The impact is limited." *Limited* compared to what? No threshold stated. The reader cannot contest *limited* because no standard is visible. The word does verdictive work while appearing descriptive.

"Mitigation measures will reduce impact to acceptable levels." A predictive claim dressed as description. The consultant is claiming that future mitigation (not yet implemented) will produce a result (not yet measurable) that is *acceptable* (threshold unstated). Three verdicts fused inside one sentence.

Site classification as "degraded" or "greenfield". The classification determines what the law permits. A "degraded" site is subject to lower protections; a "greenfield" site triggers full impact review. The classification is presented as an ecological description. It is often the outcome of the consultant's judgement, which means the first decision in the EIA is already the permit-determining decision, hidden in a category name.

"Community consensus achieved." A political verdict presented as an empirical finding. The public consultation was conducted; most participants did not object in the recorded meeting; therefore consensus. The absence of recorded objection is reported as presence of consensus. The framework — what constitutes consensus, whether consent was informed, whether affected communities were present in meaningful numbers — is invisible.

The executive summary as approval artefact. The EIA's executive summary is the document most readers, including members of the expert appraisal committee, spend time with. The summary is structured to carry the verdict. The descriptive base sits in technical appendices that most readers do not open. The collapse is architectural: the document's form produces the verdict even before the reader engages with the evidence.

Developer-commissioned EIAs. Indian practice allows the project proponent to commission the consultant who prepares the EIA. The commercial relationship colours the document without being marked in the document. A consultant whose future work depends on producing EIAs that get approved has structural reasons to produce EIAs that collapse the layers in favour of approval. The collapse and the commercial relationship reinforce each other.

"The precautionary principle has been applied." A framework-application claim made without showing the application. The sentence appears to invoke a legal principle; it

functions as a verdict that the project does not require refusal. The reader cannot reconstruct how the principle was applied because the application is not shown.

Cumulative-impact analysis replaced by project-specific review. A project's impact may be limited in isolation but substantial when combined with neighbouring projects. The law requires cumulative-impact analysis. The EIA genre routinely does project-specific review and calls it cumulative. The substitution is the collapse operating at the boundary of the project — what is *this project's* contribution is allowed to stand in for what is *this project plus everything around it*.

Each of these moves produces the same result. The permit-determining judgement is hidden inside the description, and the description is hidden inside the summary. A reader encountering the summary receives a verdict; the rubric and the facts that produced the verdict are both obscured. This is not deception by individual consultants. It is the genre operating as it has been institutionalised.

The cost of the collapse

Several costs follow from the collapse becoming the genre's structural shape.

Public cannot contest EIAs. A citizen or community member reading an EIA summary encounters a verdict. To contest the verdict, they must go to the appendices, identify which observation supports which judgement, identify which threshold the judgement depends on, and argue that the threshold was misapplied or the observation inadequate. The work is beyond what most citizens can undertake. Public consultations produce few substantive objections, not because the project is unobjectionable, but because the form of the EIA does not expose a contestable surface.

Courts cannot audit. When an EIA is challenged in the National Green Tribunal or a High Court, the court must parse the document as though it were scientific evidence. The court is asked to accept or reject findings that are already verdicts. Because the rubric and the facts are not separated, the court's review is less a judicial check on permit decisions and more a literary reading of the EIA's rhetoric. Some NGT decisions do excellent work anyway; the structural difficulty is that they are doing the separation the EIA should have done.

Ecological and social harm passes as minor. The cumulative effect of many EIAs in which "significant" means "not significant per our implicit threshold" is that significant

harm is repeatedly certified as minor. The Sabarmati riverfront project's ecological and social costs (displacement of settlements, loss of river ecology, channel narrowing with flood implications) are a case where the EIA-level verdict of "limited impact" is contestable against a rubric that would have said otherwise. The Statue of Unity's construction and the surrounding tourism expansion involved land acquisition from tribal communities in ways that a rubric-visible assessment would have scrutinised. GIFT City's aquifer extraction and coastal modifications fall in the same category. None of these outcomes would have been prevented by SDC alone; the collapse is one among several mechanisms. But the collapse is a structural contribution that makes each of them easier to authorise.

