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The Governance Function of Constitutional Property

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The Governance Function of Constitutional Property

Lynda L. Butler*

Contemporary takings scholarship has devoted much attention to the problem of regulatory takings and has largely assumed that physical takings are resolved under a clear but simplistic per se rule. Under that rule, modern courts automatically find a physical taking whenever government action causes a permanent physical invasion of property, regardless of the context or the importance of the public interest. Applying this bright-line rule has proved to be difficult because it ignores the nuances of physical takings situations and the complexities of modern property arrangements. Should the physical takings concept apply to a rent control law that limits the ability of landlords to exclude tenants, to temporary but deliberate breaches of a levee to handle rising waters, or to a law that forces landowners to accept an energy company's underground drilling of shale deposits?

This Article examines early and recent physical takings cases in light of modern property theory to demonstrate the grayness of many physical takings situations and to show how modern property theory could more effectively address them. A visual representation of the Court's physical takings cases, developed from the results and logic of key cases, reveals the insufficiency of the Court's analysis and suggests the need for more nuanced thinking. This more nuanced approach draws from modern property theory to examine physical takings claims not only under the traditional exclusion-based view of property but also from a governance perspective. Instead of deciding whether a government action subject to a

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physical takings claim is more like a permanent occupation violating the owner's right to exclude than a temporary trespass, courts should ask whether the exclusion or the governance strategy more effectively manages the private and public interests at stake. Casting the resolution of physical takings conflicts as a choice between the exclusion and governance strategies — instead of as a choice between temporary versus permanent, direct versus indirect, or continuous versus occasional — provides greater analytical capacity for resolving physical takings claims. Complex physical takings situations require a deeper analysis than that provided by the Court's approach. Those situations arise when the dispute involves an imminent public crisis, a resource subject to a complex property sharing arrangement, a resource needing more management because of overuse or changing natural conditions, or a resource subject to a new use made possible by a technological advance. The modern Court has overlooked this governance function in defining the reach of constitutional property under the Takings Clause.

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INTRODUCTION

Early on, courts agreed that the constitutional guarantee of just compensation applied to government action that physically appropriated private property even when the government had not formally sought condemnation. Eventually, the courts extended this physical takings concept to government action that indirectly but permanently occupied or invaded private property.¹ In addition to interfering with the landowner's expectation of undisturbed dominion and control over the land, such government action deprives the owner of the ability to control use of the land.² When government physically appropriates or occupies an owner's property, even unintentionally, the owner loses one of the "most essential sticks" in the owner's bundle of property rights: the right to exclude.³ Because of the importance of this "essential" stick, modern courts have even described a permanent physical occupation as a *per se* taking, automatically requiring compensation regardless of the importance of the public interest or the amount of property occupied.⁴ Takings claims involving physical invasions or occupations thus appear, on the surface, to involve one of the easiest types of claims to resolve. Perhaps because of the modern Court's simplistic approach, there is surprisingly little treatment of physical takings in the academic literature. The focus instead has been on regulatory takings.

Not all physical invasions by government, however, are takings. Nor are all damages resulting from a physical invasion recoverable. Whether a court will find a compensable physical taking depends on the context of the dispute. Permanence of the physical invasion, intent to repeat the invasion, actions of the property owner in opening the property to third parties, and the directness of the correlation between the invasion and the injury can all affect the court's analysis.⁵ These factors are easy to apply when the physical occupation is direct and permanent. They are, however, more difficult to assess when the physical invasion is intermittent but recurring, has indirect but significant effects on the use and value of the land, or deprives a landowner of an important right linked to possession and use of the property. Should the physical takings concept apply to a rent control

¹ See *Pumpelly v. Green Bay Co.*, 80 U.S. (13 Wall.) 166, 177-81 (1871).

² See *Loretto v. Teleprompter Manhattan CATV Corp.*, 458 U.S. 419, 436 (1982).

³ *Kaiser Aetna v. United States*, 444 U.S. 164, 176 (1979).

⁴ See, e.g., *Loretto*, 458 U.S. at 438 n.16 (concluding that the size of the physical occupation is not determinative).

⁵ See *infra* Part I.

law that restricts the ability of landlords to exclude tenants, to temporary but deliberate breaches of a levee to handle rising waters, or to a law that forces landowners to accept an energy company's underground drilling of shale deposits (especially without the benefit of a neutral, third-party review)?

The wide variety of government actions challenged as physical takings further complicates the takings inquiry. Physical takings claims have involved dam construction,⁶ navigational improvements altering water flow⁷ or raising water levels,⁸ temporary seizures of private property during war,⁹ and strategic destruction of property to stop fires or prevent a war-time enemy from obtaining valuable property.¹⁰ Physical takings claims have also focused on train emissions affecting the use of nearby property,¹¹ low-level airplane flights,¹² installation of cable equipment,¹³ public use of shorelands,¹⁴ and regulations that limit the right to exclude.¹⁵ The nature of the government-related interference has varied widely in terms of its directness, permanence, and impact on possessory rights.¹⁶ Because of the broad range of government actions and degrees of government interference, application of the *per se* rule has produced confusing and somewhat inconsistent results. This seemingly simple and clear rule is

⁶ See *Pumpelly*, 80 U.S. (13 Wall.) at 167.

⁷ See *Bedford v. United States*, 192 U.S. 217, 217-19 (1904).

⁸ See *United States v. Kan. City Life Ins. Co.*, 339 U.S. 799, 800-01 (1950); *United States v. Willow River Power Co.*, 324 U.S. 499, 499-500 (1945); *United States v. Lynah*, 188 U.S. 445, 446-47 (1903), *overruled in part by* *United States v. Chi., Milwaukee, St. Paul & Pac. R.R. Co.*, 312 U.S. 592, 597-98 (1941).

⁹ See *United States v. Gen. Motors Corp.*, 323 U.S. 373, 374-75 (1945); *United States v. Russell*, 80 U.S. (13 Wall.) 623, 627-28 (1871).

¹⁰ See *United States v. Caltex (Phil.), Inc.*, 344 U.S. 149, 150-51 (1952); *United States v. Pac. R.R.*, 120 U.S. 227, 228-29 (1887).

¹¹ See *Richards v. Wash. Terminal Co.*, 233 U.S. 546, 548-49 (1914).

¹² See *United States v. Causby*, 328 U.S. 256, 258 (1946).

¹³ See *Loretto v. Teleprompter Manhattan CATV Corp.*, 458 U.S. 419, 421 (1982).

¹⁴ See *Nollan v. Cal. Coastal Comm'n*, 483 U.S. 825, 827 (1987).

¹⁵ See *Loretto*, 458 U.S. at 421.

¹⁶ The claims have involved direct and permanent physical occupations, indirect and permanent physical occupations, indirect and temporary physical occupations occurring a single time, indirect and temporary but inevitably recurring physical occupations, indirect and temporary physical occupations occurring more than once, government acts temporarily depriving a landowner of access without a physical invasion, and regulatory acts depriving a landowner of a right important to possession or use. See *infra* Part I (discussing the numerous combinations along the continuums of direct/indirect and permanent/temporary).

thus a bad fit for the far more complex and nuanced contexts found in the real world.

This Article examines the principles governing physical takings that do not involve formal condemnations to determine whether those principles provide effective guidance to courts, governments, and property owners operating in a world of changing technology and resource conditions. It argues that defining physical takings by bright-line rules artificially defines the scope of this constitutional property concept, leads to sometimes irrational line-drawing, and ignores the complexity of physical takings. As a consequence, attention is diverted from the existence of conflicting right holders, from the impact of property use on shared or common systems, and from the nature of the property concept, including the relativity of property rights. Modern courts have largely ignored or forgotten the complexity of the physical takings concept, perhaps because of misconceptions or misdirections created by the *per se* approach, which inaccurately signals a simplistic concept contradicted by real-world applications. Modern jurists have disaggregated the takings concept into discrete categories of analysis, ignoring overlapping gray areas or differences of degree.¹⁷ Separating physical takings from regulatory takings facilitated the Court's adoption of a *per se* rule for physical takings.¹⁸ To the extent that this disaggregation recasts the historical compact reflected in the Takings Clause, it distorts the balance between private and public property.

A more effective¹⁹ approach expands on modern property theory to examine physical takings claims, not only under the exclusion strategy for delineating property rights, but also from a governance

¹⁷ See, e.g., *Lingle v. Chevron U.S.A. Inc.*, 544 U.S. 528, 539-40 (2005) (describing the Supreme Court's different standards for physical takings and regulatory takings and the distinct, private property rights that they were designed to protect).

¹⁸ This separation officially occurred in *Pennsylvania Coal Co. v. Mahon* when Justice Holmes declared a diminution in value that went too far to be functionally equivalent to a physical taking. See *Pennsylvania Coal Co. v. Mahon*, 260 U.S. 393, 412, 414-15 (1922) (focusing on the extent of the diminution and explaining how a law making the mining of coal commercially impracticable was "very nearly the same . . . as appropriating or destroying it"). With diminution in value now a principal factor in regulatory takings cases, the Court could narrow the focus of physical takings to physical invasions, no matter how small. See *Loretto*, 458 U.S. at 435-37 (declaring a permanent physical occupation to be a physical taking regardless of the size of the area invaded).

¹⁹ By "effective," I mean fully considering constitutionally protected property principles, common law property principles, foundational norms of property, key functions of property (allocation, management, and distribution), and the complexities of real-world property arrangements.

perspective. As explained by Henry Smith in his seminal 2002 article, the exclusion and governance strategies provide methods for defining and allocating property rights, and fall at opposite ends of a continuum of methods used to measure the costs of various collections of property attributes.²⁰ As used in this Article, the strategies provide methods not only for allocating property rights in ways that minimize the problem of information costs (as Smith proposes) but also for managing the owners, non-owners, and resources subject to property rights (whether private or public).²¹ By analyzing whether the exclusion or governance strategy would more effectively manage a resource, courts could resolve physical takings claims in a way that connects physical takings to the underlying property concept while operating in the real world.

Under the exclusion strategy, decision-making power over a resource is allocated to one party, who becomes the gatekeeper and owner, with the authority to make decisions about the resource. These gatekeeping

²⁰ Henry E. Smith, *Exclusion Versus Governance: Two Strategies for Delineating Property Rights*, 31 J. LEGAL STUD. 453, 454-55 (2002) [hereinafter *Exclusion Versus Governance*].

²¹ See, e.g., Carol M. Rose, *A Dozen Propositions on Private Property, Public Rights, and the New Takings Legislation*, 53 WASH. & LEE L. REV. 265, 270-72 (1996) (discussing the kinds of resources conducive to public rights management); Carol M. Rose, *Rethinking Environmental Controls: Management Strategies for Common Resources*, 1991 DUKE L.J. 1, 9-13 [hereinafter *Rethinking Environmental Controls*] (discussing public rights management in the context of environmental regulation). Although Smith describes governance as one of two strategies for delineating an owner's rights over a resource as against non-owners, he views the exclusion strategy as the default approach that provides a platform for occasional application of the governance strategy. See Henry E. Smith, *Property as the Law of Things*, 125 HARV. L. REV. 1691, 1709-10 (2012). But see Joseph William Singer, *Property as the Law of Democracy*, 63 DUKE L.J. 1287, 1321-24 (2014) (disagreeing with Smith's platform approach); see also Larissa Katz, *Governing Through Owners: How and Why Formal Private Property Rights Enhance State Power*, 160 U. PA. L. REV. 2029, 2052-58 (2012) (examining how the balance of power between the state and the property owner is affected by whether formal or informal property rights apply and asserting that formal property rights increase the vulnerability of property owners to the state by allowing greater imposition of state governance obligations on the owners). Greg Alexander uses the term "governance" in yet another "internal" way "to refer solely to the relationship between individuals who have a property interest in an asset." Gregory S. Alexander, *Governance Property*, 160 U. PA. L. REV. 1853, 1855 n.3 (2012). Neither Smith's nor Alexander's approach directly addresses the management responsibilities for the resource subject to the property rights. My approach reflects the idea that property performs an important management function through the exclusion and governance strategies. The exclusion strategy takes a decentralized approach, while the governance approach is more complicated, requiring greater intervention by a court or other third party.

powers would include making decisions about use, transfer, monitoring the resource, and protecting the owner's rights from encroachment and interference.²² The exclusion strategy is especially effective at promoting socially beneficial outcomes when the resource is tangible and can be easily bounded, and the number of potential users or right holders is large. With a simple delegation of gatekeeping power, the delegate becomes the owner of the resource, generally free to make decisions about the resource with minimal judicial intervention, and responsible for any gains or losses that flow from the decisions. This decentralized strategy often provides a low-cost way to delineate rights in the resource.

By contrast, the governance strategy involves a more complicated and detailed set of rules and norms. Greater specificity of practices and monitoring of use activities may be needed to minimize the costs of using a resource that is shared or subject to multiple users and right holders.²³ The governance strategy can be especially effective at delineating rights when the resource is intangible or otherwise not easily bounded, is in need of stricter monitoring, or is subject to a relatively small class of users.

Instead of deciding whether a government action subject to a physical takings claim is more like a permanent occupation violating an owner's right to exclude than like a temporary trespass, courts should ask whether the exclusion or the governance strategy would more effectively accommodate the private and public interests at stake. Seeing the resolution of physical takings conflicts as a choice between the exclusion and governance strategies to property management — instead of as a choice between temporary versus permanent or direct versus indirect — provides more analytical depth for applying the concept. Viewing physical takings through the lens of the exclusion and governance strategies helps to flush out the nature and complexity of the entire property arrangement, not just the rights of the gatekeeper owner but also of other stakeholders. This lens helps to tie physical takings analysis to the underlying property concept through

²² See Smith, *Exclusion Versus Governance*, *supra* note 20, at 454-55. Smith attributes the gatekeeping metaphor to James Penner. See *id.* at 454-55, 455 n.3; see also J. E. PENNER, *THE IDEA OF PROPERTY IN LAW* 74 (1997). Tom Merrill also used the "gatekeeper" metaphor in his influential article on the right to exclude. See Thomas W. Merrill, *Property and the Right to Exclude*, 77 NEB. L. REV. 730, 731, 740-41 (1998).

²³ See Smith, *Exclusion Versus Governance*, *supra* note 20, at 455; see also Steven N.S. Cheung, *The Structure of a Contract and the Theory of a Non-Exclusive Resource*, 13 J.L. & ECON. 49, 64 (1970) (listing resource management strategies according to cost); Rose, *Rethinking Environmental Controls*, *supra* note 21, at 8-13 (discussing public rights management strategies).

the management function of property.²⁴ Actual conditions are examined, including the effect of private rights on natural systems and infrastructure vital to all, the existence of public property rights or public goods, and the relationship between public and private rights.

In Part I, the Article begins with a discussion of modern judicial perspectives on physical takings and explains how the Court justifies and applies the *per se* approach.²⁵ The comforting clarity of the *per se* rule has caused courts to overlook the complexity of the physical takings concept, resulting in some inconsistencies in logic and results. In Part II, a review of older physical takings cases shows the complexity of the early Court's physical takings analysis, which did not simply involve application of a categorical rule.²⁶ Then the results and logic of modern and traditional physical takings cases²⁷ are represented graphically for the purpose of studying the decisions for consistency and predictability.²⁸ The visual representation reveals the insufficiency of the Court's modern approach to physical takings and suggests the need for deeper analysis. This insufficiency is due in part to a disconnect between the exclusion strategy underlying the Court's approach and the complexity of certain real-life property arrangements that would benefit from analysis under the governance strategy. Complex physical takings situations that are better analyzed under the governance strategy include conflicts that involve resources subject to complex property sharing arrangements, resources needing more management because of overuse or changing natural conditions,

²⁴ See Laura S. Underkuffler-Freund, *Takings and the Nature of Property*, 9 CAN. J.L. & JURIS. 161, 165-69 (1996) (agreeing that the Court overlooks or glosses over the property concept in its takings analysis and describing two models of property that need to be considered).

²⁵ See *infra* Part I.

²⁶ See *infra* Part II.A.

²⁷ Divisions between modern and traditional takings jurisprudence can be traced back to the development of the regulatory takings concept — when the Court first removed economic impact from physical takings analysis and used that factor to recognize a regulatory taking. Scholars and jurists usually credit Justice Holmes's opinion in *Pennsylvania Coal Co. v. Mahon* with first making the distinction. See *Pennsylvania Coal Co. v. Mahon*, 260 U.S. 393, 415 (1922) (“The general rule at least is that while property may be regulated to a certain extent, if regulation goes too far it will be recognized as a taking.”); see also Stewart E. Sterk, *The Federalist Dimension of Regulatory Takings Jurisprudence*, 114 YALE L.J. 203, 208-18 (2004) (discussing the impact of *Mahon*). But see J. Peter Byrne, *Ten Arguments for the Abolition of the Regulatory Takings Doctrine*, 22 ECOLOGY L.Q. 89, 97-106 (1995) (disputing the soundness of the *Mahon* decision).

²⁸ See *infra* Part II.B. Supreme Court cases mentioned in this Article are coded based on scales developed from the standards and tests articulated by the Court.

resources subject to a new use made possible through a technological advance, and imminent public crises. The complexity of the property concept should inform physical takings analysis. The Article concludes that using a more nuanced approach to physical takings — one that does not overlook the governance function of constitutional property — will allow courts to deal more consistently with the many sizes and shapes of physical takings claims.

