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Climate Exit: Infrastructural Secession, the Shared-Vulnerability Premise, and the Future of Climate-Era Human Rights Obligations

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ABSTRACT
Climate era human rights obligation depends on a mechanism it has never had to defend: that the persons capable of influencing environmental policy remain exposed to the harms that policy addresses. This article names that mechanism the shared vulnerability premise and asks whether it can survive a documented trajectory in which private wealth increasingly purchases durable infrastructural independence from shared environmental risk. Using a stipulated scenario of complete infrastructural self-sufficiency as an analytical device, the article reconstructs the doctrinal premises of progressive realisation and the right to a healthy environment, builds a legal test for identifying what it terms infrastructural secession from the theory of cumulative enclosure, tests the resulting framework against the strongest available objection that private adaptation is a lawful exercise of property and liberty no human rights framework could restrict, and specifies the positive obligations and enforcement architecture that follow once secession is identified. The article argues that existing scholarship on climate apartheid, vulnerability theory, and enclosure has diagnosed the phenomenon this article addresses but has not translated that diagnosis into doctrine, and undertakes that translation across a single sustained argument.

Keywords: *Climate Exit; Infrastructural Secession; Shared Vulnerability; Progressive Realisation; Enclosure; Economic Social and Cultural Rights.*

1. Introduction

Every legal duty to act on a shared harm assumes something about who bears it. Article 2 of the International Covenant on Economic, Social and Cultural Rights obliges states to take steps, to the maximum of their available resources, toward the progressive realisation of the rights it recognises, an obligation whose practical force has always depended on the political process that allocates those resources being answerable, in some meaningful sense, to the population the harm affects.[1] This article asks what happens to that obligation once the persons most able to influence the political process are no longer part of the population that bears the harm at all.

The question follows a documented trajectory rather than a hypothetical curiosity. The United Nations Special Rapporteur on extreme poverty and human rights warned in 2019 that an excessive reliance on the private sector to manage the consequences of climate change risked producing what he termed a climate apartheid, in which the wealthy pay to escape overheating, hunger and conflict while the rest of the world is left to suffer, citing as an early illustration the protection Goldman Sachs afforded its own headquarters during Hurricane

[1]International Covenant on Economic, Social and Cultural Rights (adopted 16 December 1966, entered into force 3 January 1976) 993 UNTS 3, art 2(1).

Sandy while surrounding neighbourhoods lost power for days.[2] Three years later Douglas Rushkoff documented, from direct experience advising a group of technology executives, a set of concerns oriented entirely around personal survival of anticipated societal breakdown rather than its prevention, expressed through fortified compounds, remote relocation, and in the most extreme cases contemplated departure from the planet itself.[3] Neither source claims that complete independence from shared environmental risk has been achieved. Both describe a trajectory whose endpoint this article now states with precision, and whose legal consequences neither source, writing as policy advocate and cultural critic respectively rather than as jurists, was positioned to work out.

This article stipulates, as its analytical device, a scenario in which a defined residential population achieves complete and durable independence from state provided water, power, food, security and climate moderating infrastructure, governed by private rather than ordinary municipal authority, while every member remains in full legal standing a citizen of the surrounding state and no formal act of political or territorial secession occurs. The stipulation is not a prediction. It isolates, with a precision no partial or currently observable case permits, a single variable: whether the shared exposure that has historically disciplined environmental and social policy is a load bearing feature of that policy's legal architecture or a contingent fact the architecture happens, at present, to assume. This article names the phenomenon that follows infrastructural secession, and the assumption it strains the shared vulnerability premise, and argues across the sections that follow that international human rights law presently has no vocabulary for either.

The argument proceeds in three further stages, corresponding to the three parts in which this article is submitted. Section 2 states the doctrinal method. Section 3 reconstructs the political economy premises embedded in climate era human rights obligation, establishing precisely where and how the shared vulnerability premise is loading bearing. Section 4 constructs a legal test for identifying infrastructural secession, drawing on vulnerability theory and on the theory of cumulative enclosure, and Section 5 tests the resulting framework against its strongest objection. Section 6 specifies the positive obligations infrastructural secession triggers and the institutional architecture capable of enforcing them, Section 7 draws the three preceding strands together, and Section 8 closes with recommendations addressed to treaty bodies and domestic legislatures.

2. Materials and Methods

This article's method is doctrinal, proceeding by close reading of primary human rights instruments and their authoritative interpretation, supplemented by conceptual analysis drawn from political theory and property theory where the doctrinal materials alone cannot supply an answer. The primary provisions examined are Article 2 of the International Covenant on Economic, Social and Cultural Rights and the right to a clean, healthy and sustainable environment recognised by United Nations General Assembly Resolution 76/300, read together with the Committee on Economic, Social and Cultural Rights' General Comment No. 3 on the nature of states parties' obligations and the Maastricht Principles on the Extraterritorial Obligations of States.[4] These instruments were selected because they

[2]Philip Alston, 'Climate Change and Poverty: Report of the Special Rapporteur on Extreme Poverty and Human Rights' UN Doc A/HRC/41/39 (17 July 2019) para 51.

[3]Douglas Rushkoff, Survival of the Richest: Escape Fantasies of the Tech Billionaires (W W Norton 2022) 3–18.

[4]UN Doc A/RES/76/300 (28 July 2022); Committee on Economic, Social and Cultural Rights, 'General Comment No. 3: The Nature of States Parties' Obligations (Art. 2, Para. 1, of the Covenant)' (14 December 1990) UN Doc E/1991/23; Maastricht

constitute the doctrinal core of climate era economic and social rights obligation and because their interpretive history is sufficiently developed to support the close reconstruction this article undertakes.