Planning authority drifts toward approval. An institution whose document format carries approval will drift toward approval over time. The format rewards approval and punishes refusal (a refusal requires the consultant to write a more carefully contestable document; an approval can proceed through the genre's standard phrasing). Over decades this drift has produced a planning environment in which refusals are rare, conditional approvals are common, and the "conditions" are frequently not monitored. The collapse is the drift's structural enabler.

Communities become objectors rather than parties. An affected community in the Indian EIA process is positioned as a stakeholder whose objections are heard at the public hearing and considered by the expert committee. The position is formally respectful and substantively marginal. The community cannot contest the verdict because the verdict has been hidden inside the description; they can only contest the conditions of their consultation. The architectural cost is that communities become objectors to a finding rather than parties to a judgement. A rubric-visible planning process would make them parties — their interests would be located explicitly in the framework, and they would be able to contest the application of the framework to their case.

Developer capture is institutionally invisible. When the commercial relationship between developer and consultant is inside a document that hides its judgement layer, the capture is invisible in principle. To show the capture, a critic has to reconstruct the rubric the EIA should have used, apply it to the facts the EIA reports, and show that the verdict the EIA issues is unreachable by faithful application. This is the work of an investigative journalist or an expert witness in court. It is not the work an EIA's ordinary reader should be obliged to do.

India-specific: the federal-and-state planning machinery cannot learn from itself. Individual EIAs produce individual decisions. An institutional learning loop — what thresholds have been applied, what outcomes resulted, which mitigations worked —

requires that past decisions be auditable. Because the decisions are not auditable in the sense SDC requires, the machinery does not learn. Each EIA is written as though it were the first; the institution does not build a memory of which applications of which rubric to which kinds of site have produced which kinds of outcome.

The separation, in this domain's language

Applying SDC to EIA and urban planning means restructuring the genre so that description, framework, and verdict live in separate documents, produced by distinct parties, read in sequence.

Layer 1 — site description (language work). A document that presents the site in literal terms. Ecological inventory with methodology, dated observations, photographs, and raw data appendices published as accessible files. Social survey with community-member quotes in participants' own languages, preserved verbatim, with translated parallels. Land-use history with documentary sources. Cultural context with community-held narratives preserved in community voice. Physical-environmental baseline with instrument data and timestamps. The document does not use *significant*, *minor*, *limited*, *acceptable*. It uses plain nouns and plain verbs. It is produced by a party whose commercial relationship to the project is disclosed or non-existent. It is published in advance of any judgement being issued, in forms accessible to non-expert readers, in the local languages of affected communities.

Layer 2 — public rubric (judgement work). The framework against which the site description is assessed. The applicable laws with their specific thresholds cited, the ecological principles with their literature basis, the community-consent requirements with their procedural specifics. The rubric is public, stable between cases, and revisable only as a public act. Applied to a specific Layer 1 description, the rubric produces binary determinations on each threshold: does the observation cross this threshold, yes or no, with the reasoning shown. The rubric is not a document the consultant drafts for this project; it is the standing legal and ecological framework the consultant is applying.

Layer 3 — verdict narration. A document that references Layer 1 and Layer 2, shows which thresholds were crossed and which were not, and issues the verdict that follows. The document is readable. Each claim in the document traces to either Layer 1 (observation) or Layer 2 (framework). The verdict's form is: "Given the observations recorded in the site description (Layer 1), and given the applicable framework (Layer 2),

we find that thresholds A, B, and C are crossed and thresholds D, E, and F are not. The permit question therefore resolves as follows." The verdict is contestable at any layer independently: a challenger may contest an observation (Layer 1), contest the rubric's application (Layer 2), or contest the inference drawn (Layer 3). Each kind of challenge is distinct and addressable.