I. MODERN SIMPLICITY

Modern courts have crystallized the meaning and scope of the physical takings concept in a number of ways. In particular, the courts have added definiteness to the concept through the development of a categorical or *per se* approach to physical takings. As the Supreme Court explained in the 1992 decision *Lucas v. South Carolina Coastal Council*, certain “discrete categories of regulatory action . . . [are *per se*] compensable without case-specific inquiry into the public interest advanced in support of the restraint.”²⁹ One of those categories involves “regulations that compel the property owner to suffer a physical ‘invasion’ of his property.”³⁰ Another way contemporary courts have added definiteness to the physical takings concept is through their clarification of markers or factors identifying a physical taking. Critical factors identified by the Supreme Court in recent years include the permanence of the physical invasion,³¹ the loss of the right to exclude by a physical act or forced conveyance,³² whether a physical invasion is involuntary or forced,³³ and the foreseeability of the physical invasion.³⁴ Though earlier Supreme Court cases identified some of these factors, contemporary decisions have more clearly established them as physical takings benchmarks.³⁵ Until the Court’s

²⁹ *Lucas v. S.C. Coastal Council*, 505 U.S. 1003, 1015 (1992).

³⁰ *Id.*; see also *Yee v. City of Escondido*, 503 U.S. 519, 522 (1992); *Nollan v. Cal. Coastal Comm’n*, 483 U.S. 825, 831-32 (1987); *FCC v. Fla. Power Corp.*, 480 U.S. 245, 252 (1987); *PruneYard Shopping Ctr. v. Robins*, 447 U.S. 74, 82-83 (1980).

³¹ See *Tahoe-Sierra Pres. Council, Inc. v. Tahoe Reg’l Planning Agency*, 535 U.S. 302, 342 (2002).

³² See *Nollan*, 483 U.S. at 831-32.

³³ See *Fla. Power Corp.*, 480 U.S. at 252.

³⁴ See *Ark. Game & Fish Comm’n v. United States*, 133 S. Ct. 511, 522 (2012) (identifying foreseeability as one of the factors to balance in deciding whether a temporary act is a temporary taking).

³⁵ See, e.g., *Loretto v. Teleprompter Manhattan CATV Corp.*, 458 U.S. 419, 427-38 (1982) (interpreting earlier cases as establishing definitive benchmarks for identifying when a situation is equivalent to a direct physical appropriation). For further discussion of the modern *per se* narrative, see *infra* Part I.A.

2012 decision in *Arkansas Game & Fish Commission v. United States*,³⁶ modern courts appeared to consider these benchmarks as part of their functional equivalence test for a physical taking.³⁷ The 2012 decision, however, described the factors as part of a “complex balancing process,” adding considerable confusion to physical takings analysis.³⁸

One explanation for the more crystallized approach of modern courts to the physical takings concept is that the diminution in value issues raised in early physical takings cases have now become part of regulatory takings analysis. Whereas earlier cases linked diminution in value and interference with use to physical takings claims,³⁹ contemporary cases have treated economic impact as a separate basis for a taking.⁴⁰ The Court first distinguished between physical takings and regulatory takings in *Pennsylvania Coal Co. v. Mahon* when the Court removed diminution in value from the factors discussed in earlier physical takings cases and established economic impact as the basis of regulatory takings.⁴¹ The separation of physical and regulatory

³⁶ *Ark. Game & Fish Comm’n*, 133 S. Ct. 511.

³⁷ *See Loretto*, 458 U.S. at 427-28.

³⁸ *See Ark. Game & Fish Comm’n*, 133 S. Ct. at 521 (quoting *Loretto*, 458 U.S. at 435 n.12) (internal quotation marks omitted).

³⁹ *See, e.g., Sanguinetti v. United States*, 264 U.S. 146, 149-50 (1924) (finding that a government canal could not have caused flooding amounting to a physical taking of land because, as a preliminary matter, neither the customary use nor the value of the land was impaired subsequent to the canal’s construction); *Bedford v. United States*, 192 U.S. 217, 223-24 (1904) (rejecting the contention that a government project aimed at preventing erosion of a river’s banks was a physical taking of a riparian owner’s property because that implies a right of riparian owners to restrict one another’s use of their properties, which would destroy the values of those properties); *United States v. Lynah*, 188 U.S. 445, 468-69 (1903), *overruled in part by United States v. Chi., Milwaukee, St. Paul & Pac. R.R. Co.*, 312 U.S. 592 (1941) (holding that the government’s construction of a dam was a physical taking of land because it resulted in the permanent flooding and destruction of the value of a rice plantation); *Pumpelly v. Green Bay Co.*, 80 U.S. (13 Wall.) 166, 177-78 (1871) (explaining the inconsistency of not finding a physical taking when a government act wholly destroys the value of private property just because the property is not affirmatively appropriated for public use within the traditional understanding of the Takings Clause).

⁴⁰ *See, e.g., Lucas v. S.C. Coastal Council*, 505 U.S. 1003, 1015-16 (1992) (stating the standard that a taking occurs when a government regulation deprives a property owner of the ability to reap the economic benefits of the property); *Penn Cent. Transp. Co. v. City of New York*, 438 U.S. 104, 124 (1978) (identifying the economic impact of a regulation on a property owner as a relevant factor in determining whether there has been a taking); *Pa. Coal Co. v. Mahon*, 260 U.S. 393, 414-15 (1922) (“To make it commercially impracticable to mine certain coal has very nearly the same effect for constitutional purposes as appropriating or destroying it.”).

⁴¹ *See Mahon*, 260 U.S. at 414-15. Jurists had even discussed the concept of a regulatory taking in the nineteenth century. *See, e.g., David J. Brewer, Justice, Supreme*

takings facilitated the development of a per se approach to physical takings.⁴²

Another possible explanation for the more crystallized approach of modern courts is that they are engaging in either literal or interpretive denial of past judicial approaches. In a “literal denial” situation, a court would assert that an earlier decision never took a particular position.⁴³ This type of denial appears to have occurred in *Arkansas Game & Fish Commission*. In that case, the Supreme Court denied that an earlier 1924 decision really meant to define a physical taking to be “the direct result of the [government] structure, and . . . an actual, permanent invasion” even though the earlier decision affirmatively described these as “necessary” requirements.⁴⁴ An “interpretive denial” situation, on the other hand, exists when a court accepts the rule or position of an earlier decision, but then reinterprets its meaning⁴⁵ — often more in line with the current jurists’ views. In the same 2012 decision, the Supreme Court reinterpreted the 1924 Court’s statement about physical takings, noting that “no distinction between permanent and temporary flooding was material to the result.”⁴⁶ Similarly, in the

Court of the United States, Address Delivered Before the Graduating Classes at the Sixty-Seventh Anniversary of Yale Law School: Protection to Private Property from Public Attack 11-13 (June 23, 1891), available at <http://www.minnesotalegalhistoryproject.org/assets/Brewer%20-%20Protection%20Prop%20%281891%29—XX.pdf> (arguing that the case in equity for compensation when a government regulation deprives a property owner from realizing a reasonable profit from the property is as compelling as the case for compensation when a government act physically deprives the owner of the use of his property); see also Richard A. Epstein, *David Josiah Brewer Addresses Yale Law School*, 10 GREEN BAG 2d 483, 483, 487-94 (2007) (discussing Justice Brewer’s address in support of protecting property from taxation, eminent domain, and regulation).

⁴² See *Loretto*, 458 U.S. at 426.

⁴³ STANLEY COHEN, *STATES OF DENIAL: KNOWING ABOUT ATROCITIES AND SUFFERING* 7 (2001); see also KARI MARIE NORGAARD, *LIVING IN DENIAL: CLIMATE CHANGE, EMOTIONS, AND EVERYDAY LIFE* 10 (2011) (using Cohen’s categories of denial to discuss reactions to climate change).

⁴⁴ See *Ark. Game & Fish Comm’n v. United States*, 133 S. Ct. 511, 520 (2012) (quoting *Sanguinetti*, 264 U.S. at 149) (internal quotation marks omitted).

⁴⁵ COHEN, *supra* note 43, at 7-8; see also NORGAARD, *supra* note 43, at 10.

⁴⁶ *Ark. Game & Fish Comm’n*, 133 S. Ct. at 520. Justice Ginsburg, author of the opinion, might not have always felt this way. During oral argument, she questioned the Commission’s counsel on the old case’s significance:

What about this Court’s *precedent* in . . . the *Sanguinetti* case, where the Court said that . . . it is at least necessary that the overflow constitute a permanent invasion of the land amounting to an appropriation, not merely an injury, to property? We would have to withdraw or modify that statement, would we not, if . . . your argument prevails?

Transcript of Oral Argument at 4, *Ark. Game & Fish Comm’n*, 133 S. Ct. 511 (No. 11-

majority opinion in *Lucas v. South Carolina Coastal Council*, Justice Scalia recast certain “notion[s]” and “understandings” of takings as part of the “historical compact recorded in the Takings Clause that has become part of our constitutional culture.”⁴⁷

The crystallization of contemporary judicial thinking on physical takings may also be due to a narrow view of constitutional and common law property that protects a property owner’s right to exclude almost to a fault. Under that view, property ownership conveys nearly absolute rights over the owned property because a strategy of exclusive rights more effectively promotes individual autonomy and social utility.⁴⁸ Our private property system developed at a time when Locke, Blackstone, and other like-minded thinkers had considerable influence on the founding fathers and early jurists.⁴⁹ Locke maintained that someone who labored over an unowned resource deserved to reap the rewards through property rights,⁵⁰ while Blackstone recognized the importance of protecting individual autonomy through strong property rights.⁵¹ To many of the Founding

597), 2012 WL 4616028 at *4 (emphasis added). The Commission’s counsel took the position that the *Sanguinetti* decision did not turn on the permanent flooding element, and the government did not dispute the point. *Id.* at 4. For another example of a questionable interpretation of prior takings cases, see *Koontz v. St. Johns River Water Mgmt. Dist.*, 133 S. Ct. 2586, 2594 (2013) (recasting the *Nollan* and *Dolan* takings nexus review almost exclusively in terms of the unconstitutional conditions doctrine and ignoring the physical invasion holding in both cases).

⁴⁷ *Lucas v. S.C. Coastal Council*, 505 U.S. 1003, 1027-28 (1992). In *Lucas*, Justice Scalia was justifying the application of the Takings Clause to confiscatory regulations depriving a landowner of all economically viable use even though early theorists and jurists “did not believe the Takings Clause embraced regulations of property.” *See id.* at 1027-29, 1028 n.15. A subsequent decision used the phrase “common, shared understandings of permissible limitations” to describe Justice Scalia’s expression of takings principles in *Lucas*. *See Palazzolo v. Rhode Island*, 533 U.S. 606, 630 (2001).

⁴⁸ *See Lynda L. Butler, The Resilience of Property*, 55 ARIZ. L. REV. 847, 856 (2013) [hereinafter *The Resilience*] (discussing the individual rights vision of property).

⁴⁹ *See* 2 WILLIAM BLACKSTONE, COMMENTARIES *2; JOHN LOCKE, THE SECOND TREATISE OF GOVERNMENT (AN ESSAY CONCERNING THE TRUE ORIGINAL, EXTENT AND END OF CIVIL GOVERNMENT) AND A LETTER CONCERNING TOLERATION 15 (J.W. Gough ed., Basil Blackwell & Mott, Ltd. 1956) (1690). *See generally* KEITH THOMAS, MAN AND THE NATURAL WORLD: CHANGING ATTITUDES IN ENGLAND 1500–1800 (1983) (describing the change in the common perception of humans’ status within the natural order in America and England during the seventeenth, eighteenth, and nineteenth centuries).

⁵⁰ *See* LOCKE, *supra* note 49, at 15.

⁵¹ *See* BLACKSTONE, *supra* note 49, at *2 (describing the right of property as “that sole and despotic dominion which one man claims and exercises over the external things of the world, in total exclusion of the right of any other individual in the universe”).

Fathers, property became the vehicle not only for stimulating economic activities but also for protecting individual liberty.⁵²

Mainstream economics now dominates property theory, explaining how private property rights promote an efficient allocation of interests in resources and lead to greater social utility.⁵³ Public property rights are often viewed as inefficient arrangements in need of privatization.⁵⁴ Alternative approaches and norms also tend to be ignored.⁵⁵ Gradually, courts are embedding the assumptions, choices, and values of economic theory into common law and constitutional property, causing common law and constitutional property to become intertwined.⁵⁶ Supreme Court directives have controlled how lower courts resolve regulatory takings claims by limiting their consideration of common law property principles. The Court, for example, has directed lower courts to only look at “background principles” that “inhere in the title itself,”⁵⁷ only evaluate the reasonableness of private expectations under the common law of property and nuisance,⁵⁸ and only invoke substantive laws that fairly exist as background principles.⁵⁹ Some Justices would even lock courts in time, allowing

⁵² James Madison, for example, linked property rights to an individual’s “opinions and free communication of them . . . in the safety and liberty of his person . . . [and] in the free use of his faculties.” James Madison, *Property*, NAT’L GAZETTE, Mar. 29, 1792, reprinted in MADISON: WRITINGS 516, 516-18 (Jack N. Rakove ed., Library of Am. 1999).

⁵³ See, e.g., Harold Demsetz, *Toward a Theory of Property Rights*, 57 AM. ECON. REV. 347, 347-48, 350-53 (1967) (explaining that private property ownership leads to the internalization of relevant costs that would otherwise be disregarded for purposes of valuing property and making use decisions); James E. Krier, *Evolutionary Theory and the Origin of Property Rights*, 95 CORNELL L. REV. 139, 142 (2009) (noting that “individual property rights reduce transactions costs”); Carol M. Rose, *Evolution of Property Rights*, in 2 THE NEW PALGRAVE DICTIONARY OF ECONOMICS AND THE LAW 93, 93-94 (Peter Newman ed., 1998) (arguing that a system of private property solves the problem of allocating scarce resources by incentivizing individuals to invest and labor to acquire the things that they want).

⁵⁴ Demsetz, for example, viewed the evolution of private property rights as a one-way street, occurring when the costs of public sharing of resources became too high compared to the benefits of privatization. See Demsetz, *supra* note 53, at 347-48.

⁵⁵ See Butler, *The Resilience*, *supra* note 48, at 854 (discussing how mainstream economics dominates thinking about property rights today, often to the exclusion of important alternative views).

⁵⁶ See *id.* at 854.

⁵⁷ *Lucas v. S.C. Coastal Council*, 505 U.S. 1003, 1029 (1992).

⁵⁸ See *id.* at 1032, 1035 (Kennedy, J., concurring) (noting that the state supreme court erred by failing to determine whether the state regulations “must accord with the owner’s reasonable expectations”). *But see id.* at 1061, 1068-69 (Stevens, J., dissenting) (criticizing the focus on common law principles and the denial of traditional legislative power).

⁵⁹ See *Stevens v. City of Cannon Beach*, 510 U.S. 1207, 1334 (1994) (Scalia, J.,

them to only consider “relevant precedents” governing the regulated land as it is “presently found”⁶⁰ and denying the power of common law courts to “change” property rights in response to new conditions or circumstances.⁶¹

A discussion of modern judicial narratives of physical takings will reveal that the crystallization of the contemporary physical takings concept through the *per se* approach has limited the concept’s effectiveness in complex settings.

A. *The Per Se Narrative*

Since the 1982 decision *Loretto v. Teleprompter Manhattan CATV Corp.*, the Court has unequivocally declared that a permanent physical occupation or invasion constitutes a taking regardless of the size of the area invaded or the importance of the public interest.⁶² Although the Court had, for years, held that a permanent physical appropriation or occupation was a physical taking, the earlier decisions were not as absolute in declaring this principle, instead analyzing a number of factors. The more forceful position taken in *Loretto* enables the Court to limit significantly the role of the public interest in physical takings analysis. Further, as the variety of situations raising physical takings claims has increased, the limitations of the *per se* approach have become more obvious. Recently, the Court has come full circle, adopting a balancing test for certain situations.⁶³

In *Loretto*, the Court considered whether state-mandated physical occupation of a landlord’s property constituted a compensable taking when the occupation was minor but permanent and facilitated tenant access to cable.⁶⁴ Though the previous owner of the apartment building had granted permission for the permanent installation of the

dissenting from a denial of certiorari).

⁶⁰ *Lucas*, 505 U.S. at 1032 n.18.

⁶¹ See *Stop the Beach Renourishment, Inc. v. Fla. Dep’t of Env’tl. Prot.*, 560 U.S. 702, 722 (2010); Butler, *The Resilience*, *supra* note 48, at 862 n.76. Tom Merrill and Henry Smith support this view of the limited power of common law courts to change property through their interpretation of the *numerus clausus* concept, which limits the forms available for holding property. See Thomas W. Merrill & Henry E. Smith, *Optimal Standardization in the Law of Property: The Numerus Clausus Principle*, 110 *YALE L.J.* 1, 58 (2000).

⁶² See *Loretto v. Teleprompter Manhattan CATV Corp.*, 458 U.S. 419, 435-37 (1982); see also *Lucas*, 505 U.S. at 1015.

⁶³ See *Ark. Game & Fish Comm’n v. United States*, 133 S. Ct. 511, 521-23 (2012) (adopting a balancing process for temporary physical invasions).