Doctrinal method alone cannot answer this article's central question, because no existing legal text or precedent addresses infrastructural secession as such. Doctrinal reading can describe what current law would say if applied literally to the stipulated scenario, but it cannot, unaided, explain why the law should say something different, nor construct the normative grounds on which a revised doctrine would rest. For that reason the article draws, at the specific points where doctrinal method reaches its limit, on Hirschman's theory of exit and voice, on Boyle's account of cumulative enclosure, and on the vulnerability theory associated with Fineman, Turner and Andorno, each introduced in the section where its explanatory work is needed rather than surveyed in advance.[5] The article's use of the stipulated scenario follows the method associated with constructed cases in analytical philosophy, in which a hypothetical is built to hold every variable fixed except the one under examination, a method Parfit uses at length to isolate the psychological relations that matter within a wider theory of persons, and which this article adapts to isolate the political relation, shared exposure to risk, that matters within a wider theory of climate era obligation.[6]

A final methodological point governs the whole article. The stipulated scenario deliberately excludes formal political or territorial secession, a distinct legal category governed by an established body of doctrine this article does not purport to disturb, and deliberately excludes climate displacement and migration, a related but analytically distinct field addressed by an extensive separate literature. Where either field is invoked below, it is invoked for a specific structural insight rather than as a claim that the two inquiries are the same.

3. The Political Economy Premises of Climate-Era Human Rights Obligation

Article 2 of the International Covenant on Economic, Social and Cultural Rights requires each state party to take steps, individually and through international assistance and cooperation, to the maximum of its available resources, with a view to achieving progressively the full realisation of the rights the Covenant recognises.[7] The Committee on Economic, Social and Cultural Rights, in General Comment No. 3, describes this as a flexibility device necessitated by the constraints of the real world, while insisting that progressive realisation must not be read to strip the obligation of meaningful content, and that certain minimum core obligations bind regardless of resource constraints.[8] Robertson's influential analysis of the maximum available resources standard shows that the phrase has always been treated, in practice, as a standard of political will and allocative priority as much as one of raw fiscal capacity, since no

Principles on Extraterritorial Obligations of States in the Area of Economic, Social and Cultural Rights (adopted 28 September 2011).

[5]Albert O Hirschman, Exit, Voice, and Loyalty: Responses to Decline in Firms, Organizations, and States (Harvard University Press 1970); James Boyle, 'The Second Enclosure Movement and the Construction of the Public Domain' (2003) 66 Law and Contemporary Problems 33; Martha Albertson Fineman, 'The Vulnerable Subject: Anchoring Equality in the Human Condition' (2008) 20 Yale Journal of Law and Feminism 1.

[6]Derek Parfit, Reasons and Persons (Oxford University Press 1984) 199–223.

[7]ICESCR (n 1) art 2(1).

[8]General Comment No. 3 (n 6) paras 9–10.

state genuinely lacks the resources for every possible measure and the real question is always which measures a state chooses to prioritise given the resources it has.[9]

This is the point at which the shared vulnerability premise enters the doctrine, though the doctrine itself never states it. If the maximum available resources standard is, as Robertson shows, substantially a standard of political priority rather than pure fiscal capacity, then the mechanism by which a state's political process comes to prioritise the progressive realisation of economic and social rights is not itself addressed anywhere within Article 2's text or within the Committee's interpretation of it. The historical record supplies what the text does not. Public health and environmental regulation across the nineteenth and twentieth centuries developed substantially in response to harms that, having first been confined to the poor, began to reach those with the power to compel a response, a pattern Alston's report traces directly into the climate context when it observes that the political salience of environmental harm has historically tracked its distribution across the population rather than its aggregate severity.[10] This article terms the resulting mechanism the shared vulnerability premise: the proposition that the practical, as opposed to the merely textual, force of progressive realisation depends on the persons capable of shaping a state's allocative priorities remaining existentially exposed to the harm those priorities are meant to address.

The right to a clean, healthy and sustainable environment, recognised by the General Assembly in 2022 and by the Human Rights Council the preceding year, inherits this same unexamined premise while extending the doctrinal framework specifically to environmental protection.[11] Resolution 76/300 affirms the right without specifying the political mechanism through which states are expected to translate it into practice, leaving that mechanism, as with the broader progressive realisation standard, to the ordinary operation of domestic political accountability. Nothing in either the resolution or its travaux suggests its drafters considered a circumstance in which a state's most politically influential inhabitants might no longer share the environmental exposure the right addresses. This is not a criticism of the drafting. It reflects the same historical absence of occasion that this article's introduction identified in the founding instruments of economic and social rights generally: no state's obligations have ever needed to specify that its officials and its wealthiest citizens must remain exposed to the harms their own decisions help produce, because until recently no infrastructure existed capable of making the alternative achievable at meaningful scale.

The Maastricht Principles on the Extraterritorial Obligations of States supply a structurally adjacent, though ultimately distinct, illustration of how human rights doctrine has previously responded to a mismatch between its existing categories and an emerging configuration of power. The Principles were developed because a body of expert opinion concluded that the territorial assumptions embedded in the ordinary interpretation of instruments such as the Covenant could not adequately address harm generated by conduct crossing state borders, and they propose criteria for extending obligation outward, to persons outside a state's

[9] Robert E Robertson, 'Measuring State Compliance with the Obligation to Devote the "Maximum Available Resources" to Realizing Economic, Social and Cultural Rights' (1994) 16 Human Rights Quarterly 693, 694–700.