Held apart, the three layers produce a planning process that can be audited, challenged, and learned from. Communities can see the framework that their interests are being assessed against. Courts can check whether the rubric was applied faithfully to observable facts. Institutions can accumulate knowledge across cases because each case leaves a readable record of which rubric was applied to which facts with what outcome. The result is not necessarily fewer approvals or more approvals — it is more contestable approvals and more contestable refusals. The quality of the planning process becomes inspectable.

Philosophical grounding

The SDC move in this domain inherits from four older critical traditions.

James C. Scott's legibility. Scott's *Seeing Like a State* (1998) argued that modern states simplify the phenomena they govern into categories that the state can read, and that the simplifications frequently fail because they omit what they cannot see. EIA categories — *degraded land*, *significant biodiversity*, *affected population* — are state legibility moves. Scott's argument is not that states should stop simplifying; it is that the simplifications should be visible as simplifications, and that the governed should be able to see what the categories exclude. SDC is the architectural form of Scott's methodological demand: show the category, show the observation, show where one departs from the other.

Ramachandra Guha's Indian environmentalism. Guha's writing (*Environmentalism: A Global History*, *The Unquiet Woods*, *Gandhi Before India*) distinguishes "full-stomach" environmentalism (a conservation ethic rooted in affluent distance from nature) from "empty-belly" environmentalism (the environmentalism of people whose daily livelihoods depend on ecological conditions). The distinction is load-bearing for the EIA domain in India, because most Indian EIAs are produced in a full-stomach register — they assess ecological impact as though the humans affected were independent of the ecology. Guha's point is that they are not. Empty-belly communities are in direct dependency on the land being assessed. The SDC separation, with community voice preserved verbatim

in Layer 1 and community-consent requirements made visible in Layer 2, is one way to restore the empty-belly register to the assessment.

Henri Lefebvre's production of space. Lefebvre's *The Production of Space* (1974) argued that space is socially produced — it is not a neutral container for human activity but the outcome of political, economic, and cultural processes. Applied to planning, Lefebvre's argument undermines the pretension of a neutral site description. Any site is already layered with social meaning; "describing" the site without acknowledging the layering hides the layering under the guise of observation. SDC does not solve Lefebvre's problem, but it creates the structural space for the layering to be visible. Community voice at Layer 1 is the beginning of that visibility.

Jane Jacobs and the mismatch between plan and street. Jacobs's *The Death and Life of Great American Cities* (1961) argued that planners routinely misdescribe the cities they plan because they read them from above rather than from the street. The street-level description is not just a different level of detail; it is a different object, with emergent properties the planner's description cannot capture. Applied to EIA, Jacobs's argument says that the site as the consultant sees it and the site as the community lives it are different objects, and a planning process that privileges the consultant's object over the community's has made a decision that is not rationally defended. SDC's Layer 1 — thick, multi-voiced, preserved in plain language — is a move toward Jacobs's demand.

The worth-is-not-hierarchical argument

(`/home/prayas/Dropbox/personal_projects/gabor.mate/worth-is-not-hierarchical.md`) has a specific application in this domain as well.

The EIA genre routinely ranks the worth of affected parties — the developer's interest against the community's, the project's economic value against the land's ecological value, the broader "public interest" against the specific claim of a tribal group. These rankings presuppose a common unit that does not exist. The worth argument does not dictate a particular permit decision; it does refuse the rhetorical move by which the EIA claims to have balanced interests that were never commensurable to begin with. A faithful Layer 2 rubric in this domain would refuse commensurability claims and would instead apply specific thresholds to specific kinds of impact, without pretending to aggregate them into a single ranking.

Relationship to Koher output

The urban-planning variant does not yet have a tool landing in Koher. Its relationships are contextual and prospective.

Ahmedabad as living context. Prayas lives in Ahmedabad. The Sabarmati riverfront, the Riverfront Development Corporation's planning record, the ongoing land-use transitions around GIFT City, and the legacy of the 2002 urban restructuring are all within daily view. The variant is not a distant theoretical contribution; it addresses a planning landscape Prayas is inside.