⁶⁴ *Loretto*, 458 U.S. at 421.

cable facilities, the current landlord objected to the installation.⁶⁵ The facilities included a small metal box on the roof and thin cable wires running down the side of the building.⁶⁶ In holding that the minor but permanent physical occupation was a compensable taking, the Court noted that it had “long considered a physical intrusion by government to be a property restriction of an unusually serious character.”⁶⁷ When the physical intrusion reached the “extreme form of a permanent physical occupation,” the character of the government action was “determinative.”⁶⁸ In such a setting, the Court could ignore “other factors that a court might ordinarily examine”⁶⁹ and conclude that a taking had occurred. The Court stressed that any permanent physical occupation, even one involving insubstantial amounts of space, would uniformly be considered a taking without regard for the importance of the public interest at stake or the economic impact of the invasion.⁷⁰

In justifying its conclusion that a permanent physical occupation was always a taking, the Court stressed that such an invasion involves the “most serious form of invasion . . . [I]t chops through the bundle, taking a slice of every strand” of the bundle of property rights.⁷¹ Those strands include the rights to possess, use, and dispose of the invaded area and, most importantly, the right to exclude.⁷² Describing the power to exclude as “one of the most treasured strands in an owner’s bundle of property rights,”⁷³ the Court noted that a permanent physical occupation “forever denies the owner any power to control the use of the property.”⁷⁴ Indeed, the owner could not even make a nonpossessory use of the occupied land.⁷⁵ Property law “has long protected an owner’s expectation that he will be relatively undisturbed at least in the possession of his property.”⁷⁶ A permanent physical occupation is “qualitatively more severe than a regulation of the use of

⁶⁵ *Id.* at 421-22, 424.

⁶⁶ *Id.* at 422.

⁶⁷ *Id.* at 426.

⁶⁸ *Id.*

⁶⁹ *Id.* at 432.

⁷⁰ *See id.* at 430, 434-35. One scholar has concluded that the result in *Loretto* can only be reconciled with other cases that find no taking, despite much more severe impacts, by focusing on the “degree of stringency” with which particular property rights are protected. Underkuffler-Freund, *supra* note 24, at 175, 186-87.

⁷¹ *Loretto*, 458 U.S. at 435.

⁷² *See id.*

⁷³ *Id.*

⁷⁴ *Id.* at 436.

⁷⁵ *Id.*

⁷⁶ *Id.*

property, even a regulation that imposes affirmative duties on the owner, since the owner may have no control over the timing, extent, or nature of the invasion.”⁷⁷ An owner thus “suffers a special kind of injury” whenever government directly invades and occupies the owner’s land.⁷⁸ In the language of modern property theory, the permanent loss of the owner’s gatekeeping powers over the occupied land necessitates compensation under the Takings Clause.

The Court in *Loretto* limited its decision in two important ways. The Court first “narrow[ed]”⁷⁹ its holding by distinguishing the *Loretto* situation from those cases involving regulation of housing and the landlord-tenant relationship that did not authorize a “permanent occupation of the . . . property by a third party.”⁸⁰ The regulated conduct involved in these cases included discrimination in public accommodations, fire regulation, rent control, mortgage moratoria, and emergency housing.⁸¹ As the *Loretto* Court explained, its holding would not affect the analysis in the regulatory cases because the laws at issue in those cases did not require owners “to suffer the physical occupation” of their property by a third party.⁸² The holding thus would not impact laws requiring landowners to comply with building codes or provide utility connections, mailboxes, smoke detectors, and other similar items. As long as these types of laws did not subject the owner to a permanent physical occupation, the “multifactor inquiry generally applicable to nonpossessory governmental activity” would apply — and not the per se approach.⁸³

The Court also limited its decision in *Loretto* through its affirmation of two earlier cases that did not apply a per se approach to temporary physical occupations. One of those cases, *Kaiser Aetna v. United States*, involved a takings challenge to the government’s imposition of a navigational servitude on a privately owned pond after the owner connected the pond to navigable waters and created a marina.⁸⁴ In concluding that the government action was a taking, the Court in *Kaiser Aetna* relied on a number of factors.⁸⁵ Recognizing as legitimate the government’s power to regulate the pond after it became navigable,

⁷⁷ *Id.*

⁷⁸ *Id.*

⁷⁹ *Id.* at 441.

⁸⁰ *Id.* at 440.

⁸¹ *Id.*

⁸² *Id.*

⁸³ *See id.*

⁸⁴ *See Kaiser Aetna v. United States*, 444 U.S. 164, 164 (1979).

⁸⁵ *See id.* at 178.

the *Kaiser Aetna* Court nevertheless concluded that forcing the landowner to grant a public right of access to the improved pond far exceeded ordinary regulations adopted to facilitate navigation.⁸⁶ Because the imposition of the navigational servitude resulted in an actual physical invasion causing the loss of the fundamental right to exclude, the Court decided that just compensation was owed.⁸⁷ In reaffirming the *Kaiser Aetna* ruling, the Court in *Loretto*, however, acknowledged that the physical invasion in *Kaiser Aetna* involved an easement of passage and therefore was not a permanent occupation subject to the per se rule.⁸⁸ Rather, a temporary physical invasion — one that did not permanently and absolutely divest the landowner of the right to exclude — was subject to a “more complex balancing process to determine” whether a taking existed.⁸⁹

PruneYard Shopping Center v. Robins, the other case affirmed in *Loretto*, involved a state law requiring shopping center owners to allow individuals to exercise their free speech and petition rights on the owners’ property.⁹⁰ Concluding that the requirement did not constitute a taking, the Court in *PruneYard* stressed that the landowner could still control the expressive activities by imposing reasonable time, place, and manner restrictions to minimize interference with the landowner’s business interests.⁹¹ Also important to the Court was the fact that the landowner had partially waived its right to exclude by inviting the general public onto the property.⁹² As the *Loretto* Court further explained in discussing *PruneYard*: “Since the invasion was temporary and limited in nature, and since the owner had not exhibited an interest in excluding all persons from his property,” the existence of a physical invasion could not be viewed as “determinative.”⁹³

Collectively, *Kaiser Aetna*, *PruneYard*, and *Loretto* demonstrate that contemporary jurisprudence has treated permanent physical occupations differently from temporary invasions and nonpossessory

⁸⁶ See *id.* at 172-73.

⁸⁷ See *id.* at 179-80.

⁸⁸ See *Loretto*, 458 U.S. at 433.

⁸⁹ *Id.* at 435 n.12.

⁹⁰ *PruneYard Shopping Ctr. v. Robins*, 447 U.S. 74, 76 (1980).

⁹¹ *Id.* at 83.

⁹² See *id.* at 87.

⁹³ *Loretto*, 458 U.S. at 434 (internal quotation marks omitted). Judge Plager of the U.S. Court of Appeals for the Federal Circuit has described temporary physical interference too fleeting to rise to the level of a physical taking as “a momentary excursion shortly to be withdrawn, and thus little more than a trespass.” *Hendler v. United States*, 952 F.2d 1364, 1376 (Fed. Cir. 1991).

restrictions on the right to exclude. Permanent physical occupations merit a per se rule because the “permanence and absolute exclusivity of [the] physical occupation distinguish it from [a] temporary [invasion].”⁹⁴ Temporary limitations or invasions are subject to a “more complex balancing process to determine whether they are a taking.”⁹⁵ According to the *Loretto* Court, the reason is “evident: they do not absolutely dispossess the owner of his rights to use, and exclude others from, his property.”⁹⁶ That is, “[n]ot every physical invasion is a taking.”⁹⁷

Contemporary thinking about permanent physical occupations would benefit from the perspective of the governance, as well as the exclusion, strategy. With its focus on permanent physical ouster, the *Loretto* decision clearly reflects the exclusion strategy. The permanent loss of possession of the occupied area deprives the owner of her gatekeeping powers that are important under the exclusion strategy. What is missing from the analysis, however, is consideration of the legitimate rights of the tenants, especially their First Amendment interests in receiving information and news in a timely manner through modern means of communication.⁹⁸ A governance perspective would have focused attention on the interests of the tenants, who also have possessory rights affected, at least qualitatively, by the landlord’s refusal. The result of the analysis may ultimately have been the same, given the government’s management method of forced occupation, but at least the analysis would have focused attention on the landlord’s refusal in light of the tenants’ interests and suggested alternative ways to manage the interests. The problem here, in other words, is not simply that the landlord suffered a loss of the right to exclude, but also that the tenants’ possessory interests in use and enjoyment of the leasehold premises are detrimentally affected by the landlord’s unilateral decision. When multiple parties have property rights in a

⁹⁴ *Loretto*, 458 U.S. at 435 n.12.

⁹⁵ *Id.*

⁹⁶ *Id.*

⁹⁷ *Id.*

⁹⁸ See, e.g., *State v. Shack*, 277 A.2d 369 (N.J. 1971) (applying a governance strategy to resolve a trespass dispute). In that case, a field worker and an attorney from a nonprofit organization that assisted migrant farmworkers were convicted under a New Jersey trespass statute after they visited the on-site living quarters of migrant workers without the employer’s supervision or consent. *Id.* at 299-301. Noting that “[p]roperty rights serve human values,” the New Jersey Supreme Court reversed the conviction, holding that the migrant workers’ right to access aid provided them by the government trumped the employer’s right to exclude. *Id.* at 303, 307.

resource, courts need to consider a governance strategy of management.

The *Kaiser Aetna* decision also reflects exclusionary thinking, with the Court trying to decide where to place the forced easement of passage on the continuum of temporary trespass to permanent occupation.⁹⁹ As *Loretto* explained in its examination of *Kaiser Aetna*, the Court refused to apply a per se approach in *Kaiser Aetna* because of the temporary and limited nature of passage but nevertheless found a physical taking due to the loss of the right to exclude — a fundamental gatekeeping power.¹⁰⁰ A governance perspective would have more fully highlighted that navigable waters are subject to public and private rights and that those rights sometimes carry conflicting management responsibilities. As inherently public property, navigable waters are important public resources contributing to commerce, travel, and economic well-being.¹⁰¹ As resources subject to the private rights of waterfront landowners, navigable waters provide important and valuable benefits of access and use to those landowners.¹⁰² Management of public resources subject to public and private property rights will necessarily involve government regulation as well as private action. The exclusion strategy is, however, designed to focus on the powers of an individual owner or party. Without consideration of the governance strategy, the analysis of a conflict tends to be linear instead of multi-dimensional. Left out of the equation are the management powers of conflicting rightholders and the complex nature of property arrangements involving public and private rights. When a management decision by one of the rightholders produces unnecessary spillovers or substantially interferes with the reasonable expectations of other rightholders, a governance strategy would call for a rebalancing of rights and responsibilities.¹⁰³ Applying a governance

⁹⁹ See *Kaiser Aetna v. United States*, 444 U.S. 164, 178-80 (1979).

¹⁰⁰ *Loretto*, 458 U.S. at 433; *Kaiser Aetna*, 444 U.S. at 178-79.

¹⁰¹ See Carol Rose, *The Comedy of the Commons: Custom, Commerce, and Inherently Public Property*, 53 U. CHI. L. REV. 711, 750-55 (1986) [hereinafter *The Comedy of the Commons*] (describing timeless traditions of using navigable waters for public transportation and recreation).

¹⁰² Though the water rights of waterfront landowners vary from state to state, they typically include the right to wharf out to or access navigable waters and the right to use the waters for irrigation, fishing, and consumption. See A. DAN TARLOCK, *LAW OF WATER RIGHTS AND RESOURCES* § 3:74, at 132-36 (2013).

¹⁰³ In *Kaiser Aetna*, for example, government regulators induced the private waterfront landowner to invest millions in improvements with the expectation that the improved property would remain privately owned and controlled. *Kaiser Aetna*, 444 U.S. at 169. Courts traditionally have concluded that private waterfront

strategy to *Kaiser Aetna* would highlight the complex property sharing arrangement and recognize that government expanded its management powers by misleading the landowner.

In contrast to *Loretto* and *Kaiser Aetna*, the *PruneYard* decision uses exclusionary thinking to conclude that the physical invasion was too temporary, too voluntary, too subject to the landowner's time, place, and manner restrictions to be a taking. Because the language of exclusion controls the analysis, some have had trouble reconciling the decision with other temporary physical invasion cases.¹⁰⁴ Analysis under a governance strategy would alleviate some of this difficulty. That analysis would recognize the public dimension of private property opened to the public and the resulting need to manage both from a public and private perspective. Once the landowner voluntarily opens the property to public use, the owner gives the property a public character of sorts and yields some control to the courts to consider the interests of public users in resolving a conflict.

In *Nollan v. California Coastal Commission*, the Supreme Court expanded the scope of the per se rule by redefining a permanent physical occupation to include a "permanent and continuous right" of passage.¹⁰⁵ In *Nollan*, the owners of beachfront property challenged the state coastal commission's decision to condition approval of a development permit on their conveyance of an easement that would allow the public to pass laterally across their property.¹⁰⁶ Writing for the majority, Justice Scalia relied on *Loretto* to bring permanent rights of passage within the per se rule.¹⁰⁷ Absent from his discussion was any acknowledgement that *Loretto* had classified an easement of passage as a temporary physical invasion not subject to the per se rule and had stressed the need to have a permanent dispossession of the right to exclude, use, or dispose of property.¹⁰⁸ Despite *Loretto's* focus on the "permanence and absolute exclusivity of a physical occupation" in defining the scope of the per se rule, the majority in *Nollan*

landowners hold their rights subject to the navigational servitude and to legitimate government action that promotes navigation. Under this view landowners often are not entitled to just compensation. See, e.g., TARLOCK, *supra* note 102, § 9:17, at 553 (discussing the scope of the navigational servitude and the Supreme Court cases that defined it).

¹⁰⁴ See Richard A. Epstein, *Takings, Exclusivity and Speech: The Legacy of PruneYard v. Robins*, 64 U. CHI. L. REV. 21, 51 (1997) (arguing that the decision "fundamentally misunderstands the logic of property rights").

¹⁰⁵ *Nollan v. Cal. Coastal Comm'n*, 483 U.S. 825, 832 (1987).

¹⁰⁶ See *id.* at 828.

¹⁰⁷ See *id.* at 831-32.

¹⁰⁸ *Loretto v. Teleprompter Manhattan CATV Corp.*, 458 U.S. 419, 433-35 (1982).

classified the right of passage as a permanent physical occupation.¹⁰⁹ The Court explained that the condition would give individuals “a permanent and continuous right to pass to and fro, so that the real property may continuously be traversed, even though no particular individual is permitted to station himself permanently upon the premises.”¹¹⁰ *PruneYard* and *Kaiser Aetna* were not inconsistent with this conclusion because, according to the *Nollan* Court, neither involved a “classic right-of-way easement.”¹¹¹ Traditional doctrines governing the navigation servitude affected the analysis in *Kaiser Aetna*, while the owner in *PruneYard* already had opened the land to the general public.¹¹²

Although the Court in *Nollan* expanded the scope of the per se rule by broadening the meaning of permanent physical occupation, the Court also limited applicability of the rule. A literal interpretation arguably would allow landowners to win a per se taking challenge any time the government imposed a condition in a permitting process that met this expanded meaning. Such an interpretation would require a taking to be found, for example, when government required a subdivision developer to build roads or playgrounds to meet increased demand associated with the subdivision.¹¹³ The Court in *Nollan* rejected this literal interpretation, instead holding that a permit condition resulting in a physical occupation could still be constitutional if a permit denial would not be a taking and the permit condition served the same legitimate police power purpose as the denial.¹¹⁴ If, however, this essential nexus did not exist, such a

¹⁰⁹ Compare *id.* at 435 n.12 (stressing the need to determine whether a physical invasion completely precludes the owner’s use of the property or is only a temporary use), with *Nollan*, 483 U.S. at 832 (finding a taking where, although an owner is not physically prevented from using land, he or she is stripped of the right to exclude others from passing over it).

¹¹⁰ *Nollan*, 483 U.S. at 832.

¹¹¹ *Id.* at 832 n.1.

¹¹² See *id.*

¹¹³ JULIAN CONRAD JUERGENSMEYER & THOMAS E. ROBERTS, *LAND USE PLANNING AND CONTROL LAW* 421 (1998).

¹¹⁴ See *Nollan*, 483 U.S. at 836-37. The Court’s 2013 decision in *Koontz v. St. Johns River Water Management District*, 133 S. Ct. 2586, 2595-96 (2013), calls this analysis into question. In that decision the Court clarified that the takings nexus reviews of *Nollan* and its companion case, *Dolan v. City of Tigard*, 512 U.S. 374 (1994), even apply to permit denials when the denial follows the applicant’s refusal to meet a condition. See *Koontz*, 133 S. Ct. at 2595-96. In the process, the *Koontz* Court seemed to fold its takings nexus analysis more completely into its unconstitutional conditions doctrine. See *id.*

condition would be an “an out-and-out plan of extortion.”¹¹⁵ Although the nexus did not exist in *Nollan*, the Court’s restriction of the applicability of the per se rule “rescued many land use controls.”¹¹⁶

Fifteen years later, the Court appeared to ignore the *Nollan* expansion of the per se rule when it explained the physical takings concept in *Tahoe-Sierra Preservation Council, Inc. v. Tahoe Regional Planning Agency*.¹¹⁷ Writing for the majority, Justice Stevens described the jurisprudence governing physical takings as involving “the straightforward application of per se rules.”¹¹⁸ Those rules mandated compensation whenever “government physically takes possession of an interest in property for some public purpose” regardless of the importance of the public interest, the amount taken, or the temporary nature of the use.¹¹⁹ The Court focused on the deprivation of possession and the physical occupation of property; references to *Nollan* were noticeably absent.¹²⁰ This apparent slight became more confusing after a 2012 Supreme Court decision appeared to retreat somewhat from the per se approach for temporary invasions.¹²¹

¹¹⁵ *Nollan*, 483 U.S. at 837 (quoting *J.E.D. Assocs., Inc. v. Town of Atkinson*, 432 A.2d 12, 14 (N.H. 1981)) (internal quotation marks omitted).

¹¹⁶ JUERGENSMEYER & ROBERTS, *supra* note 113, at 421.