[10] Alston (n 2) paras 44–52.

[11] UNGA Res 76/300 (n 6); UN Human Rights Council, Resolution 48/13, 'The Human Right to a Clean, Healthy and Sustainable Environment' (8 October 2021).

territory over whom that state nonetheless exercises effective power or authority.[12] The Principles' drafting method, a sustained expert process translating an identified doctrinal gap into a specific set of interpretive criteria, is instructive for the task this article undertakes in Section 4 below. Their substantive content, oriented entirely around the outward projection of state power across borders, has no direct application to the phenomenon this article examines, which involves no border crossing of any kind and occurs entirely within a single state's territory. The difficulty this article addresses runs, in a precise sense, in the opposite direction, an inward erosion of a state's own population's shared stake in that state's governance, and Section 4 below develops the doctrinal tools such an inward facing problem requires.

Read together, these doctrinal materials support a precise and limited claim, one this article treats as established before proceeding to its constructive work in Section 4. The shared vulnerability premise is nowhere stated as a formal precondition of progressive realisation or of the right to a healthy environment. It is, nonetheless, the unstated mechanism through which the political will Robertson identifies as the true content of the maximum available resource’s standard has historically been generated, in a manner the historical record supports even though no instrument's text acknowledges it. A textual obligation whose practical realisation depends on an unstated political mechanism is not, for that reason alone, incoherent. It becomes a live doctrinal problem only once that mechanism can be shown to fail for an identifiable population segment, which is the task Section 4 undertakes by constructing a legal test capable of identifying exactly when that failure occurs.

4. Vulnerability, Enclosure, and the Legal Test for Infrastructural Secession

4.1 Why Vulnerability Theory Alone Does Not Supply a Legal Test

Part I established that the shared vulnerability premise is the unstated mechanism through which progressive realisation acquires practical force. That finding explains why infrastructural secession matters. It does not, by itself, tell a court or a legislature how to recognise infrastructural secession when it occurs, and the vulnerability theory literature from which the premise draws its normative weight was never built to answer that narrower, more operational question. Fineman's account of the vulnerable subject argues that law should take embodied vulnerability, rather than an idealised autonomous subject, as the proper starting point for legal and political theory, because vulnerability, unlike autonomy, is a condition every person shares by virtue of being embodied, and because a society's institutions exist substantially to manage that shared condition.[13] Turner's parallel account grounds the human rights project itself in this shared precariousness, arguing that rights exist because human beings are vulnerable to one another and to their environment.[14] Andorno's more targeted inquiry asks directly whether vulnerability can supply human rights with a

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[12] Maastricht Principles (n 6) principles 8–9; Olivier de Schutter and others, 'Commentary on the Maastricht Principles on Extraterritorial Obligations of States in the Area of Economic, Social and Cultural Rights' (2012) 34 Human Rights Quarterly 1084, 1096–1105.

[13] Martha Albertson Fineman, 'The Vulnerable Subject: Anchoring Equality in the Human Condition' (2008) 20 Yale Journal of Law and Feminism 1, 8–13.

[14] Bryan S Turner, Vulnerability and Human Rights (Pennsylvania State University Press 2006) 1–32.

foundation, engaging critically with competing dignity based accounts without settling the question definitively.[15]

None of these three accounts, however, was constructed with a legal test in view. Each treats vulnerability as a foundational commitment from which legal and political institutions should be built, not as an operational criterion a court could apply to a specific residential arrangement to determine whether that arrangement has crossed from ordinary private adaptation into something a human rights framework must treat differently. This is not a defect in the vulnerability literature. It reflects a straightforward division of intellectual labour: normative foundations and operational tests answer different questions, and a theory adequate to the first is not thereby adequate to the second. The task of this section is to perform the translation the vulnerability literature does not itself undertake, using two further bodies of doctrine, Boyle's theory of cumulative enclosure and the public function doctrine developed in United States constitutional law, each of which supplies a structural resource the vulnerability literature lacks.

4.2 The Structural Case for a Cumulative Test: Enclosure Reconsidered

Boyle's account of what he terms the second enclosure movement describes the privatisation of the intangible commons of knowledge and culture through the expansion of intellectual property rights, and draws an explicit parallel to the first enclosure movement, the centuries long process by which common agricultural land in England was fenced off and converted into private property.[16] Boyle's central structural insight is that enclosure of this kind rarely proceeds through any single dramatic act of appropriation. It proceeds through the accumulation of many individually lawful, individually unremarkable private law transactions, each defensible on its own terms, whose cumulative effect is nonetheless the disappearance of a shared resource. A single patent registration is not a taking of the public domain. A pattern of patent registrations across an entire field of knowledge can be.

This structural insight transfers to the environmental context with unusual precision. No single act of building a resilient water system, installing private power generation, or hiring private security is remarkable, and no plausible legal test should treat any of them, considered alone, as secession. What Boyle's framework shows is that a test built to catch enclosure need not search for a single triggering violation at all. It can instead be built around the cumulative pattern the individually lawful acts produce, asking not whether any specific measure was wrongful but whether the accumulated effect of many lawful measures has produced the specific outcome the law has reason to treat differently, namely a population's durable and total withdrawal from a shared exposure the surrounding legal order was built to address. This is the first design principle the test constructed in Section 4.4 below adopts. The test does not ask whether any particular infrastructural investment was improper. It asks whether the cumulative pattern of investment has produced functional displacement, examined next.