CEPT teaching history. Prayas taught at CEPT University in 2012 and 2013. CEPT is one of India's principal planning and architecture schools, with direct links to the planning consultancies that produce EIAs for large projects. The variant could be taught as part of a CEPT planning curriculum, either directly by Prayas or by collaborators, and could influence how a new generation of planners approaches the form.

Potential Level B partnership. The process.md engagement model permits a domain partner (a planning researcher, an environmental-law organisation, a community-impact advocacy group) to collaborate with Koher on applying SDC to a specific planning case. Candidate partners include the Centre for Policy Research (Delhi), the Centre for Science and Environment, organisations in the Environmental Justice Atlas network, and individual researchers at CEPT, TISS, and Azim Premji University who work on urban planning and ecological governance. The variant is the conceptual artefact; a Level B collaboration would produce the process deliverables (Domain Map, Language Instrument, Rubric, Narration, Audit Protocol) for a specific site or regulatory regime.

Potential grant angle. The variant is a plausible framing for a methodology grant targeting urban governance or environmental policy research. ICSSR's Major Research Project scheme, SPARC international collaborations with Dutch or German planning-research institutions, and certain FICA-adjacent art-and-ecology grants would read the variant as a methodological contribution rather than as an advocacy piece. Any grant effort here should be paired with a PhD-holding co-PI from planning, ecology, or environmental law, consistent with the broader methodology-funding pattern documented in [split-domain-cognition/methodology-funding.md](#).

The Murmur Engine as precedent. The Murmur Engine (FICA 2026–27 submission, 11 April 2026) is an SDC instance in public art — a machine placed in public space that refuses to issue verdicts and renders its hesitation ambient. The urban-planning variant is the political sibling of that artwork. Both argue that machines and institutions in public space should render their judgement layer visibly rather than hiding it inside confident

outputs. The artwork makes the argument experientially; the variant makes it programmatically.

What this variant makes possible

A **vocabulary becomes available** for critics of specific EIAs and planning decisions to name what is wrong without resorting to either ad hominem critique of consultants or generalised anti-development rhetoric. The problem is structural. The genre carries the verdict. A critic who says "this EIA does not separate its description from its judgement, and therefore its verdict cannot be audited" is making a different argument from "this EIA is biased toward the developer". The first argument is stronger because it identifies the structural mechanism; the second argument is weaker because it relies on imputing motive.

A **methodological reform becomes conceivable** at the level of regulation. The EIA Notification could, in principle, be amended to require that site description, framework application, and verdict be produced as separate documents by distinct parties, with each layer open to challenge independently. Such a reform would not be politically easy and is not the work of this variant. But the variant makes the reform describable, which is a precondition to its being advocated.

A **teachability becomes possible** at CEPT and other planning schools. The current planning curriculum includes courses on EIA and on environmental governance. Those courses typically do not name the collapse. A curriculum that taught the three-layer separation as a professional competency — that taught future planners to author EIAs in separable layers — would produce practitioners who could not easily operate inside the current genre because the genre would feel architecturally wrong to them. Over time, a generation of such practitioners would change the genre.

A **research agenda becomes legible** for scholars working on Indian urban planning and environmental governance. The SDC-framed research question — how does the separation of layers, or its absence, correlate with planning outcomes across cases — is empirical and answerable. A Level B collaboration could generate the case studies that make the empirical question answerable.

The variant does not argue that planning should become more technocratic or less political. Planning is political by its nature; every permit decision distributes benefits and burdens across parties with unequal power. The argument is that the political distribution

should happen where political distribution happens — in the authoring of Layer 2, in the decision to weight the law's thresholds one way or another — and not in the descriptive layer, where the political work currently hides. Separating the layers does not remove politics from planning. It makes the politics visible. That is the variant's contribution.

Version 1.0 — 16 April 2026. Read `./sdc.md` and `README.md` before working on this variant. Stake: Prayas lives in Ahmedabad (Sabarmati riverfront, GIFT City, Statue of Unity all within the regional planning landscape); CEPT teaching history (2012-2013); no tool landing yet — prospective Level B collaboration with planning/ecology research partner; paired politically with The Murmur Engine's public-art SDC argument.