¹¹⁷ *Tahoe-Sierra Pres. Council, Inc. v. Tahoe Reg’l Planning Agency*, 535 U.S. 302 (2002). *But see* Andrea L. Peterson, *The False Dichotomy Between Physical and Regulatory Takings Analysis: A Critique of Tahoe-Sierra’s Distinction Between Physical and Regulatory Takings*, 34 *ECOLOGY L.Q.* 381, 440-41 (2007) (interpreting Stevens more broadly as not limiting physical takings to permanent physical occupations).

¹¹⁸ *Tahoe-Sierra Pres. Council*, 535 U.S. at 322.

¹¹⁹ *Id.*

¹²⁰ *See id.* at 321-23. The Court does, however, cite *United States v. Causby*, 328 U.S. 256, 261-62 (1946), as an example of a per se taking involving government use of “private airspace to approach a government airport.” *Tahoe-Sierra Pres. Council*, 535 U.S. at 322. What the reference ignores is the damage caused by low-level flights over the landowner’s property. *Compare id.* (implying that the determinative factor for finding a taking in *Causby* was that the government planes actually flew over the land), *with Causby*, 328 U.S. at 262-63 (finding a taking because the noise of large aircraft passing just overhead with regular frequency was so disruptive as to render the land useless). The characterization of the airspace as private also is inconsistent with current thinking on airspace as a resource subject to public and private interests. *See Note, Airplane Noise, Property Rights, and the Constitution*, 65 *COLUM. L. REV.* 1428, 1428 (1965) (discussing landowners’ shrinking ownership interests in the sky).

¹²¹ In *Arkansas Game & Fish Commission v. United States*, the Court concluded that a temporary physical invasion required “a more complex balancing process,” rather than a per se approach. *Ark. Game & Fish Comm’n v. United States*, 133 S. Ct. 511, 521 (2012) (quoting *Loretto v. Teleprompter Manhattan CATV Corp.*, 458 U.S. 419, 435 n.12 (1982)) (internal quotation marks omitted). Factors to be balanced include the duration of the flooding, the character of the land, whether the invasion was intentional or foreseeable, and the severity of the interference.

The per se narrative announced in *Loretto* and other decisions presents a “straightforward” rule that ignores the complexity of physical takings. Because of this complexity, the scope of the per se rule shifts in meaning as new situations and forms of interference arise. Though the rule professes clarity, its application negates the assumption of simplicity. The rule assumes that all physical invasions are alike. It assumes that if “A” — a physical invasion — exists, then “B” — a physical taking — must be found. What is left out of the analysis is the continuum of physical invasion situations that actually exist, from outright and unjustified physical intrusions onto private property to physical interference affecting shared resources. Instead of the hypothesis being A, it really is A₁ or A₂ or A₃ (and so on). The per se narrative also fails to understand the reach of the management role of property, particularly the choice between the exclusion and governance strategies of management. This omission ultimately causes the Court to come full circle in its thinking about physical takings and to retreat in part from the per se approach. The next Subpart will more clearly show the continuum of physical invasion situations and the limitations of the per se rule.

B. Limitations of the Per Se Approach

Limitations of the per se approach become increasingly apparent as the physical takings claims move away from the physicality¹²² or the permanence¹²³ of a direct physical appropriation or occupation. Difficulties posed by situations involving little or no physicality are demonstrated by physical takings challenges to economic regulations that limit, in some fashion, the owner’s right to exclude, use, or profit from her property. Problems posed by situations that are not permanent are exemplified by physical takings claims raised against government action that is limited in terms of time or fluid in terms of space. Both types of situations are discussed below.

1. Little or No Physicality

Laws regulating the price of using, occupying, or profiting from another’s property — the rate, the rent, the interest — have been

¹²² The physicality of the government interference measures the degree to which government action has a physical presence on private property.

¹²³ The permanence of the government interference measures the degree to which the interference continues indefinitely.

challenged as physical takings.¹²⁴ Though the challenged government action does not involve an actual physical occupation, regulated property owners have stressed the limiting impact of the law on the right to exclude or profit in their arguments in support of a physical taking. For the most part, their claims have met with little success.

Loretto's narrow construction of a per se physical taking affected the results in *FCC v. Florida Power Corp.*¹²⁵ and *Yee v. City of Escondido*,¹²⁶ two cases involving regulatory restrictions to the right to exclude. In *Florida Power Corp.*, the Court considered whether the Pole Attachment Act ("PAA") authorized a permanent physical occupation of private property that fell within the per se takings rule of *Loretto*. The PAA empowered the Federal Communications Commission ("FCC"), in the absence of state regulation, to determine "just and reasonable" rates that utilities could charge cable systems for using utility poles to string television cable.¹²⁷ This delegation of power enabled the FCC to control the utilities' exploitation of their monopoly position by overcharging cable television operators.¹²⁸ Several utility companies had argued that the Act prevented them from excluding cable companies and thus constituted a taking.¹²⁹ The Court rejected this argument, concluding that "required acquiescence" was "at the heart" of *Loretto's* physical occupation rule.¹³⁰ The statute in *Loretto* "specifically required landlords to permit permanent occupation of their property by cable companies," while the PAA did not give cable operators "any right to occupy space on utility poles."¹³¹ The PAA merely authorized the FCC to review rents charged by utility landlords who had "voluntarily entered into leases with cable

¹²⁴ See, e.g., *Brown v. Legal Found. of Wash.*, 538 U.S. 216 (2003) (challenging as a physical taking a law forcing the transfer of non-interest-earning client funds into interest-earning accounts and the use of the interest earned for indigent legal services); *Yee v. City of Escondido*, 503 U.S. 519 (1992) (challenging as a physical taking a rent control law that fixed rent and limited a landlord's ability to terminate mobile home pad tenancies); *FCC v. Fla. Power Corp.*, 480 U.S. 245 (1987) (challenging as a physical taking a law regulating the rate charged by utilities for use of their poles).

¹²⁵ *Fla. Power Corp.*, 480 U.S. 245.

¹²⁶ 503 U.S. 519.

¹²⁷ *Fla. Power Corp.*, 480 U.S. at 248 (quoting the Pole Attachments Act, 47 U.S.C. § 224(b)(1) (1982)) (internal quotation marks omitted).

¹²⁸ See *id.* at 247-48.

¹²⁹ See *id.* at 251 n.6.

¹³⁰ *Id.* at 252.

¹³¹ *Id.* at 251.

company tenants renting space on utility poles.”¹³² As long as the economic regulation did not “require” the utility landlord to “suffer the physical occupation” of its property by a third party, the multi-factor test generally applicable to nonpossessory governmental activities would apply instead of the *per se* test.¹³³

In *Yee*, the Court considered whether a rent control law fixing rent for mobile home pads and limiting termination of pad tenancies amounted to a physical taking.¹³⁴ The effect of the law was to allow the mobile home tenants to occupy the rental pad at below market rental value as long they complied with their lease and the landlord continued to use the land for rental purposes.¹³⁵ This protection from eviction was provided in part because of the high cost of moving a mobile home.¹³⁶ The Court in *Yee* resisted the temptation to give *Loretto* an expansive reading, holding instead that the *per se* test of *Loretto* did not apply. As the Court explained, the required acquiescence at the heart of the physical occupation concept was not present in *Yee* because the mobile home park owners “voluntarily rented their land to mobile home owners.”¹³⁷ The challenged law did not compel the mobile home park owners to rent or continue to rent their land to mobile home owners.¹³⁸ “A different case would be presented were the statute, on its face or as applied, to compel a landowner over objection to rent his property or to refrain in

¹³² *Id.* at 252.

¹³³ *Id.* (original emphasis omitted) (quoting *Loretto v. Teleprompter Manhattan CATV Corp.*, 458 U.S. 419, 440 (1982)) (internal quotation marks omitted). A year later, in *Pennell v. City of San Jose*, the Court decided that the physical takings challenge to a rent control law was not ripe for consideration. *Pennell v. City of San Jose*, 485 U.S. 1, 9 (1988). The city ordinance allowed a hearing officer resolving tenant challenges to rent increases above 8% to consider hardship to the tenant. *See id.* at 5. In a footnote, the majority made it clear that they saw “no need to reconsider the constitutionality of rent control *per se*” under the physical takings concept. *Id.* at 12 n.6. *Loretto* and *Florida Power Corp.* had, in their view, resolved that issue. *Id.* Justices Scalia and O’Connor dissented from the lack of ripeness conclusion and would have found a taking because of the absence of a causal link between the hardship provision and landlords. *See id.* at 15, 20-24 (Scalia, J., with O’Connor, J., concurring in part and dissenting in part). As Justice Scalia explained, the wealth transfer effected by the ordinance unfairly singled out landlords to bear the costs of addressing a social problem in violation of the Takings Clause. *See id.* at 15, 19-23.

¹³⁴ *Yee v. City of Escondido*, 503 U.S. 519, 523-24 (1992).

¹³⁵ *See id.* at 526-27; JUERGENSMEYER & ROBERTS, *supra* note 113, at 421.

¹³⁶ *See Yee*, 503 U.S. at 524.

¹³⁷ *Id.* at 527.

¹³⁸ *See id.* at 527-28. Given California law and regulatory practice, the assertion that landlords could get out of the rental business is debatable. *See* STEVEN J. EAGLE, REGULATORY TAKINGS § 4-3(e), at 455 & n.423 (4th ed. 2009).

perpetuity from terminating a tenancy.”¹³⁹ Even though the law might deprive the owners of the ability to choose incoming tenants or might cause a wealth transfer, those effects would not create a physical taking. Rather, they would speak to the possible existence of a regulatory taking.¹⁴⁰ Individuals who “voluntarily open their property to occupation by others” could not successfully argue that a law depriving them of their ability to exclude particular individuals was a per se taking.¹⁴¹

In *Brown v. Legal Foundation of Washington*, the Court considered a physical takings challenge to a law requiring the depositing of otherwise non-interest-earning client funds into Interest on Lawyers Trust Accounts (“IOLTA”) accounts and directing the interest earned after depositing to be used to support legal services for the poor.¹⁴² The Court decided to apply the per se physical takings approach to the required transfer of interest now earned by the IOLTA accounts, explaining that the forced transfer was a taking of private property owned by the clients “akin to the occupation of a small amount of rooftop space in *Loretto*.”¹⁴³ Compensation was not owed, however, because the client funds were non-interest-bearing accounts prior to being deposited in the IOLTA account. The property owners thus suffered no actual loss.¹⁴⁴

The Court’s decision to treat a mandatory transfer of funds as a physical taking undermines the decisions reached in the rent control and rate regulation cases and suggests that a different result might be reached today, especially given the changes in the Court’s composition.¹⁴⁵ Treating a forced wealth transfer as a physical taking

¹³⁹ *Yee*, 503 U.S. at 528.

¹⁴⁰ *Id.* at 530-31.

¹⁴¹ *Id.*

¹⁴² See *Brown v. Legal Found. of Wash.*, 538 U.S. 216, 220 (2003).

¹⁴³ *Id.* at 234-35. The Court relied on its decision in *Phillips v. Washington Legal Foundation*, 524 U.S. 156, 172 (1998), to conclude that the interest earned in an IOLTA trust account was the property of the clients and customers whose money was deposited in the accounts. *Brown*, 538 U.S. at 235. The Court quickly dismissed the argument that a taking arose from the requirement that the principal be placed in an IOLTA account, explaining that the mandate simply required a transfer and that no adverse economic impact occurred. *Id.* at 234.

¹⁴⁴ *Brown*, 538 U.S. at 235-37. In his dissent, Justice Scalia argued that just compensation meant the fair market value of the property taken, which would be greater than zero. *Id.* at 241 (Scalia, J., dissenting).

¹⁴⁵ In *Brown*, Chief Justice Rehnquist and Justices Scalia, Kennedy, and Thomas dissented. *Id.* at 241-53. With the retirements of Justices Stevens, O’Connor, and Souter (all of whom supported the majority decision) and the additions of Chief Justice Roberts and Justices Alito, Kagan, and Sotomayor, it is likely that the dissent’s

blurs the line between physical and regulatory takings, bringing us back full circle to the days when physical takings analysis included an analysis of impact on use.¹⁴⁶ Unfortunately, that circling is more troubling now because of the expansion of the physical takings concept.¹⁴⁷

2. Decreasing Permanence

The Court has also extended the physical takings concept to some government-authorized uses of a public or shared resource, such as air or navigable waters, that harm adjacent property. These types of physical takings may be temporary in both a temporal and spatial sense, with the use being transient and not geographically fixed. While some of the government-authorized uses result in an invasion of private property, others do not. They all have an adverse impact on the adjacent landowner's ability to possess, use, or profit from the land.

One area where this extension of the physical takings concept has occurred involves technological advances that blur the distinction between trespassory and nontrespassory invasions. In cases involving harm caused by low-level airplane flights, for example, the Court concluded that a physical taking resulted when government-authorized use of the airspace immediately above privately owned land adversely affected the owner's use of the land.¹⁴⁸ As the Court in *United States v. Causby* explained, when low-level flights continuously invade the airspace adjacent to the land and affect use of the surface, it is "as if the United States had entered upon the surface of the land and taken

logic would prevail today.

The Court chose not to address the wealth transfer argument in a 2005 case involving challenges to a rent control law governing oil companies. In *Lingle v. Chevron U.S.A., Inc.*, the law limited the rent that oil companies could charge independent dealers leasing company-owned service stations. See *Lingle v. Chevron U.S.A., Inc.*, 544 U.S. 528, 532 (2005). Writing for a unanimous Court, Justice O'Connor used the decision to clarify that any requirement that a restriction substantially advance a legitimate public purpose was not a stand-alone takings test but instead derived from due process jurisprudence. *Id.* at 531-32.

¹⁴⁶ See, e.g., *Pumpelly v. Green Bay Co.*, 80 U.S. (13 Wall.) 166, 179-81 (1871) (treating the near total destruction of a property's use value by government-induced overflows as functionally equivalent to a physical taking).

¹⁴⁷ See, e.g., *Ark. Game & Fish Comm'n v. United States*, 133 S. Ct. 511, 519-20 (2012) (clarifying that temporary physical invasions could be a physical taking even though they were not inevitably recurring).

¹⁴⁸ See *Griggs v. Cnty. of Allegheny*, 369 U.S. 84, 88-90 (1962); *United States v. Causby*, 328 U.S. 256, 262-63 (1946).

exclusive possession of it.”¹⁴⁹ Even though the flights, if permanently occurring, would only constitute an easement of passage, they would, in the Court’s words, “be a definite exercise of complete dominion and control over the surface of the land.”¹⁵⁰ The absence of a direct physical invasion onto the land is “irrelevant,” the Court explained, because the “owner’s right to possess and exploit the land — that is to say, his beneficial ownership of it — would be destroyed.”¹⁵¹ The Court stressed, however, that flights over privately owned land normally are not a taking — not unless they are “so low and so frequent as to be a direct and immediate interference with the enjoyment and use of the land.”¹⁵² Such low-level flights fall into “the same category as invasions of the surface.”¹⁵³ Critical to the Court’s analysis was the impact of the flights on the use and value of the land below. Thus, in analyzing nontrespassory invasions under the physical takings concept, the Court applied the same type of functional equivalence logic relied on by the Court in prior cases expanding physical takings and in cases recognizing the concept of regulatory takings.¹⁵⁴

More recently, the Court muddied the physical takings concept by concluding that not all government-authorized physical invasions caused by flooding were governed by the *per se* approach, and that a physical taking could indeed be temporary and not necessarily recurring. Again, the government used a public resource — navigable waters — in a way that harmed adjacent private property. This time the government use caused an actual but temporary physical invasion.

¹⁴⁹ *Causby*, 328 U.S. at 261.

¹⁵⁰ *Id.* at 262.

¹⁵¹ *Id.*

¹⁵² *Id.* at 266. In determining whether the harm to the private property results from a direct invasion by government, the Court has distinguished between harm that is peculiar to the land in question and harm that is generally felt by the community. See JUERGENSMEYER & ROBERTS, *supra* note 113, at 422. A direct invasion requires harm that is suffered by the individual, and not the community at large. When the harm is suffered by the community generally and the government act otherwise promotes a legitimate police power objective, the Court has considered the harm to be incidental to the promotion of the public purpose. See *Richards v. Wash. Terminal Co.*, 233 U.S. 546, 554, 556-57 (1914).

¹⁵³ *Causby*, 328 U.S. at 265; accord *Griggs*, 369 U.S. at 88-90.

¹⁵⁴ Compare *Causby*, 328 U.S. at 261-62, 264-66 (citing the flooding cases and equating the impact on the owner’s rights to the impact on possession and use of the land), with *Portsmouth Harbor Land & Hotel Co. v. United States*, 260 U.S. 327, 329-30 (1922) (discussing whether the military’s firing of battery guns over the land of another imposed a servitude and directly invaded the landowner’s domain), and *Pa. Coal Co. v. Mahon*, 260 U.S. 393, 414-15 (1922) (discussing whether mining regulations that limited the value of a mineral estate rose to the level of a taking).