4.3 The Public Function Analogy: Private Governance and Constitutional Obligation

A second and more directly doctrinal resource comes from an area of law addressed to a different constitutional system but structurally on point. The public function doctrine developed by United States courts holds that a privately owned entity performing functions ordinarily performed by government becomes subject, to that extent, to the constitutional

[15] Roberto Andorno, 'Is Vulnerability the Foundation of Human Rights?' in Aniceto Masferrer and Emilio García-Sánchez (eds), Human Dignity of the Vulnerable in the Age of Rights: Interdisciplinary Perspectives (Springer 2016) 257–272.

[16] James Boyle, 'The Second Enclosure Movement and the Construction of the Public Domain' (2003) 66 Law and Contemporary Problems 33, 37–46.

obligations that would bind government directly. The doctrine's foundational case, Marsh v Alabama, concerned a company owned town, Chickasaw, Alabama, that possessed streets, a sewage system and a business district open to the public and was, in every respect but formal ownership, indistinguishable from an ordinary municipality.[17] The Supreme Court held that a resident's exercise of First Amendment rights within the town could not be criminally punished merely because the town's streets were privately rather than publicly owned, reasoning that the public has an identical interest in the free functioning of a community whether that community is owned by a corporation or a municipality, and that residents of a company owned town are free citizens of their state and country in exactly the same sense as residents of any other town, with no less claim to the liberties the constitution guarantees.[18]

The doctrinal move Marsh performs is precisely the move this article's proposed test needs. The Court did not ask whether Gulf Shipbuilding Corporation, the town's owner, had committed some independent wrong. It asked whether the corporation had, through the cumulative effect of owning and administering what was functionally a town, taken on enough of the character of a government that the constitutional obligations attaching to government should follow. The more completely a private arrangement replicates the functions of public governance, the Court reasoned, the more its private character recedes as a reason to withhold the obligations that would apply were those functions performed by the state directly. Aihwa Ong's account of what she terms graduated sovereignty, developed from a study of special economic zones and comparable governance arrangements across East and Southeast Asia, supplies a contemporary and explicitly comparative confirmation of the same structural pattern operating at the level of entire jurisdictions rather than a single town: states increasingly govern different populations and different territories within their own borders according to different rules, creating zones of variegated sovereignty in which certain populations receive a different, often more favourable, regulatory and infrastructural regime than the general population, without any formal transfer of sovereign authority ever occurring.[19] Infrastructural secession, as this article develops it, is graduated sovereignty's mirror image. Where Ong's special economic zones are typically created by the state to attract investment and are extended to populations the state wishes to favour, infrastructural secession is created by private actors to exit an obligation the state would otherwise expect them to share, and extended only to those able to purchase membership in it. The structural resemblance nonetheless holds: both phenomena involve a population governed, in practice, by a materially different regime than its formal citizenship would suggest, within the territory of a single, nominally uniform state.

4.4 The Proposed Legal Test for Infrastructural Secession

Combining the structural insight of Boyle's enclosure theory, the functional criterion supplied by Marsh and its public function progeny, and the normative weight vulnerability theory supplies for treating the resulting pattern as a matter of human rights concern rather than mere private preference, this article proposes a four factor test for identifying infrastructural

[17]Marsh v Alabama, 326 US 501 (1946) 502–503.

[18]ibid 506–508.

[19]Aihwa Ong, 'Graduated Sovereignty' in Neoliberalism as Exception: Mutations in Citizenship and Sovereignty (Duke University Press 2006) 75, 78–89.

secession, applied conjunctively rather than in the alternative, since no single factor, standing alone, distinguishes secession from ordinary and legally unremarkable adaptation.

The first factor, functional displacement, asks whether privately owned and privately governed infrastructure has substituted for, rather than merely supplemented, the core systems ordinarily provided or regulated by the state: water, power, food supply, security and, where applicable, climate moderating infrastructure such as engineered cooling or flood defence. A household that adds a backup generator to a grid connection it retains has not displaced state provided power. A compound that severs its grid connection entirely and relies exclusively on private generation has. This factor operationalises, for the environmental context, the same question Marsh asked of Chickasaw, Alabama, namely how completely a private arrangement has come to perform functions ordinarily performed by public authority.

The second factor, durability, asks whether the arrangement is designed, resourced and governed for indefinite operation rather than for temporary or emergency use. A family that stockpiles supply ahead of a forecast storm has not achieved durable independence from shared risk. A compound engineered and financially structured for decades of continuous, self-sufficient operation has. This factor operationalises Boyle's cumulative structural insight, distinguishing an accumulation of measures that, taken together, constitute a settled withdrawal from shared exposure from an accumulation that remains, however extensive, oriented toward a temporary contingency.

The third factor, exposure differential, asks whether the arrangement produces a measurable and substantial reduction in the population's exposure to the specific environmental risk climate era obligations exist to address, relative to the general population of the surrounding state. This factor gives the test its connection to the shared vulnerability premise established in Part I. A population that has achieved functional displacement and durability with respect to matters unrelated to environmental risk, an isolated community built for privacy rather than climate resilience, for example, has not thereby engaged the specific concern this article addresses, because its exposure to the harm’s progressive realisation and the right to a healthy environment exist to address has not been differentially reduced.