The 2012 decision in question, *Arkansas Game & Fish Commission v. United States*, involved a physical takings claim brought by Arkansas Game and Fish Commission (“the Commission”), owner of a wildlife management area that included lands along the banks of the Black River.¹⁵⁵ The Commission used the area as a hunting and wildlife preserve and for timber harvesting.¹⁵⁶ In 1948, the Army Corps of Engineers had built a dam 115 miles upstream from the Commission’s property.¹⁵⁷ As part of its water control efforts, the Corps adopted a plan that allowed water release rates to vary seasonably and that authorized deviations.¹⁵⁸ Each year from 1993 through 2000, the Corps had approved deviations from the planned release rates, lowering them in the fall to provide a longer harvest period for downstream farmers and increasing them at other times to deal with the accumulated water.¹⁵⁹ The Commission claimed that the temporary deviations were a physical taking because their cumulative impact had destroyed the timber on the Commission’s land and substantially changed the character of the land.¹⁶⁰

The U.S. Court of Federal Claims agreed, concluding that the temporary deviations over the 1993–2000 period differed noticeably from historical flooding patterns, with an increase in the number of days and water levels over historical patterns.¹⁶¹ Although the substantial increase in flooding was temporary, it constituted a physical appropriation of the Commission’s property.¹⁶² The Court of Federal Claims explained that the cumulative effect of the flooding changed the character of the soil, reducing its oxygen content, and weakened the trees’ root systems; these changes ultimately destroyed the trees and led to the invasion of less desirable species.¹⁶³ The U.S. Court of Appeals for the Federal Circuit reversed, interpreting the Supreme Court’s standard for physical takings by flooding as requiring the flooding to be “permanent or inevitably recurring.”¹⁶⁴

¹⁵⁵ See *Ark. Game & Fish Comm’n v. United States*, 133 S. Ct. 511, 515 (2012).

¹⁵⁶ *Id.* at 515-16.

¹⁵⁷ *Id.* at 516.

¹⁵⁸ *Id.*

¹⁵⁹ *Id.*

¹⁶⁰ *Id.*

¹⁶¹ *Ark. Game & Fish Comm’n v. United States*, 87 Fed. Cl. 594, 607-08, 621-23 (2009), *rev’d*, 637 F.3d 1366 (Fed. Cir. 2011), *rev’d*, 133 S. Ct. 511; see *Ark. Game & Fish Comm’n*, 133 S. Ct. at 517.

¹⁶² *Ark. Game & Fish Comm’n*, 87 Fed. Cl. at 619-21; see *Ark. Game & Fish Comm’n*, 133 S. Ct. at 517.

¹⁶³ *Ark. Game & Fish Comm’n*, 87 Fed. Cl. at 612-14, 620.

¹⁶⁴ *Ark. Game & Fish Comm’n*, 637 F.3d at 1374 (relying on *Sanguinetti v. United*

In an 8–0 decision, the Supreme Court concluded that no blanket exemption from takings liability existed for temporary, government-induced flooding.¹⁶⁵ Writing for the Court, Justice Ginsburg rejected the interpretation of the Court’s precedent as restricting physical takings by flooding to permanent flooding or to temporary, intermittent but inevitably recurring flooding.¹⁶⁶ As the Court explained, temporary flooding still may oust a landowner from possession, as opposed to simply injuring his property,¹⁶⁷ or may cause “direct and immediate interference with the enjoyment and use of the land.”¹⁶⁸ In an apparent departure from recent decisions preferring a *per se* approach to physical takings,¹⁶⁹ the Court relied on a footnote in *Loretto*, a non-flooding case, to announce that temporary invasions required “a more complex balancing process.”¹⁷⁰ Factors identified by the Court as important to that balancing included: the duration of the flooding (where the Court cited cases dealing with both temporary physical invasions and regulatory restrictions); the degree to which the invasion was intended or foreseeable; the character of the land (where the Court discussed whether the land was already in a floodplain); reasonable investment-backed expectations about use (where the Court mentioned past flooding); and the severity of the interference (where a parenthetical pointed to the repetitive nature of the interference, not to its economic impact).¹⁷¹

States, 264 U.S. 146, 149 (1924)).

¹⁶⁵ *Ark. Game & Fish Comm’n*, 133 S. Ct. at 519.

¹⁶⁶ *Id.* at 519-21.

¹⁶⁷ *Id.* at 518-19.

¹⁶⁸ *Id.* at 519 (quoting *United States v. Causby*, 328 U.S. 256, 266 (1946)) (internal quotation marks omitted).

¹⁶⁹ See, e.g., *Tahoe-Sierra Pres. Council, Inc. v. Tahoe Reg’l Planning Agency*, 535 U.S. 302, 322 (2002) (referring to the “straightforward application of *per se* rules” for physical takings); *Lucas v. S.C. Coastal Council*, 505 U.S. 1003, 1015-16 (1992) (noting that the categorical approach applies in general to physical invasions, at least when they are permanent, and to regulations denying all economically viable use).

¹⁷⁰ *Ark. Game & Fish Comm’n*, 133 S. Ct. at 521 (quoting *Loretto v. Teleprompter Manhattan CATV Corp.*, 458 U.S. 419, 435 n.12 (1982)) (internal quotation marks omitted); see *supra* note 89 and accompanying text (discussing the statement in *Loretto* about a balancing process).

¹⁷¹ *Ark. Game & Fish Comm’n*, 133 S. Ct. at 522-23. One scholar has argued that the Court’s factors alter the *ad hoc* factor-balancing test first defined by the Court in *Penn Central Transportation Co. v. City of New York*, 438 U.S. 104, 124 (1978). See Timothy M. Mulvaney, *Takings Case Set for Oral Argument at the SCOTUS on January 15th*, ENVTL. LAW PROF BLOG (Jan. 13, 2013), <http://perma.cc/6EM9-7M25> [hereinafter *Takings Case Set*].

The principle that *Arkansas Game & Fish Commission* establishes may lead us down a troubling path with unexpected consequences — a path that could have been avoided had the decision focused on the complex property sharing arrangement at issue. After the 2012 decision, whenever government releases water from a dam, levee, or other water improvement project, downstream owners of property damaged by the release are more likely to sue — regardless of the reasons for the release or the temporariness of the flooding.¹⁷² If, for example, a government-authorized structure fails to hold rising waters — for whatever reason — downstream landowners significantly harmed by the flooding will probably bring suit, citing *Arkansas Game & Fish Commission* as support.¹⁷³ Or, if government attempts to deal with rising floodwaters by deliberately breaching a levee or dam, landowners significantly harmed by breach will likely sue, convinced of the strength of their claim by *Arkansas Game & Fish Commission*.¹⁷⁴ Recent courts' handling of these types of claims even suggest the possibility of perverted results, with government negligence or failure to act being rewarded over affirmative government efforts to deal with a serious flooding problem.¹⁷⁵ As climate change worsens, sea level rises, and extreme rain events become more likely in certain parts of

¹⁷² See Timothy M. Mulvaney, *Temporary Takings, More or Less*, in CLIMATE CHANGE IMPACTS ON OCEAN AND COASTAL LAW: U.S. AND INTERNATIONAL PERSPECTIVES 461, 466 (Randall S. Abate ed., 2015); Lyle Denniston, *Opinion Analysis: Some Advice About "Takings,"* SCOTUSBLOG (Dec. 4, 2012, 2:59 PM), <http://www.scotusblog.com/2012/12/opinion-analysis-some-advice-about-takings/>. If government-induced flooding were inevitably recurring or even likely to recur, condemnation of a flowage easement for floodwaters might be necessary. Changing and unpredictable weather patterns, however, might make forecasting future flooding events difficult. Thus, the reason for the decision to release floodwaters should be a critical part of the physical takings analysis. A governance strategy would allow such consideration.

¹⁷³ See, e.g., *Murphy v. Village of Plainfield*, 918 F. Supp. 2d 753, 759 (N.D. Ill. 2013) (recognizing *Arkansas Game & Fish Commission* as abrogating *Sanguinetti*, but rejecting the takings claim on ripeness grounds); *Henderson v. City of Columbus*, 827 N.W.2d 486, 493-97 (Neb. 2013) (declining to extend the takings principles of *Arkansas Game & Fish Commission* to a one-time basement flooding event).

¹⁷⁴ See, e.g., *Quebedeaux v. United States*, 112 Fed. Cl. 317 (2013) (denying the government's motion to dismiss a claim based on a one-time flooding event, relying on the multi-factor test of *Arkansas Game & Fish Commission*).

¹⁷⁵ Compare *id.* at 323-24 (rejecting the argument that a single flooding event resulting from the deliberate opening of a spillway to prevent downstream flooding could not be a physical taking), with *Henderson*, 827 N.W.2d at 494-97 (concluding that a backup of the City's sewage system after a heavy rainstorm was not a taking under *Arkansas Game & Fish Commission*, even if due to a malfunctioning system, without proof that the backup was foreseeable or intentionally caused).

the country,¹⁷⁶ these types of results place government in an impossible situation.

The potential damage done by the reasoning in *Arkansas Game & Fish Commission* results, in part, from the Court's failure to consider background principles of property law — here state water law — in developing its reasoning and evaluating the rights and reasonable use expectations of downstream owners. The rights of waterfront landowners are relative, depending on their position as upstream or downstream landowners.¹⁷⁷ While each riparian owner generally has the right to reasonable use of the adjoining watercourse, the scope of downstream use rights is relative to and dependent on the reasonable uses occurring upstream.¹⁷⁸ The conditions facing a downstream rightholder will necessarily differ from those facing upstream users. This concept of relativity of upstream and downstream uses is inherent in and part of the definition of riparian rights.¹⁷⁹ Though the importance of the role of state water law was raised in amicus curiae filed before the Court,¹⁸⁰ it apparently was not adequately discussed in the parties' briefs or considered by the Federal Circuit, and therefore was not pursued by the Court.¹⁸¹ Yet, state water law principles are relevant to an analysis of downstream owners' rights and reasonable expectations. While the bottom line in *Arkansas Game & Fish Commission* probably would have been the same given the repeated nature of the government's water releases, inclusion of the analysis would have helped to minimize the filing of future frivolous lawsuits and the creation of perverse incentives.

Consideration of downstream versus upstream status, and of water law more generally, also highlights the need to understand the property arrangement governing use of navigable waters. Effective

¹⁷⁶ See generally WORKING GROUP I, INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, CLIMATE CHANGE 2013: THE PHYSICAL SCIENCE BASIS 4, CONTRIBUTION TO THE FIFTH ASSESSMENT REPORT OF THE INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE (IPCC) (2013) [hereinafter IPCC FIFTH ASSESSMENT REPORT], available at http://www.climatechange2013.org/images/report/WG1AR5_ALL_FINAL.pdf (reporting on the science and impacts of climate change).

¹⁷⁷ See TARLOCK, *supra* note 102, §§ 3:56, 3:60, at 102, 107 (discussing the traditional and modern judicial doctrines for allocating riparian rights).

¹⁷⁸ See *id.* § 3:56, at 102.

¹⁷⁹ See *id.* § 3:55, at 107.

¹⁸⁰ Motion for Leave to File Amicus Curiae Brief of Professors of Law Teaching in the Property Law & Water Rights Fields and Brief Amicus Curiae in Support of Respondent at 3, *Ark. Game & Fish Comm'n v. United States*, 133 S. Ct. 511 (2012) (No. 11-597), 2012 WL 3875238, at *3.

¹⁸¹ See *Ark. Game & Fish Comm'n*, 133 S. Ct. at 522 & n.1.

resolution of the physical takings question requires an understanding of the affected property rights in the context of the affected resources. Approaching the physical takings question simply from the perspective of the exclusion strategy fails to appreciate the complexity of the interests at stake and of the resources subject to those interests. It fails to appreciate the need to manage shared resources, such as air and water, to promote the private and public rights in those resources. The management question is not simply about whether government action physically affected private property but also about whether government action legitimately managed the shared resource to promote both public and private interests. Such management efforts sometimes will require making a choice between truly conflicting and incompatible uses.¹⁸² Using a governance strategy to resolve the conflict would ensure consideration of competing interests and encourage more active review of conflicts by courts or regulators.

In the case of *Arkansas Game & Fish Commission*, the decision to allow deviations in water releases to favor downstream farmers over another user whose property would be subject to significantly increased flooding¹⁸³ was not the type of choice needed to manage the resource effectively. The government created the conflict by slowing the release of water to extend the growing season of downstream farmers and then releasing the accumulated water later. This action, in effect, forced a reallocation of water rights to promote the preferences of one group of rightholders. In the case of an infrastructure failure or a deliberate breach to deal with rising floodwaters, the government would not be creating a conflict to prefer one user over another but rather would be addressing a resource problem. The government must be able to make management decisions, including experimentation with different options, to deal with natural conditions and disasters without being subjected to takings liability for lands damaged as a result. The *Arkansas Game & Fish Commission* decision makes such a management approach more costly, because of increased takings litigation, and thus less likely.

Finally, *Arkansas Game & Fish Commission* seems to bring takings jurisprudence full circle, merging the physical takings and regulatory takings concepts more like the traditional courts did. The Court, for

¹⁸² The Court has recognized the validity of police power action that chooses between conflicting uses. *See, e.g., Miller v. Schoene*, 276 U.S. 272, 277-81 (1928) (upholding the Virginia Cedar Rust Act by choosing the apple tree owners over the red cedar tree owners to combat cedar rust). *But see* EAGLE, *supra* note 138, § 6-5(a), at 690-91 (describing the decision as based on wealth maximization, not conflicting uses).

¹⁸³ *Ark. Game & Fish Comm'n*, 133 S. Ct. at 516.

example, mixed physical and regulatory takings in explaining how government interference temporary in duration could be a taking — moving from outright physical occupations temporary in duration to direct but temporary interference caused by government-induced action to temporary land use regulations.¹⁸⁴ Then, in describing the balancing test that would apply instead of the per se approach, the Court discussed the test in light of temporary physical invasions and regulations that only partially diminished the property's value. Though the Court began with the balancing inquiry defined in *Penn Central Transportation Co. v. City of New York*, the Court recast or ignored old factors and mixed in new ones.¹⁸⁵ This recasting conflicts with earlier cases describing the “multifactor inquiry” as “generally applicable to nonpossessory governmental activity.”¹⁸⁶

The discussion of the limitations of the per se approach to physical takings reveals the Court's failure to recognize the wide variety of situations raising the claim. Those situations range from direct, permanent physical invasions to complex property sharing arrangements involving interactions among public and private right holders. A review of traditional physical takings cases in the next section shows how earlier courts recognized the context dependency of the physical takings concept. Application of modern property theory to traditional and modern physical takings cases then underscores the importance of the governance function in analyzing more complex constitutional property claims.

¹⁸⁴ See *id.* at 519 (citing *Causby*, *Dickinson*, and *Tahoe-Sierra*).

¹⁸⁵ See *id.* at 518 (mentioning the “situation-specific factual inquiries” often involved in takings cases); *Penn Cent. Transp. Co. v. City of New York*, 438 U.S. 104, 124-25 (1978) (identifying the character of the government action, the diminution in value, and interference with reasonable investment-backed expectations as factors to consider); Mulvaney, *Takings Case Set*, *supra* note 171 (discussing the impact of *Arkansas Game & Fish Commission* on the *Penn Central* balancing test). The Court in *Arkansas Game & Fish Commission* adds intent or foreseeability and appears to recast diminution in value as an inquiry into the severity of the interference, with a focus on the repetitive nature of the interference. See *Ark. Game & Fish Comm'n*, 133 S. Ct. at 522-23; *supra* note 171 and accompanying text; see also Steven J. Eagle, *The Four-Factor Penn Central Regulatory Takings Test*, 118 PENN. ST. L. REV. 601, 630-31, 641-44 (2014) (discussing the intrusion of the *Penn Central* framework into physical takings analysis).

¹⁸⁶ *Loretto v. Teleprompter Manhattan CATV Corp.*, 458 U.S. 419, 440 (1982); see also *FCC v. Fla. Power Corp.*, 480 U.S. 245, 252 (1987).

II. TRADITIONAL COMPLEXITY

Despite the presence of the Takings Clause in the federal Constitution since 1792, state courts generally controlled the development of takings jurisprudence prior to the Civil War.¹⁸⁷ A number of factors explain the state dominance in developing early takings jurisprudence. Through much of the eighteenth century, the federal government had “very few occasions to apply the takings clause.”¹⁸⁸ In addition, public use development “was so meager that the problem of compensation for land taken or injured by public authorities hardly played a significant role in American law.”¹⁸⁹ Further, until the late 1800s, even when the federal government needed land, it did not directly exercise eminent domain, choosing instead to use state governments as intermediaries to condemn the necessary land.¹⁹⁰ Eventually, in 1875, the Supreme Court finally clarified that the federal government had the power of eminent domain.¹⁹¹ Even after that decision, though, the courts relied on the Contracts Clause of the United States Constitution to protect property rights against the action of state governments, until 1897.¹⁹² In that year, the Supreme Court concluded that the Fourteenth Amendment incorporated the just compensation principle for purposes of evaluating state action, finally allowing federal courts to apply the Takings Clause to state governments.¹⁹³

In his work *The Transformation of American Law, 1780–1860*, Morton Horwitz attributed the slow development of the federal just compensation principle to several theories affecting the development of the legal and political systems during the early nineteenth century.¹⁹⁴ According to Horwitz, the antidevelopment theory of

¹⁸⁷ See MORTON J. HORWITZ, *THE TRANSFORMATION OF AMERICAN LAW, 1780–1860*, at 66–108 (1977); James W. Ely, Jr., *The Fuller Court and Takings Jurisprudence*, 2 J. SUP. CT. HIST. 120, 120–22 (1996) [hereinafter *The Fuller Court*].

¹⁸⁸ GEORGE SKOURAS, *TAKINGS LAW AND THE SUPREME COURT: JUDICIAL OVERSIGHT OF THE REGULATORY STATE’S ACQUISITION, USE, AND CONTROL OF PRIVATE PROPERTY* 13 (1998); see also Ely, *The Fuller Court*, *supra* note 187, at 120 (noting that the federal government “instituted relatively few projects that necessitated taking private property”).