The fourth factor, governance autonomy, asks whether day to day administration, security and dispute resolution within the population are exercised by private corporate or contractual authority rather than by the state's ordinary municipal or provincial government, in the manner Chickasaw, Alabama was administered by Gulf Shipbuilding Corporation rather than by any organ of Alabama's state or local government. This factor captures the governance dimension of secession that infrastructure alone does not, since a population could in principle achieve complete infrastructural self-sufficiency while remaining subject to ordinary local government, a case this article's test would not treat as secession because the shared political process the shared vulnerability premise depends upon would remain, in that instance, fully engaged.

A population satisfying all four factors to a substantial degree has, on this article's proposed test, achieved infrastructural secession. A population satisfying some factors but not others has not, and the test is deliberately designed to leave considerable space for legitimate private adaptation that satisfies one or two factors without approaching the cumulative pattern the four factors, applied together, are built to identify. This conjunctive structure is the test's central design choice and the direct response to the objection, addressed in full in Section 5 below, that any test capable of restricting private adaptation risks capturing far more than it should.

4.5 Evidentiary Standard and Application

The test proposed in Section 4.4 is intended for application by courts, regulatory bodies or, in the first instance, by the treaty monitoring bodies discussed in Part III of this article, drawing on evidence of the kind already routinely gathered in comparable regulatory contexts: utility connection and disconnection records, corporate governance filings for private administrative bodies, security and dispute resolution arrangements, and, where available, direct evidence of the arrangement's own marketing or internal planning materials, of the kind Rushkoff's account of billionaire planning already illustrates exists and is, at least informally, obtainable.[20] The evidentiary burden should fall on the party asserting that secession has occurred, consistent with the ordinary allocation of proof in comparable regulatory proceedings, and the standard of proof should require substantial, rather than merely marginal, satisfaction of all four factors, in keeping with the conjunctive structure Section 4.4 establishes and the deliberate space that structure leaves for ordinary adaptation. Applied to presently observable arrangements, the test yields result consistent with the intuition this article's introduction relied upon without yet defending. Existing special economic zones, of the kind Ong examines, typically satisfy governance autonomy and, in some cases, functional displacement, but are created by state action rather than private withdrawal and are not, on this article's framework, instances of infrastructural secession at all, since the state remains the author of the arrangement rather than a party from whom the arrangement has withdrawn. Gated residential communities of the ordinary kind presently found across many jurisdictions typically satisfy governance autonomy in a limited sense, private security and dispute resolution for internal matters, but rarely approach functional displacement with respect to water, power or food, and remain connected to and dependent upon state provided infrastructure for the core systems this article's first factor examines. The billionaire compounds and relocation strategies Rushkoff documents represent the closest presently observable approach to the stipulated scenario, satisfying durability and, in some documented cases, functional displacement and governance autonomy, while the exposure differential factor remains, at the time of writing, a matter of degree rather than the complete severance this article's stipulated scenario contemplates. The test, in other words, correctly identifies the presently observable world as falling short of full infrastructural secession while identifying precisely which of the four factors would need to be satisfied more completely for that conclusion to change, giving the test genuine predictive as well as classificatory content.

5. Testing the Premise Against Its Strongest Objection

5.1 The Property and Liberty Objection Stated at Full Strength

The framework constructed in Section 4 faces an objection this article has anticipated since its introduction and must now confront directly rather than merely acknowledge. The objection, stated in its most demanding form, holds that private adaptation to environmental risk is a lawful exercise of property and liberty interests that no human rights framework could legitimately restrict without collapsing into an indefensible doctrine of forced levelling. Nozick's classical statement of entitlement theory supplies this objection its most rigorous philosophical foundation, arguing that a distribution of holdings is just if it arises through legitimate acquisition and legitimate transfer, regardless of the resulting pattern of inequality, and that patterned principles of justice requiring redistribution to achieve or maintain a particular distributive outcome are unjust precisely because they require continuous

[20] Rushkoff (n 3 in Part I) 3–18.

interference with individuals' free exercise of their own legitimately acquired holdings.[21] Applied to this article's argument, the Nozickian objection runs as follows. If a resident's water system, power generation and security arrangements were each acquired through legitimate purchase from willing sellers, and if the underlying wealth funding those purchases was itself legitimately acquired, then no principle of justice is violated by the cumulative pattern those individually just acquisitions produce, however uncomfortable that pattern may be for observers committed to a different distributive outcome. Boyle's own enclosure framework, on this objection, proves too much: any accumulation of legitimate property transactions could in principle be redescribed as an objectionable enclosure by an observer who simply dislikes its aggregate effect, and a legal test built to catch such accumulations, however carefully limited, risks becoming a general licence for restricting lawful economic activity whenever its results are found distasteful.

This objection deserves to be stated at its full strength precisely because it is not a weak or easily dismissed position. Nozick's entitlement theory remains one of the most rigorously defended accounts of property and liberty in the political philosophy literature, and the objection it grounds here is not merely rhetorical. It identifies a genuine tension between this article's proposed test and a serious, widely held view about the moral status of legitimately acquired property, a tension this article's response must address on its own terms rather than by assuming the vulnerability-based framework constructed in Section 4 is simply correct and the Nozickian alternative simply mistaken.

5.2 The Reply: Governance Displacement, Not Wealth, as the Target

This article's primary response concedes a significant part of the Nozickian objection while showing that the concession does not reach the test constructed in Section 4.4. Nozick's entitlement theory is a theory about the justice of holdings, the question of who legitimately owns what. The test this article proposes does not ask whether any individual holding was legitimately acquired, and does not propose redistributing any holding on the ground that its accumulation produces an unwelcome pattern. It asks a categorically different question, whether the cumulative exercise of legitimately held property has produced a specific structural outcome, the private assumption of governmental functions across water, power, food, security and climate moderation simultaneously, durably, and to the exclusion of the shared exposure the surrounding polity's legal obligations depend upon. This is precisely the distinction Marsh v Alabama itself drew and precisely the distinction Nozick's own framework, read carefully, does not foreclose. Gulf Shipbuilding Corporation's ownership of Chickasaw was never questioned in Marsh. What was questioned, and what the Court held could not simply be assumed away by the fact of lawful ownership, was whether the corporation's assumption of governmental functions carried with it governmental obligations regardless of the legitimacy of the underlying property interest. The test proposed in this article makes the same move. It does not ask whether the population achieving infrastructural secession legitimately owns its water systems, power generation or security arrangements. It asks whether the cumulative, functional effect of that ownership is the private performance of governmental functions at a scale and durability that the public function doctrine, independently of any question about the underlying property's legitimacy, has already shown can trigger obligations a purely proprietary analysis would not capture.

This reply does not deny that the test constructed in Section 4.4 restricts, in a meaningful sense, what a wealthy population may do with legitimately acquired property, since the

[21] Robert Nozick, Anarchy, State, and Utopia (Basic Books 1974) 149–182.

obligations Part III of this article specifies attach once the four-factor test is satisfied regardless of how the underlying resources were acquired. What the reply denies is that this restriction operates through the redistributive mechanism Nozick's argument is built to resist. Nozick objects to patterned principles that require continuous interference with holdings to maintain a preferred distributive outcome. The obligations this article's test triggers are not redistributive in that sense. They are functional obligations that attach, as Marsh shows they have attached before, to the exercise of governmental power itself, however that power came to be held, in the same way a state does not escape its human rights obligations by demonstrating that its treasury was legitimately funded. A private actor that has, through the cumulative and durable exercise of legitimately acquired property, come to perform the functions a government would otherwise perform for a defined population is not, on this article's argument, entitled to perform those functions free of the obligations that would attach were a government performing them directly, and this conclusion follows without requiring any judgment at all about whether the actor's underlying wealth was justly acquired.

5.3 A Second Objection: Causation and the Limits of the Historical Argument

A second, less philosophically fundamental but practically significant objection concerns the historical claim, made in Part I, that shared exposure has in fact disciplined environmental and social policy. A sceptical reader might grant the entire structure of Sections 4.1 through 5.2 while denying the underlying empirical premise, arguing that the correlation between elite exposure and policy responsiveness Alston's report and the broader environmental history literature describe does not establish that elite exposure causes policy responsiveness, as opposed to both being effects of some third factor, such as the general expansion of democratic accountability across the same historical period.

This article's response is to note that its central argument does not, in fact, require the strong causal claim the objection attacks. The argument requires only the more modest claim that shared exposure has been one significant contributing mechanism among others, sufficient that its wholesale removal for a specific population would be expected to weaken, even if not eliminate, the political pressure toward progressive realisation that population would otherwise help generate. This modest claim is considerably more defensible than the strong causal claim the objection targets, and is, in any event, the claim this article's working thesis in Part I actually advanced: that the shared vulnerability premise is load bearing for the practical efficacy of progressive realisation, not that it is the sole or even the primary mechanism generating that efficacy. A test built to detect and respond to the erosion of one significant contributing mechanism among several does not require proof that the mechanism is the only one operating, any more than a duty of care in ordinary negligence law requires proof that the defendant's conduct was the sole cause of the claimant's harm rather than one contributing cause among others.

5.4 The Qualified Verdict

The two objections examined in this section are not decisively refuted, and this article does not claim to have refuted them. What Section 5.2 establishes is that the test constructed in Section 4.4 targets a narrower and more defensible category of conduct than the Nozickian objection initially suggests, the functional performance of governmental power rather than the mere possession of legitimately acquired wealth, a category the public function doctrine's own history shows can coherently carry obligations independent of any judgment about the underlying property's legitimacy. What Section 5.3 establishes is that the article's historical premise requires only a modest, contributory causal claim rather than the strong claim a sceptical reading might attack. Neither response eliminates all residual force from the objections it addresses. A committed Nozickian may still resist the functional reframing Section 5.2 proposes, on the ground that governmental functions performed through legitimately acquired private property remain, at bottom, an exercise of property rights the state has no legitimate basis to burden merely because it finds the exercise's aggregate pattern troubling. This article's position, consistent with the non triumphalist method its broader project applies to comparably difficult objections elsewhere, is that this residual disagreement is a genuine and unresolved point of philosophical contest rather than a position this article has shown to be simply mistaken, and that the test proposed in Section 4.4 should be understood as resting on the more defensible, though not unanimously compelling, side of that contest rather than as resolving it beyond reasonable challenge.

6. Obligation and Enforcement

6.1 What the State Owes Its Remaining Population

Once infrastructural secession has been identified under the test proposed in Part II, the surrounding state's obligation to the population that remains within the ordinary reach of its water, power, food, security and climate systems is not reduced, and this article's first and most direct doctrinal conclusion is that it must be treated as undiminished notwithstanding the secessionary population's withdrawal from the resource base and political process the obligation depends upon. The Committee on Economic, Social and Cultural Rights' General Comment No. 3 confirms that retrogressive measures, steps that reduce the level of protection a state has already achieved, require the most careful scrutiny and can be justified only by reference to the totality of the rights the Covenant protects and in the context of the full use of a state's maximum available resources.[22] A state that permitted or facilitated infrastructural secession, whether through direct authorisation, favourable tax or zoning treatment, or simple non enforcement of existing regulatory tools against the pattern this article's test identifies, and then pointed to the resulting reduction in its available political or fiscal resources as a justification for reduced progressive realisation elsewhere, would be relying on a resource constraint of its own indirect making, a form of justification General Comment No. 3's demanding retrogression standard was designed to prevent state parties from invoking too readily.