¹⁸⁹ HORWITZ, *supra* note 187, at 63.

¹⁹⁰ See SKOURAS, *supra* note 188, at 19.

¹⁹¹ *Kohl v. United States*, 91 U.S. 367, 371–72 (1875).

¹⁹² See SKOURAS, *supra* note 188, at 13; see also James W. Ely Jr., *Whatever Happened to the Contract Clause?*, 4 CHARLESTON L. REV. 371, 371–72 (2010).

¹⁹³ See *Chi., Burlington & Quincy R.R. Co. v. Chicago*, 166 U.S. 226, 241 (1897).

¹⁹⁴ See HORWITZ, *supra* note 187, at 32, 63–66. *But see* SKOURAS, *supra* note 188, at 13–14 (criticizing Horwitz’s position).

property generally limited landowners to the “natural uses of their land,” which often meant agrarian uses.¹⁹⁵ “[A]ny interference with the property of another gave rise to liability; only the lowest common denominator of noninjurious activity could avoid a suit for damages.”¹⁹⁶ Also, adherents to the republican theory of government viewed property owners as holding their rights “at the sufferance of the state” for the promotion of the greater public good.¹⁹⁷ Although republican theorists recognized the importance of property rights, they also believed that those rights could be restricted or abridged when public health, welfare, or safety concerns needed such restriction.¹⁹⁸

During the post-Civil War era, significant changes occurred in the social, political, and legal systems of the United States. Over time a strong federal government developed, aided in part by the Supreme Court’s more active role in the economic and social spheres.¹⁹⁹ The Supreme Court, for example, began to develop the framework of its own takings principles through a series of physical takings cases.²⁰⁰ That framework included examining the character of the government action that resulted in the alleged physical taking, as well as the impact of the government action on the use value of the land.²⁰¹ The Court’s consideration of interference with use value was important to determining the proximity of the government action to a physical appropriation or occupation.²⁰² Though the traditional courts did not

¹⁹⁵ HORWITZ, *supra* note 187, at 32.

¹⁹⁶ *Id.*

¹⁹⁷ *Id.* at 64.

¹⁹⁸ *See id.* at 47-53 (discussing how courts justified the Mills Acts, despite their negative impact on neighboring landowners, as promoting society’s economic development); *id.* at 64 (noting that “[a]t the turn of the century, there still existed a perhaps dominant body of opinion maintaining that individuals held their property at the sufferance of the state”).

¹⁹⁹ *See* SKOURAS, *supra* note 188, at 17-21.

²⁰⁰ *See, e.g.,* Sanguinetti v. United States, 264 U.S. 146, 149-50 (1924) (government canal project resulting in flooding); Bedford v. United States, 192 U.S. 217, 223-24 (1904) (government earthworks to slow erosion of river banks); United States v. Lynah, 188 U.S. 445, 468-69 (1903), *overruled in part by* United States v. Chi., Milwaukee, St. Paul & Pac. R.R. Co., 312 U.S. 592 (1941) (government dam causing river to overflow onto adjacent land); Pumpelly v. Green Bay Co., 80 U.S. (13 Wall.) 166, 177-78 (1871) (canal company dam, authorized by state statute, causing river to overflow onto adjacent land).

²⁰¹ *See supra* note 39 and accompanying text.

²⁰² *See, e.g.,* Sanguinetti, 264 U.S. at 149-50 (considering the lack of interference with use value determinative in concluding that no taking occurred when it was not clear to what extent the government canal caused the flooding on the appellant’s land).

speak in terms of the exclusion or governance strategies, their factor analysis reflected a more flexible approach than one based solely on exclusionary thinking.²⁰³ A discussion of some of the key physical takings cases will illustrate the complexity of the traditional physical takings concept — a complexity that has been ignored or forgotten in recent years.

A. *Categories of Physical Takings*

For the most part, traditional physical takings cases fall into one of three categories: (1) public works projects that cause some sort of physical interference with private property; (2) military uses of private property; and (3) other public necessity or emergency uses.²⁰⁴ Collectively, the cases present an approach to physical takings that is more flexible and nuanced than the modern one, considering factors and dimensions that foreshadow the governance strategy to management of property rights.

1. Public Works Cases

Many of the public works takings cases involved navigation projects. Among other activities, those projects focused on dam construction,²⁰⁵ improvement of the navigability of waterways,²⁰⁶ construction of canals or dikes to control water flow,²⁰⁷ and modification of the flow

²⁰³ See, e.g., *Pumpelly*, 80 U.S. (13 Wall.) at 181 (“[I]t remains true that where real estate is actually invaded by superinduced additions of water, earth, sand, or other material, or by having any artificial structure placed on it, so as to effectually destroy or impair its usefulness, it is a taking, within the meaning of the Constitution . . .”).

²⁰⁴ See, e.g., *Block v. Hirsh*, 256 U.S. 135, 153-54 (1921) (public necessity because of serious housing crisis); *Gibson v. United States*, 166 U.S. 269, 271-72 (1897) (public works project); *United States v. Pac. R.R.*, 120 U.S. 227, 228-29 (1887) (military necessity).

²⁰⁵ See, e.g., *United States v. Dickinson*, 331 U.S. 745, 746 (1947) (government dam of Kanawha River in West Virginia caused flooding); *United States v. Cress*, 243 U.S. 316, 317-18 (1917), *limited by Chi., Milwaukee, St. Paul & Pac. R.R. Co.*, 312 U.S. at 597 (back-water from government dams on the Cumberland and Kentucky Rivers); *Pumpelly*, 80 U.S. (13 Wall.) at 167 (state-authorized, privately constructed dam of the Fox and Wisconsin Rivers caused flooding).

²⁰⁶ See, e.g., *United States v. Kan. City Life Ins.*, 339 U.S. 799, 800 (1950) (flooding of land caused by government’s maintaining a section of the Mississippi River artificially high in the interest of navigation); *United States v. Willow River Power, Co.*, 324 U.S. 499, 500-01 (1945) (government dam built to improve navigation on the Mississippi River caused diminution of the capacity of an upstream electric power plant).

²⁰⁷ See, e.g., *Sanguinetti*, 264 U.S. at 146-47 (government canal built between the Calaveras River and the Mormon Slough in California to reduce sediment deposits in

of navigable waters.²⁰⁸ The navigation cases proved to be a fruitful area for the development of the physical takings concept. Because navigable waters were involved, the cases raised questions about the relationship between private and public rights in the waters. These questions forced the Court to confront the conflicting and complex interests at stake, much as the governance strategy would. Many of the cases also involved interference with use, destruction of value, temporary physical invasions, indirect physical interference, and questions about the strength of the link between the physical interference and the damage to property rights. The cases thus allowed the Supreme Court to build a takings framework that involved some important pieces of the takings puzzle — pieces that relate to the distinction between takings and torts, to the importance of economic impact in the physical takings setting, and to the significance of differences in degree versus differences in kind.

One of the most significant public works cases, *Pumpelly v. Green Bay Co.*, involved a government-authorized dam construction project that resulted in the overflowing of a lake onto 640 acres of plaintiff's land.²⁰⁹ Although the government did not formally take title to or actual possession of the land, the flooding caused by the overflow almost totally destroyed the property's value.²¹⁰ Despite the absence of a formal appropriation of title or possession, the Court concluded that the government action constituted a physical taking.²¹¹ Critical to the Court's reasoning was the physical invasion of plaintiff's land by a government-induced overflow that made the land almost completely unusable.²¹² As the Court explained, where land is "actually invaded by superinduced additions of water, earth, sand, or other material, or by having any artificial structure placed on it, so as to effectually destroy or impair its usefulness, it is a taking."²¹³ The Court admitted that, as a general matter, the law did not provide just compensation for consequential or indirect injury to property resulting from a

the navigable channels); *Gibson*, 166 U.S. at 269 (government-built dike on Ohio River flooded the landing that a farmer used to send produce to market).

²⁰⁸ See, e.g., *Bedford v. United States*, 192 U.S. 217, 217-18 (1904) (government earthworks built to slow the narrowing from erosion of a navigable passage on the Mississippi River).

²⁰⁹ See *Pumpelly*, 80 U.S. (13 Wall.) at 167.

²¹⁰ *Id.* at 177.

²¹¹ See *id.* at 181-82.

²¹² See *id.* at 179.

²¹³ *Id.* at 181. In *Pumpelly*, the Court actually was interpreting a takings provision in the Wisconsin state constitution that was very similar in wording to the federal constitutional provision.

government undertaking.²¹⁴ Where, as here, however, a “serious interruption to the common and necessary use of property” had occurred through flooding from a government project, the interruption would be “equivalent to the taking” of it.²¹⁵ The Court noted that:

It would be a very curious and unsatisfactory result, if in construing a provision of constitutional law, always understood to have been adopted for protection and security to the rights of the individual as against the government . . . it shall be held that if the government refrains from the absolute conversion of real property to the uses of the public it can destroy its value entirely, can inflict irreparable and permanent injury . . . without making any compensation, because, in the narrowest sense of that word, it is not *taken* for the public use.²¹⁶

The fact that the land bordered a navigable waterway and therefore was subject to the public’s navigation servitude did not matter to the Court.²¹⁷

Pumpelly is significant for a number of reasons. First, the Court in *Pumpelly* recognized property as a bundle of rights having value, and not just as a physical thing. Although the property owner did not lose title or possession by direct appropriation, he still was entitled to compensation under the physical takings concept for the near total destruction of his right to use the land.²¹⁸ In *Pumpelly*, the Court made clear that physical takings were not simply about the loss of the right to exclude.²¹⁹ Second, the Court found a physical taking despite the absence of a formal or direct appropriation of title or possession by government. Under its logic, the Court treated the near total destruction of the property’s use value by government-induced flooding as functionally equivalent to an official physical occupation by government.²²⁰ Indirect damages were at least compensable when government action led to a permanent physical invasion that deprived the owner of the property’s use value. This focus on interference with use and destruction of value reveals that the traditional judicial narrative of physical takings included a determination of the severity

²¹⁴ *See id.* at 180-81.

²¹⁵ *Id.* at 179.

²¹⁶ *Id.* at 177-78.

²¹⁷ *See id.* at 181-82.

²¹⁸ *See id.* at 178.

²¹⁹ *Id.* at 178-79.

²²⁰ *See id.* at 181-82.

of the deprivation. Finally, the public right of navigation was not enough, at least in the context of *Pumpelly*, to defeat the takings claim.

The Supreme Court distinguished *Pumpelly* in the 1878 decision *Transportation Co. v. Chicago*.²²¹ The property owners in *Transportation Co.* had claimed that the City of Chicago's construction of a tunnel under the Chicago River had constituted a taking by depriving the property owner of water access to its shipping warehouse and street access to some of the warehouse's doors during the construction period.²²² In rejecting the takings claims, the Court held that "acts done in the proper exercise of governmental powers, and not directly encroaching upon private property, though their consequences may impair its use, are universally held not to be a taking."²²³ The Court distinguished the case before it from *Pumpelly* by noting that *Pumpelly* involved "permanent flooding of private property" resulting in a "physical invasion" of the land and a "practical ouster" of the owner from the land.²²⁴ In *Transportation Co.*, in contrast, "[n]o entry was made upon the plaintiffs' lot. All that was done was to render for a time its use more inconvenient."²²⁵ Because the obstruction of access was not "permanent or unreasonably prolonged," the Court found no taking.²²⁶ The temporary nature of the obstruction of access in *Transportation Co.* and the absence of any sort of physical invasion — even an indirect one caused by government — were critical to the Court's distinction of the case from *Pumpelly*.

Almost twenty years later, in *Gibson v. United States*, the Court followed the distinction made in *Transportation Co.* to conclude that government construction of a dike did not constitute a taking even though the dike substantially diminished the functioning of plaintiff's landing, denying the landowner water access for much of the year.²²⁷ The federal government constructed the dike to concentrate the water

²²¹ See *Transp. Co. v. Chicago*, 99 U.S. 635, 642 (1878).

²²² See *id.* at 636.

²²³ *Id.* at 642. The just compensation or takings clause in some state constitutions includes damage to private property and loss of access. See, e.g., VA. CONST. art. 1, § 11 (stating "[t]hat the General Assembly shall pass no law whereby private property, the right to which is fundamental, shall be damaged or taken except for public use"). See generally 2A PHILIP NICHOLS ET AL., NICHOLS ON EMINENT DOMAIN § 6.02 (3d ed. 2014) (discussing takings under federal and state constitutions).

²²⁴ *Transp. Co.*, 99 U.S. at 642.

²²⁵ *Id.*

²²⁶ *Id.* at 643.

²²⁷ See *Gibson v. United States*, 166 U.S. 269, 271, 276 (1897). The landowner had water access when water levels were high. *Id.* at 270.

flow of the river as it ran past plaintiff's property.²²⁸ Though the dike substantially reduced plaintiff's water access, the landowner still could access the property by land.²²⁹ To support its conclusion of no taking, the Court stressed that the damage to plaintiff's property "was not the result of the taking of any part of her property . . . or a direct invasion thereof, but the incidental consequence of the lawful and proper exercise of a governmental power" to improve navigation.²³⁰ Compensation for such damage was not allowed because the losses were "accidental, but unavoidable."²³¹ Only when an "extreme[]" situation like that present in *Pumpelly* existed would the Court be willing to find a taking for indirect damages.²³² Such a situation required a permanent physical invasion induced by government and a practical ouster of possession.²³³ Further, because plaintiff's land bordered a navigable waterway, plaintiff owned the land subject to the public's navigation servitude.²³⁴ Damage resulting from the dike construction was "merely incidental to the exercise" of this servitude.²³⁵ The existence of public rights in adjacent navigable waters and the government action taken to improve the exercise of those rights thus complicated resolution of the takings claim. The complex property sharing arrangement in *Gibson* required a more nuanced approach closer to the analysis of the governance strategy than the logic of the exclusion-based, per se approach.

The Court again distinguished *Pumpelly* in the 1900 decision *Scranton v. Wheeler*.²³⁶ In that case, the government authorized construction of a pier that would rest on submerged lands and extend, in the water, across the front of plaintiff's land.²³⁷ As a result of the construction, plaintiff was denied access to navigable water from his waterfront property.²³⁸ In concluding that the loss of access caused by

²²⁸ *Id.* at 269.

²²⁹ *Id.* at 270-71.

²³⁰ *Id.* at 275.

²³¹ *Id.* at 274 (quoting from *Monongahela Navigation Co. v. Coons*, 6 Watts & Serg. 101, 115 (Pa. 1843)) (internal quotation marks omitted).

²³² *Id.* at 275-76.

²³³ *See id.* at 276.

²³⁴ *See id.*

²³⁵ *Id.*

²³⁶ *Scranton v. Wheeler*, 179 U.S. 141 (1900).

²³⁷ *Id.* at 141.

²³⁸ *Id.* at 143-44. The water between the new pier and the bank of the river was only five feet deep, so the pier prevented plaintiff "from reaching navigable water of greater depth than 5 feet." *Id.* at 143. Congress had originally authorized the construction of a canal around some falls to connect navigable portions of the river to promote

the government construction was not a taking, the Court contrasted *Pumpelly* and followed the consequential damage rule of *Transportation Co. and Gibson*.²³⁹ Like the plaintiffs in *Transportation Co. and Gibson*, the landowner in *Scranton* had suffered consequential damages — and not a taking — because the damages did not result from a physical appropriation or invasion of plaintiff's property, but rather from the government's lawful exercise of its power over navigable waters.²⁴⁰ That power included the right to occupy the submerged bed to improve navigation.²⁴¹ Because the government erected the pier for this purpose, the injury resulted "incidentally from the exercise of a governmental power for the benefit of the general public,"²⁴² and no compensation was owed. The Court stressed that plaintiff's riparian right of access was always subject to the public interest in navigable waters.²⁴³ In the Court's view, "it was not intended that the paramount authority of Congress to improve the navigation of the public navigable waters of the United States should be crippled by compelling the government" to pay compensation for injuries incidentally resulting from an improvement ordered by Congress.²⁴⁴ *Pumpelly* did not control because *Pumpelly* involved

commerce. *See id.* at 142. Plaintiff's land had benefitted from that construction and from an earlier pier that was further out in the water. *See id.* at 142-44.

²³⁹ *See id.* at 154-57.

²⁴⁰ *See id.* at 164-65. The federal government's power over navigable waters arises from the Commerce Clause of the Constitution. *Gibbons v. Ogden*, 22 U.S. (9 Wheat.) 1, 195-97 (1824); *see also* TARLOCK, *supra* note 102, § 9.6, at 535. Public rights in navigable waters arise from common law concepts like the public trust doctrine and from some state constitutions. *See, e.g., Scranton*, 179 U.S. at 162-63 (discussing the paramount public interest in navigable waters); *Shively v. Bowlby*, 152 U.S. 1, 48-49 (1894) (recognizing the federal government's power over navigable waters and the navigational servitude imposed on waterfront landowners); *Ill. Cent. R.R. Co. v. Illinois*, 146 U.S. 387, 458 (1892) (recognizing the public trust under English common law). Property theory scholarship has persuasively justified the recognition of public rights in navigable waters. Rose, *The Comedy of the Commons*, *supra* note 101, at 727-29 (arguing that the public nature of navigable waters has strong historical and economic support).

²⁴¹ *Scranton*, 179 U.S. at 164.

²⁴² *Id.*

²⁴³ *See id.* at 162, 164-65. *See generally* TARLOCK, *supra* note 102 (discussing the relationship between private water rights and public rights in navigable waters); Lynda L. Butler, *Environmental Water Rights: An Evolving Concept of Public Property*, 9 VA. ENVTL. L.J. 323, 337-40 (1990) (discussing the recognition of public rights under the navigability concept).