This conclusion follows directly from the doctrinal reconstruction undertaken in Part I. If the shared vulnerability premise is, as this article has argued, an unstated mechanism through which the maximum available resources standard has historically acquired political force rather than a separate and dispensable feature of the obligation, its erosion for a specific population does not shrink the underlying legal obligation itself, which remains defined by reference to the state's total resources and the totality of its population's needs. What changes, once secession is identified, is the diagnostic significance the Committee should attach to a subsequent claim of resource constraint from that state, a significance this article submits should be treated as substantially reduced, in the manner the Maastricht Principles already treat a state's own contribution to a rights deficit as relevant to the scrutiny that deficit receives.[23] The state's obligation to its remaining population is not a new obligation this article invents. It is the ordinary progressive realisation obligation, examined with the

[22]Committee on Economic, Social and Cultural Rights, 'General Comment No. 3' (n 6 in Part I) para 9.

[23]Maastricht Principles (n 6 in Part I) principle 26.

heightened scrutiny General Comment No. 3 and the Maastricht Principles already direct toward retrogression a state has had a hand in producing.

6.2 What Falls on the Private Governing Authority

The harder and more original question this article's framework raises is whether obligations fall directly on the private authority governing a secessionary population, independently of any obligation owed by the surrounding state. This article answers that question affirmatively, extending the functional logic Part II drew from Marsh v Alabama into the specific vocabulary of contemporary business and human rights doctrine. The United Nations Guiding Principles on Business and Human Rights, endorsed by the Human Rights Council in 2011, establish that business enterprises have an independent responsibility to respect human rights, existing over and above compliance with domestic law and applying wherever an enterprise's own activities cause or contribute to an adverse human rights impact, a responsibility the Guiding Principles state applies to all business enterprises regardless of size, sector or structure.[24] A private authority governing a population that satisfies this article's four factor test for infrastructural secession is, on the analysis developed in Part II, performing functions functionally indistinguishable from those a government performs for the general population, and this article submits that the responsibility to respect human rights the Guiding Principles already impose on ordinary business enterprises applies with particular and heightened force to an entity performing governmental functions of this kind, for the same reason Marsh held that Gulf Shipbuilding Corporation's ownership of Chickasaw did not entitle it to withhold the constitutional protections a public government would have owed the town's residents.

Three specific obligations follow from this extension, each addressed to a different aspect of the secessionary arrangement. First, a private governing authority satisfying this article's test should be understood to owe a duty of non interference with the continued exercise, by members of the surrounding population, of whatever entitlement they may have to access the infrastructure or territory the secessionary population now privately controls, where that access was previously available and its withdrawal would itself constitute a retrogressive step of the kind Section 6.1 above addresses at state level. Second, the authority owes a duty of transparency regarding the scale and durability of the infrastructural and governance arrangement itself, sufficient to permit application of the evidentiary standard proposed in Part II, Section 4.6, a duty modelled directly on the Guiding Principles' own requirement that business enterprises know and show their human rights impacts through appropriate due diligence and communication.[25] Third, and most significant, the authority owes what this article terms a compensatory contribution obligation, a financial or in kind contribution to the maximum available resources the surrounding state can direct toward progressive realisation for its remaining population, calibrated to the scale of infrastructural withdrawal the four factor test has identified. This third obligation is the direct doctrinal payoff of the internal critique developed in Part II, Section 5.2, translating Nozick's own compensation principle, there shown to require that a dominant protective association compensate the independents disadvantaged by its dominance, into the specific and quantifiable form a human rights framework requires.

6.3 Detection and Enforcement Architecture

[24]UN Human Rights Council, 'Guiding Principles on Business and Human Rights: Implementing the United Nations "Protect, Respect and Remedy" Framework' (2011) UN Doc HR/PUB/11/04, principles 11–13, 23.

[25]ibid principles 15, 21.

Identifying the obligations Sections 6.1 and 6.2 specify is of limited value without an institutional architecture capable of detecting infrastructural secession and enforcing the obligations it triggers, and this article proposes a three-layer architecture, sequenced according to the comparative speed and comparative institutional demands of each layer.

The first layer is interpretive and immediate. The Committee on Economic, Social and Cultural Rights should develop a general comment applying the retrogression standard already established in General Comment No. 3 explicitly to the phenomenon of infrastructural secession, adopting the four-factor test proposed in Part II as an interpretive tool for identifying when a state's claimed resource constraints deserve the heightened scrutiny Section 6.1 above describes. This layer requires no new state consent, and follows a well-established institutional practice, since the Committee has repeatedly used its general comment power to extend the Covenant's application to circumstances its drafters did not directly anticipate.

The second layer is domestic and immediate, extending existing regulatory categories rather than requiring new legislation in the first instance. The company town doctrine Marsh established, and the more contemporary body of domestic law already regulating homeowner governed developments documented in Part II, Section 4.5, supply existing domestic legal categories into which the obligations proposed in Section 6.2 above could be incorporated through ordinary regulatory or judicial development, without requiring any state to legislate a wholly new category of infrastructural secession from first principles. A domestic court or regulator already equipped to ask whether a private development has assumed sufficient governmental character to trigger public law obligations, the question Marsh itself posed, is institutionally well placed to extend that same inquiry to the human rights specific obligations this article proposes.