²⁴⁴ *Scranton*, 179 U.S. at 164-65.

permanent flooding of private property caused by a government-authorized project.²⁴⁵

A governance strategy for managing interests in navigable waters and their submerged lands would more fully reflect the complex property sharing arrangement in those resources. This complex arrangement recognizes three categories of interests. First, waterfront landowners have the right to use navigable waters and their submerged beds.²⁴⁶ Second, public rights in navigable waters also exist and include navigation, fishing, and other water-related uses.²⁴⁷ Third, the federal government has regulatory authority over navigable waters under the Commerce Clause.²⁴⁸ Over the years, the federal government has repeatedly exercised that power to improve navigation and increase commerce. The resulting economic activities have been vital to the growth and stability of the country.²⁴⁹ When conflicts have arisen between private water rights and the longstanding public interest in navigable waters,²⁵⁰ the Court has clarified that the federal power over navigation is paramount under the Constitution²⁵¹ and that waterfront landowners take subject to the navigational servitude, including efforts to improve it.²⁵² The Court has also clarified that the government may not abdicate its responsibility to protect public rights in navigable waters.²⁵³ Balancing the three categories of interests thus requires greater judicial intervention than what normally occurs under the exclusion strategy.

When a resource is subject to a complex property sharing arrangement, greater judicial intervention is needed because of the numerous stakeholders having interests and gatekeeping powers in the

²⁴⁵ See *id.* at 154.

²⁴⁶ See *supra* notes 240–44 and accompanying text.

²⁴⁷ See *supra* notes 240–44 and accompanying text.

²⁴⁸ See *supra* notes 240–44 and accompanying text.

²⁴⁹ See *Scranton*, 179 U.S. at 143 (noting how the resulting increase in economic activities helped the federal government to pay its debts). For a discussion of the relationship between economic activity and the just compensation clause in the context of navigable waters, see HORWITZ, *supra* note 187, at 34–42.

²⁵⁰ See LYNDA LEE BUTLER & MARGIT LIVINGSTON, VIRGINIA TIDAL AND COASTAL LAW 113–24 (1988) (explaining the English common law origins of that public interest).

²⁵¹ See, e.g., *Gibbons v. Ogden*, 22 U.S. (9 Wheat.) 1, 196–197 (1824) (explaining the power of Congress “is complete in itself, may be exercised to its utmost extent,” and “comprehends navigation, within the limits of every State in the Union”).

²⁵² See, e.g., *Shively v. Bowlby*, 152 U.S. 1, 23–24 (1894) (recognizing the navigational servitude imposed on waterfront landowners).

²⁵³ See *Ill. Cent. R.R. Co. v. Illinois*, 146 U.S. 387, 453 (1892) (holding that the public trust doctrine applied and proscribed abdication).

resources. Increasing returns to scale and expanding economic activity occur when the federal government manages navigable waters to improve use, control congestion, and overcome self-interested behavior that would inhibit cooperation and sharing. Unless such management efforts result in an actual physical invasion of private property, claims of physical takings normally should be resolved in favor of the public rights promoted by the government's management decision. The Court in *Scranton* reached such a result. Though the loss of access to navigable waters might seem significant, the landowner did not lose possession or use of the land and could still exercise other water-dependent uses (such as water withdrawal or fishing).²⁵⁴ Further, the government's earlier water improvements, which included construction of a canal around some falls and the original pier, had already benefitted the landowner.²⁵⁵ If government could not, without payment of compensation, build a larger pier to achieve greater returns to scale, the public would have to bear more of the costs of private use even when the government action would promote public rights.²⁵⁶ Application of the exclusion strategy would have focused only on the landowner's loss of access and ignored the public rights.

In the 1903 decision *United States v. Lynah*, the Court reaffirmed the principle of awarding compensation for damages resulting indirectly from government action that physically destroys the use of private property.²⁵⁷ In *Lynah*, a series of dams and other structures built over several years to improve navigation on the Savannah River raised the mean high water mark of the river.²⁵⁸ This rise in water levels damaged a rice plantation, much of which was already located below the high water mark.²⁵⁹ The land had been reclaimed by drainage and used to grow rice for over seventy years.²⁶⁰ Because of its location

²⁵⁴ See *Scranton*, 179 U.S. at 156.

²⁵⁵ See *id.* at 142-43, 164.

²⁵⁶ Cf. *id.* at 164-65 (explaining that building the pier was necessary to serve the public interest in navigating that waterway and opining that Congress's power to act on behalf of that interest would be crippled if it had to pay just compensation every time that its navigation-improvement projects interfered with the ability of a riparian owner to use the submerged soil).

²⁵⁷ See *United States v. Lynah*, 188 U.S. 445, 462-63 (1903), *overruled in part by* *United States v. Chi., Milwaukee, St. Paul & Pac. R.R. Co.*, 312 U.S. 592, 598 (1941) (reversing *Lynah* to the degree that *Lynah* concluded that compensation was owed whenever government injured a riparian owner's property located on a submerged bed unless the property was obstructing navigation).

²⁵⁸ *Id.* at 449.

²⁵⁹ *Id.* at 449-50.

²⁶⁰ *Id.* at 448.

below the high water mark, the land periodically flooded as the tides rose.²⁶¹ During those periods, the property owner would open the drainage gates to allow the water to recede.²⁶² After the government improvements raised the water level near the rice plantation, the land no longer could drain and became an “irreclaimable bog, unfit for the purpose of rice culture or any other known agriculture, and deprived of all value.”²⁶³ Relying heavily on *Pumpelly*, the Court concluded that the permanent and total loss of use value caused by government’s physical alteration of the river constituted a physical taking.²⁶⁴ As the Court explained: “While the government does not directly proceed to appropriate the title, yet it takes away the use and value; when that is done it is of little consequence in whom the fee may be vested. . . . [T]he proceeding must be regarded as an actual appropriation of the land”²⁶⁵

The decision in *Lynah* reaffirmed that a physical taking could arise indirectly from government action that physically destroyed the use of property so long as no damage payment could cure the loss of use going forward.²⁶⁶ The total or substantial destruction of use value caused by the permanent invasion of floodwater in *Lynah* “must be regarded as an actual appropriation of the land, including the possession, the right of possession, and the fee.”²⁶⁷ A “serious interruption[] to the common and necessary use of property may be . . . equivalent to the taking of it, and . . . it is not necessary that the land should be absolutely taken.”²⁶⁸ *Lynah* thus shows how the logic of functional equivalence had become firmly entrenched in the physical takings concept.

The flooding scenario of *Lynah* seems vaguely similar to the situation in the 2012 decision *Arkansas Game & Fish Commission*, discussed earlier. Like the government action in *Arkansas Game & Fish Commission*, government management of navigable waters in *Lynah* led to flooding that destroyed the use value of private

²⁶¹ See *id.* at 448-49, 468.

²⁶² *Id.* at 448-49, 468-69.

²⁶³ *Id.* at 469.

²⁶⁴ See *id.* at 469-70.

²⁶⁵ *Id.* at 470.

²⁶⁶ See *id.* at 474. For a discussion of the difference between a tort and a taking, see EAGLE, *supra* note 138, § 2-5(e)(3), at 291-99.

²⁶⁷ *Lynah*, 188 U.S. at 470.

²⁶⁸ *Id.* (quoting *Pumpelly v. Green Bay Co.*, 80 U.S. (13 Wall.) 166, 179 (1871)) (internal quotation marks omitted).

property.²⁶⁹ Like the Court in *Arkansas Game & Fish Commission*, the Court in *Lynah* found a physical taking because of that permanent destruction.²⁷⁰ On the surface, the public interest in *Lynah* seems stronger because the government action directly promoted the public right of navigation, while the government action in *Arkansas Game & Fish Commission* preferred one use over another, destroying the second use (farming over timber harvesting). Yet in *Lynah*, the government caused the flooding by permanently altering the physical characteristics of the river, raising its actual water level, and taking away the affected land's ability to drain.²⁷¹ Though the government decision in *Arkansas Game & Fish Commission* to allow deviations in water releases did not permanently change the physical conditions of the river, the government-authorized deviations altered the character of downstream land.²⁷² In both decisions, the government managed the watercourse in a way that had lasting impacts on private property. In both decisions, the existence of the navigational servitude, by itself, did not — and should not — justify management decisions that totally destroy use of private property without compensation. Even broad gatekeeping powers must respect core conceptual boundaries.

Just a year after *Lynah*, the Court in *Bedford v. United States* limited the reach of *Lynah* and *Pumpelly*.²⁷³ In *Bedford*, a government project to reinforce the banks of the Mississippi River and reduce erosion caused water to flood and erode plaintiff's land.²⁷⁴ The government had built a revetment along the banks of the Mississippi after the river changed course to prevent further recession away from the City of Vicksburg.²⁷⁵ Distinguishing *Pumpelly* and *Lynah*, the *Bedford* Court stressed that the “damage was strictly consequential. It was the result of the action of the river through a course of years.”²⁷⁶ The Court noted that the government was simply trying to prevent or reverse erosion caused by natural conditions and was not responsible for the initial change in conditions.²⁷⁷ In *Lynah* and *Pumpelly*, in contrast, the damage was a consequence of government work that altered the

²⁶⁹ See *id.* at 469.

²⁷⁰ *Id.*

²⁷¹ *Id.*

²⁷² *Ark. Game & Fish Comm'n v. United States*, 133 S. Ct. 511, 516 (2012).

²⁷³ See *Bedford v. United States*, 192 U.S. 217, 225 (1904).

²⁷⁴ See *id.* at 217-18.

²⁷⁵ *Id.* at 218.

²⁷⁶ *Id.* at 225.

²⁷⁷ *Id.*

natural flow of the water.²⁷⁸ Thus, in refining the distinction between indirect, nonrecoverable damages and compensable takings, the Court in *Bedford* clarified that government action constituted a taking when it altered natural conditions to improve navigation at the expense of a waterfront landowner's use right but not when it was trying to correct or minimize the impact of natural conditions and processes. In the alteration situation, government action was the source of the injury, resulting in permanent flooding of privately owned land.²⁷⁹ In the correction situation, natural conditions and processes caused the problem, leading to government's efforts to rectify the change in natural conditions and minimize the impact.²⁸⁰

This focus on how management or gatekeeping powers over a shared resource are exercised could become very important in the future as sea level rises and extreme weather events become more common.²⁸¹ In *Lynah* and *Arkansas Game & Fish Commission*, the management decision created the problem, altering the river conditions in *Lynah*, and creating the conflict between property owners in *Arkansas Game & Fish Commission*. In *Bedford*, the government exercised its management powers to address changing natural conditions in an effort to reverse or minimize them. The government sacrificed property rights in *Arkansas Game & Fish Commission* for one group of private users, and in *Lynah* for an improved navigation channel that irreversibly altered natural conditions to the detriment of the landowner. The management strategy in *Bedford*, in contrast, focused on trying to reverse, or at least control, naturally occurring change. These differences suggest that government efforts to plan for increased flooding events in the future should be legitimate if they manage for change — if they focus on the changing conditions generally facing waterfront landowners and coastal communities. Some management plans may include construction of structures to protect coastal communities, while others may require retreat from regularly flooded shoreland.²⁸² As long as the

²⁷⁸ *Id.*

²⁷⁹ *Accord* Jackson v. United States, 230 U.S. 1, 21-22 (1913); *see Bedford*, 192 U.S. at 225.

²⁸⁰ *Bedford*, 192 U.S. at 223.

²⁸¹ *See generally* IPCC FIFTH ASSESSMENT REPORT, *supra* note 176 (reporting on the science and impacts of climate change).

²⁸² For discussions of different options for handling sea level rise, *see generally* J. Peter Byrne, *The Cathedral Engulfed: Sea-Level Rise, Property Rights, and Time*, 73 LA. L. REV. 69 (2012), and James G. Titus, *Rising Seas, Coastal Erosion, and the Takings Clause: How to Save Wetlands and Beaches Without Hurting Property Owners*, 57 MD. L. REV. 1279 (1998).

government focuses on the changing conditions and does not use its management powers to create a conflict between two private users or to implement a public program that physically destroys the use of property, the management efforts should escape takings liability.

The Court's 1917 decision in *United States v. Cress*²⁸³ complicated the analysis of how gatekeeping powers are exercised by reaffirming and arguably extending *Pumpelly* and *Lynah* to allow recovery for indirect, consequential injury. *Cress* involved suits brought by landowners to recover compensation for damages to their properties resulting from the government's construction and maintenance of locks and dams to facilitate navigation.²⁸⁴ As a result of the project, a portion of one property owner's land became subject to frequent overflows that depreciated its value.²⁸⁵ Owners of the other tract lost the flow of water needed to operate a mill located on the property.²⁸⁶ In concluding that the owners of both properties had suffered compensable takings, the Court stressed the permanence of the changes caused by the government project and the importance of the "character of the invasion."²⁸⁷ As the Court explained, a permanent alteration in the physical condition of property could constitute a "direct invasion, amounting to a taking,"²⁸⁸ even if it did not cause a near total destruction of value, as in *Pumpelly* and *Lynah*.²⁸⁹ Rather, the "character of the invasion" was the key to finding a taking, not the amount of damage or the degree of the destruction of value.²⁹⁰

In analyzing the character of the government action, the Court admitted that the flooding of one plaintiff's tract was not a "permanent condition of continual overflow" but rather "a permanent liability to intermittent but inevitably recurring overflows."²⁹¹ That did not matter, however, because the difference between the two was a

²⁸³ *United States v. Cress*, 243 U.S. 316 (1917), limited by *United States v. Chi., Milwaukee, St. Paul & Pac. R.R. Co.*, 312 U.S. 592 (1941). *Chicago, Milwaukee, St. Paul & Pacific Railroad Co.* limited *Cress* to its facts to avoid any suggestion that compensation was owed whenever government injured a riparian owner's property located on the bed of a navigable waterway unless the property was obstructing navigation. See *Chi., Milwaukee, St. Paul & Pac. R.R. Co.*, 312 U.S. at 597.

²⁸⁴ *Cress*, 243 U.S. at 318.

²⁸⁵ *Id.*

²⁸⁶ *Id.*

²⁸⁷ *Id.* at 327-28.

²⁸⁸ *Id.*

²⁸⁹ See *id.* at 328.

²⁹⁰ *Id.*

²⁹¹ *Id.*

difference of “degree” and not a “difference of kind.”²⁹² In principle, the right to compensation should arise in both the permanent condition and the permanent liability situations.²⁹³ In effect, what the government appropriated in the case of the intermittent but recurring overflows was an “easement . . . to overflow [plaintiff’s land] with water as often as [necessarily] may result from the operation of the lock and dam for purposes of navigation.”²⁹⁴ While the government did not directly appropriate title, it had taken away the use and value of the land. Its action therefore had to be treated as an actual appropriation.²⁹⁵ For different reasons, government action involving the second tract of land also effected a taking.²⁹⁶ Now, the government action had taken the “right to have the water flow away from the milldam unobstructed, except as in the course of nature.”²⁹⁷ This right was not “a mere easement or appurtenance, but exists by the law of nature as an inseparable part of the land” because of the ownership of the bed of the creek.²⁹⁸ Government’s destruction of the right thus caused a “taking of a part of the land.”²⁹⁹

Many years later, in *United States v. Chicago, Milwaukee, St. Paul & Pacific Railroad Co.*,³⁰⁰ the Court limited the reach of both *Lynah* and *Cress*. In *Chicago, Milwaukee, St. Paul & Pacific Railroad Co.*, the Court considered whether the government owed just compensation to a railroad and a telegraph company for injury to their property located between the high and low water marks.³⁰¹ Navigation projects of the federal government had raised the level of the adjoining river and flooded the companies’ tracks and poles.³⁰² The owners had argued that compensation was owed because their property never obstructed navigation.³⁰³ The government had responded that property below the

²⁹² *Id.*

²⁹³ *Id.*

²⁹⁴ *Id.* at 329.

²⁹⁵ *Id.* at 328.

²⁹⁶ *See id.* at 330.

²⁹⁷ *Id.*

²⁹⁸ *Id.*

²⁹⁹ *Id.* *Cress* was distinguished in *United States v. Willow River Power Co.* because of the fact that *Willow River Power Co.* involved a navigable waterway, while *Cress* involved a non-navigable waterway. *See United States v. Willow River Power Co.*, 324 U.S. 499, 506 (1945). The Court in *Willow River Power Co.* explained that *Cress* only applied in a factual setting where the navigation interest was not dominant. *See id.*

³⁰⁰ 312 U.S. 592 (1941).

³⁰¹ *See id.* at 593.

³⁰² *Id.*

³⁰³ *Id.* at 595.

high water mark is subject to the federal navigation servitude.³⁰⁴ After recognizing the constitutional basis of the federal government's power over navigable waters, the Court agreed with the government that this power includes all lands below the high water mark, and that damage resulting from the lawful exercise of the power generally was not compensable.³⁰⁵ To reach its decision, the Court eliminated any suggestion in *Lynah* and *Cress* that damage to property located below the high water mark and caused by alteration of a waterway's physical conditions would be compensable as long as the property did not obstruct navigation. The Court in *Chicago, Milwaukee, St. Paul & Pacific Railroad Co.* achieved this by confining *Cress* to its facts and limiting *Lynah* — a confusing opinion, to the degree that *Lynah* allowed compensation for injury to waterfront property below the high water mark.³⁰⁶ The Court clarified that a waterfront landowner who built a structure below the high water mark did so subject to the "risk that it may be . . . injured or destroyed" by later navigational improvements.³⁰⁷

The decision in *Chicago, Milwaukee, St. Paul & Pacific Railroad Co.* makes an important point: first-in-time status does not protect a private waterfront landowner who uses land subject to the navigational servitude. The rights of waterfront landowners to use land below the high water mark do not trump the public interest in navigation — not even when exercised first in time. The federal government may still make improvements to navigable waters after a private structure is built below the high water mark. Being the first to exercise rights in a resource subject to a shared property arrangement does not give the private user the right to forever hold the public hostage. The Court's decision thus corrects the balance between public and private rights in navigable lands and beds — and a more complex strategy of governance begins to emerge. Applying a simple strategy of exclusion would have focused solely on the physical injury to the landowners' property.