The third layer is international and procedural, making use of the individual communications procedure the Optional Protocol to the International Covenant on Economic, Social and Cultural Rights already establishes. The Optional Protocol, adopted by the General Assembly in 2008 and in force since 2013, permits individuals or groups claiming to be victims of a Covenant violation to bring a communication before the Committee once domestic remedies have been exhausted, and further establishes an inquiry procedure for grave or systematic violations.[26] Members of a state's remaining population, affected by the retrogression Section 6.1 addresses, are, on this article's analysis, victims of a Covenant violation in exactly the sense the Optional Protocol's individual communications procedure contemplates, and this article proposes that the inquiry procedure in particular, designed for systematic rather than isolated violations, is institutionally well suited to a pattern of infrastructural secession affecting an entire remaining population rather than a single identifiable claimant, without requiring the negotiation of any new instrument.

7. Discussion

The argument developed across this article's three parts closes the threefold gap its introduction identified, and this discussion draws the three closures together in a way no single part could, since each part necessarily proceeded before the next was available to complete the picture.

The foundational gap, the absence of any existing test of whether climate era human rights obligation's normative foundations can survive the loss of the shared vulnerability premise, is

[26]Optional Protocol to the International Covenant on Economic, Social and Cultural Rights (adopted 10 December 2008, entered into force 5 May 2013) UN Doc A/RES/63/117, arts 2, 11.

closed by the combination of Part I's doctrinal reconstruction and Part II's engagement with vulnerability theory and the property and liberty objection. Part I showed the premise to be load bearing for the practical, though not the textual, efficacy of progressive realisation. Part II showed that Fineman's distinction between constant vulnerability and unequally distributed resilience survives the strongest available objection to treating that distinction as normatively significant, once the objection is engaged through Nozick's own compensation principle rather than around it. The doctrinal gap, the absence of any legal test for infrastructural secession, is closed by the four-factor test constructed in Part II, Section 4.4, built from Boyle's cumulative account of enclosure and Marsh's functional account of public obligation, and validated against presently observable arrangements in Section 4.5. The institutional gap, the absence of any architecture capable of detecting and enforcing against infrastructural secession, is closed by the three layer architecture proposed in Section 6.3 above, sequenced to make use of institutional resources, the Committee's general comment power, existing domestic public function doctrine, and the Optional Protocol's individual communications and inquiry procedures, that already exist rather than requiring new international consent as a precondition of any protection at all.

What this combination does not achieve is worth stating as plainly as what it does. The framework constructed across this article rests on a working thesis, stated at the project's outset, that the shared vulnerability premise's practical significance can be established without resolving every question a sceptical reader might raise about the precise causal weight shared exposure has carried in the historical record, a concession Part II, Section 5.3 made explicit rather than concealed. It rests on a legal test whose four factors, while designed to exclude ordinary adaptation, will nonetheless require careful application at the margins the evidentiary standard proposed in Part II, Section 4.6 cannot fully anticipate in advance of the disputes it will eventually be asked to resolve. And it rests on an institutional architecture whose second and third layers depend on domestic courts and the Committee actually adopting the interpretive extensions this article proposes, an adoption this article can argue for but cannot itself compel. These are not defects unique to this article's argument. They are the ordinary condition of any jurisprudential proposal addressed to a problem existing doctrine has not yet been forced to confront, and this article's own non triumphalist engagement with its strongest objections in Part II is offered as evidence that its claims are calibrated to what the argument actually establishes rather than inflated beyond it.

8. Conclusion and Recommendations

This article has argued that climate era human rights obligation depends on a shared vulnerability premise nowhere stated in its governing instruments, that this premise is presently strained by a documented trajectory of privately purchased infrastructural independence from environmental risk, and that international human rights law, properly read, already contains the doctrinal resources, in the progressive realisation standard's own retrogression doctrine, in the public function tradition Marsh established, and in the business and human rights framework the Guiding Principles supply, needed to respond to that strain once those resources are drawn together and applied to the specific, structurally defined phenomenon this article terms infrastructural secession. The article closes with recommendations addressed to three audiences, each capable of acting on this article's argument independently of the others.

To the Committee on Economic, Social and Cultural Rights, this article recommends the development of a general comment applying General Comment No. 3's retrogression standard explicitly to infrastructural secession, adopting the four factor test proposed in Part

II as an interpretive aid for identifying when a state's claimed resource constraints warrant heightened scrutiny, a development consistent with the Committee's own established practice of extending the Covenant's application to circumstances its original drafters did not directly anticipate.

To domestic legislatures and regulators, this article recommends the extension of existing company town, homeowner association and special economic zone regulatory categories to incorporate the compensatory contribution obligation proposed in Section 6.2, a recommendation requiring adaptation of existing legal categories rather than the creation of new ones from first principles, and correspondingly achievable on a considerably shorter legislative timescale than international treaty development would require.

To the broader scholarly community, this article recommends further work in three directions this single article has been able to open but not complete: empirical research tracking the actual trajectory of infrastructural independence documented impressionistically by Alston and Rushkoff, doctrinal research applying this article's four factor test to presently existing arrangements in specific domestic jurisdictions with the granularity a single article addressed to the international framework cannot provide, and continued philosophical engagement with the property and liberty objection this article has answered but, consistent with the qualified verdict reached in Part II, Section 5.4, not claimed to have settled beyond reasonable further contest. This article offers its own argument as a foundation for that further work rather than as its final word.

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