The Court later contrasted *Pumpelly*, *Lynah*, and *Cress* from the dispute in *Sanguinetti v. United States*³⁰⁸ to distinguish a tort from a taking and conclude that no compensation was owed. In *Sanguinetti*, the government constructed a canal to divert waters and improve

³⁰⁴ *Id.* at 594.

³⁰⁵ *Id.* at 595-97.

³⁰⁶ *Id.* at 597-98.

³⁰⁷ *Id.* at 599.

³⁰⁸ *Sanguinetti v. United States*, 264 U.S. 146 (1924).

navigation in an area already prone to periodic flooding.³⁰⁹ The canal proved to be insufficient to carry away floodwaters, which overflowed onto plaintiff's property but did not remain long enough to prevent use of the land for agricultural purposes.³¹⁰ In concluding that a taking had not resulted from the flooding, the Court stressed the temporary and indirect nature of the harm.³¹¹ Distinguishing *Pumpelly*, *Lynah*, and *Cress*, the Court noted that those cases involved permanent overflow situations caused by the government project; *Sanguinetti*, in contrast, concerned temporary overflows and insufficient evidence of a causal connection between the government project and the overflows.³¹² To prove the flooding was enough of an invasion to be a taking and "not merely an injury to the property," the landowner needed to establish that the overflow was the "direct result" of the canal and constituted "an actual, permanent invasion of the land, amounting to an appropriation of . . . the property."³¹³ These conditions were not met in *Sanguinetti* because the extent of the increase in flooding caused by the canal was "purely conjectural."³¹⁴ The land would have been flooded even if the canal had not been built; the plaintiff had failed to show that the flooding was the "direct or necessary" result of the canal.³¹⁵ Nor had the plaintiff shown that the government intended or reasonably anticipated the flooding.³¹⁶ Except for short periods of time, plaintiff had not been ousted or prevented from conducting his customary use of the land, and only temporary flooding and damages had resulted.³¹⁷ At best, the canal caused indirect and consequential damage not compensable under the Takings Clause.³¹⁸ The decision in *Sanguinetti* thus clarified that indirect, temporary damages resulting from flooding and not caused directly by a government project were at most a tortious injury, and not a physical appropriation under the Takings Clause.

Much later, the Court qualified the potential reach of *Sanguinetti* in the 2012 decision, *Arkansas Game & Fish Commission v. United States*,

³⁰⁹ *See id.* at 146-47.

³¹⁰ *Id.* at 147.

³¹¹ *See id.* at 150.

³¹² *See id.* at 148-50.

³¹³ *Id.* at 149.

³¹⁴ *Id.*

³¹⁵ *Id.* at 146, 149-50.

³¹⁶ *See id.* at 150.

³¹⁷ *See id.* at 149.

³¹⁸ *See id.* at 150.

discussed earlier.³¹⁹ In describing the decision in *Sanguinetti*, the Court in *Arkansas Game & Fish Commission* stressed that the “outcome rested on settled principles of foreseeability and causation.”³²⁰ Critical to the Court’s reading of *Sanguinetti* were two “case-specific features”: the government had not foreseen or intended the flooding and the landowner had not established a causal connection between the canal and the flooding.³²¹ Any reference in *Sanguinetti* to the necessity of “an actual, permanent invasion” therefore was not, in the 2012 Court’s view, material to that decision.³²² Further, any interpretation of *Sanguinetti* as requiring a permanent invasion would run contrary to a 1987 decision holding that a taking could be temporary in duration.³²³

What this reading of *Sanguinetti* overlooks is the early Court’s efforts to place physical takings claims on a continuum to determine whether a particular situation was more like a one-time trespass — a tort — or instead like a permanent condition or liability — a taking. Implicit in these efforts is the recognition of a range of physical invasion scenarios that may or may not result in a taking. The degree of permanence was critical to the early Court’s thinking. The government action in *Arkansas Game & Fish Commission* was permanent enough because the flooding altered the character of the land, detrimentally affecting its use.³²⁴ The flooding in *Sanguinetti*, in contrast, did not have a lasting impact on the condition or use of the land.³²⁵ Though the absence of foreseeability and the inability to prove a causal link also were part of the *Sanguinetti* Court’s reasoning, their consideration should not detract from the Court’s focus on the degree of permanence.

The tort versus taking distinction proved to be critical to the Court’s handling of injuries from a different type of public works project in the 1914 decision *Richards v. Washington Terminal Co.*³²⁶ That case involved a residential landowner who claimed that smoke, cinders, and gases emitted by trains operating on nearby tracks and in a tunnel

³¹⁹ Ark. Game & Fish Comm’n v. United States, 133 S. Ct. 511, 519-21 (2012). For a more complete discussion of the case, see *supra* notes 155–86 and accompanying text.

³²⁰ Ark. Game & Fish Comm’n, 133 S. Ct. at 520.

³²¹ *Id.*

³²² *Id.* (discussing such a statement in *Sanguinetti*, 264 U.S. at 149).

³²³ See *id.* at 519-21 (discussing *Sanguinetti* in light of *First English Evangelical Lutheran Church of Glendale v. County of Los Angeles*, 482 U.S. 304, 321 (1987)).

³²⁴ *Id.* at 517.

³²⁵ *Sanguinetti v. United States*, 264 U.S. 146, 149-50 (1924).

³²⁶ 233 U.S. 546 (1914).

caused plaintiff's property to depreciate in value.³²⁷ In addition to lost rental value, plaintiff claimed that the operation of the railroad on adjoining land contaminated the land and air.³²⁸ Although the Court concluded that the congressional authorization of the railroad's construction and operation had generally "legalize[d] what otherwise would be a public nuisance,"³²⁹ the Court stressed that the legislature could not "confer immunity from action for a private nuisance of such a character as to amount in effect to a taking."³³⁰ What this statement meant in the context of railroad operations generally was that "railroads constructed and operated for the public use, although with private capital and for private gain, are not subject to actions in behalf of neighboring property owners for the ordinary damages attributable to the operation of the railroad, in the absence of negligence."³³¹ Thus, any diminution in value of property that was "not directly invaded nor peculiarly affected" would not be a taking as long as the property owner was "sharing in the common burden of incidental damages" arising from the proper operation of the railroad.³³² That is, no taking would result if the damages were "naturally and unavoidably" the result of the proper operation of the railroad and were "shared generally by property owners whose lands lie within range of the inconveniences necessarily incident to proximity to a railroad."³³³ To rule otherwise would, in the Court's view, "bring the operation of railroads to a standstill."³³⁴

In applying these principles to the facts before it, the Court concluded that a distinction needed to be made between damages caused by trains operating on tracks adjacent to plaintiff's property and damages caused by railroad operations in the tunnel.³³⁵ Injuries from trains operating on the tracks resulted naturally and unavoidably from the proper operation of the railroad, generally affecting landowners in proximity to the railroad, and therefore were not compensable under the Takings Clause.³³⁶ Injuries from trains operating in the tunnel, however, resulted from the railroad's

³²⁷ *Id.* at 550.

³²⁸ *See id.* at 549-50.

³²⁹ *Id.* at 553.

³³⁰ *Id.*

³³¹ *Id.*

³³² *Id.* at 554.

³³³ *Id.*

³³⁴ *Id.* at 555.

³³⁵ *Id.* at 557-58.

³³⁶ *See id.*

installation and operation of a fanning system, which forced out pollutants through a portal located close to plaintiff's property.³³⁷ The Fifth Amendment did not allow the "imposition of so direct and peculiar and substantial a burden" on plaintiff's property without payment of just compensation.³³⁸ Damages that were "prevent[a]ble" at reasonable expense were not necessary for the purpose contemplated, and therefore were compensable.³³⁹

Richards provides a good example of how a governance strategy should be applied to a constitutional conflict between private property rights and a vital public work. Instead of simply examining the conflict from the perspective of the private property owner under the exclusion strategy, the Court would, as in *Richards*, recognize the complexity of the interests at stake — both the public interest in an important mode of commerce and transportation and the private rights of the landowner. The Court would, as in *Richards*, accept the rebalancing achieved by Congress in the legislation that legalized what might otherwise be a public nuisance to allow the normal operation of the railroad. Such a rebalancing generally would be valid under the Takings Clause because it reflected the collective sharing of the usual and unavoidable burdens of operating a railroad by neighboring property owners while allowing society, including the property owners, to benefit from this important mode of transportation. The rebalancing could not, however, legalize a direct physical invasion or impose a peculiar and substantial burden on a particular landowner without payment of just compensation.

The review of the traditional physical takings cases involving public works reveals a Court hard at work evaluating each case under its functional equivalence analytic. Through its case-by-case approach, the Court gradually identified factors important to determining whether a situation was essentially equivalent to an actual physical appropriation. The degree of permanence, the degree of physicality, the existence of a conflicting public right, and the strength of the causal link all were critical to the Court's decision making. Though these benchmarks would remain important in the next two categories of traditional takings cases, another factor, public necessity, dominates much of the Court's analysis, suggesting that something more was occurring — that the Court was developing another dimension and instinctively making a governance-like management decision.

³³⁷ See *id.* at 556-57.

³³⁸ *Id.* at 557.

³³⁹ *Id.*

2. Military Use Cases

In addition to the public works cases, decisions about military use of private property have contributed to the development of the physical takings concept. Raising important conflicts between private property rights and the national defense, military use cases typically have involved one of three situations: private property that is seized and pressed into service by the military; the military's strategic destruction of property during war; and the diminution in value of property by military use. In the first two categories, the government has physically taken over, consumed, or destroyed private property. Yet, that factor is not necessarily determinative of the result. In the third category, the diminution in value provides the evidence of physical impact, but again further evaluation is needed. Collectively the military use cases suggest a far more complex analysis than would occur under a straightforward exclusion-based, per se approach.

a. *Private Property Pressed into Military Service*

The military use cases involving property pressed into military service highlight the tensions that can arise between important military needs and constitutionally protected property. One of the earliest takings decisions by the Supreme Court, *Mitchell v. Harmony*, examined the lawfulness of the military's seizure and use of property.³⁴⁰ In that case, the military seized the property owner's horses, mules, wagons, and goods to prevent the enemy from acquiring the property and to ensure the success of future encounters with the enemy.³⁴¹ In concluding that the military unlawfully seized plaintiff's property, the Court affirmed its adherence to the law of necessity but then determined that the required level of necessity did not exist in the case before it.³⁴² The Court explained that, under the law of necessity, the military could lawfully take possession of private property to prevent it from falling into enemy hands if justified by a danger that is "immediate and impending, and not remote or contingent."³⁴³ The military could even lawfully press property into public service "in case of an immediate and pressing danger or urgent necessity existing at the time, but not otherwise."³⁴⁴ As long as an impending danger or urgent necessity existed, the taking would be

³⁴⁰ *Mitchell v. Harmony*, 54 U.S. (13 How.) 115, 129-30 (1851).

³⁴¹ *See id.* at 132.

³⁴² *Id.* at 137.

³⁴³ *Id.* at 133.

³⁴⁴ *Id.*

justified, and no trespass would have occurred.³⁴⁵ The necessity or emergency gave the military “the right” to take the property.³⁴⁶ According to the Court, “urgent” meant “not admit[ing] of delay” and existed “where the action of the civil authority would be too late in providing the means” called for by the occasion.³⁴⁷ Even when the government established that an impending danger or urgent necessity existed, however, government generally would be “bound to make full compensation to the owner” if it seized or destroyed the property.³⁴⁸

In the case before it, the military had not established the requisite level of danger or necessity. The military and the executive branch had authorized plaintiff’s commercial activity, and the government had not presented any evidence that plaintiff was trading with the enemy.³⁴⁹ Nor had the defendant established the urgent necessity required to justify seizing property for military use without the owner’s consent.³⁵⁰ The property was taken to support the advance into Mexico, not to defend against an ongoing attack.³⁵¹ The doctrine of necessity did not validate the taking of property to “insure the success of any enterprise against a public enemy.”³⁵² The military situation also was not “so pressing as . . . to admit of delay.”³⁵³ General wartime operations or long-term needs would not be enough to justify the seizure of private property.³⁵⁴ Without immediate necessity, such action would not be a justified taking but rather an unlawful trespass, making the defendant liable for the value of the property destroyed during use.³⁵⁵

Subsequent decisions clarified that, in extreme or exceptional situations, the government may seize private property due to impending public danger or urgent necessity without consent, and sometimes even without payment of compensation. Those decisions reiterated the principle that a truly immediate public danger — that is, an emergency situation too urgent to delay action — justifies the seizure or destruction of private property without consent. Though the government’s duty to pay compensation generally remains, in

³⁴⁵ See *id.* at 134.

³⁴⁶ *Id.*

³⁴⁷ *Id.*

³⁴⁸ *Id.*

³⁴⁹ *Id.* at 132-33.

³⁵⁰ *Id.* at 137.

³⁵¹ See *id.* at 135.

³⁵² *Id.*

³⁵³ *Id.*

³⁵⁴ See *id.*

³⁵⁵ *Id.* at 136-37.

certain extraordinary situations, compensation may not even be owed. As one Court explained, the “terse language of the Fifth Amendment” does not provide a “comprehensive promise that the United States will make whole all who suffer from every ravage and burden of war.”³⁵⁶

One of those decisions, *United States v. Russell*, stressed both the government’s power to seize property without consent and its obligation to pay compensation.³⁵⁷ The Court recognized that the just compensation requirement is, “*except in certain extreme cases . . . a condition precedent annexed to the right of the government to deprive the owner of his property without his consent.*”³⁵⁸ Government thus could destroy, seize, or abrogate property without consent or delay “in cases of extreme necessity in time of war or of immediate and impending public danger.”³⁵⁹ Such extreme occasions could exist, for instance, when property is taken during war to prepare defenses at the moment of an impending attack, provide food or medicine to a sick and hungry army, or transport troops, arms, munitions, or clothing.³⁶⁰ A seizure of property would be justified as long as the necessity was “extreme and imperative,” enabled those in charge “to maintain their position or to repel an impending attack,” and could not be addressed in a timely manner by other alternative means.³⁶¹ As a general matter, though, the government would still owe full compensation to the owner.³⁶²

In *Russell*, military necessity justified the government’s seizure of plaintiff’s steamboats for use in military operations, but not without payment of compensation.³⁶³ The owner of the steamboat served on the ships and paid for operational expenses while the government used the steamboats for military transport.³⁶⁴ Eventually the government returned the steamboats to the owner’s exclusive control.³⁶⁵ Recognizing that “imperative military necessity” justified the seizure and use of the property without the owner’s consent, the Court concluded that private rights “must give way for the time to the

³⁵⁶ *United States v. Caltex (Phil.), Inc.*, 344 U.S. 149, 155 (1952).

³⁵⁷ *See United States v. Russell*, 80 U.S. (13 Wall.) 623, 627-29 (1871).

³⁵⁸ *Id.* at 627 (emphasis added).

³⁵⁹ *Id.*

³⁶⁰ *Id.* at 627-28.

³⁶¹ *Id.* at 627. When the seizure was justified, no trespass liability could be imposed on the officer taking the property. *Id.*

³⁶² *Id.* at 628.

³⁶³ *See id.*

³⁶⁴ *See id.* at 629.

³⁶⁵ *See id.* at 631.

public good, but the government must make full restitution for the sacrifice.”³⁶⁶

The Court in *Omnia Commercial Co. v. United States* discussed in greater detail the idea that some extreme, exceptional circumstances would even excuse payment of just compensation.³⁶⁷ As the Court noted, “destruction of, or injury to, property is frequently accomplished without a ‘taking’ in the constitutional sense.”³⁶⁸ Property may be destroyed without compensation, for example, to prevent the spreading of a fire or a contagious disease.³⁶⁹ Further, laws could indirectly harm property through regulation, making it “almost valueless,” and still escape liability.³⁷⁰ The Court explained that the Takings Clause “has always been understood as referring only to a direct appropriation, and not to consequential injuries resulting from the exercise of lawful power. It has never been supposed to have any bearing upon, or to inhibit laws that indirectly work harm and loss to individuals.”³⁷¹

This rule applied in *Omnia Commercial*, where the government indirectly frustrated the performance of a contract by physically taking over property during war.³⁷² In *Omnia Commercial*, the government had requisitioned the entire output of a steel company, causing the company to default on its contract with Omnia.³⁷³ Although the executory contract was “property within the meaning of the Fifth Amendment,”³⁷⁴ the government requisition did not effect a taking of Omnia’s contractual interests because the government had not directly seized either of the two key parts of the contract: the obligation to perform and the right to enforce.³⁷⁵ Seizing the subject matter of the contract during wartime was a lawful exercise of the police power that made the contract between Omnia and the steel company impossible

³⁶⁶ *Id.* at 629.

³⁶⁷ See *Omnia Commercial Co. v. United States*, 261 U.S. 502, 507-11 (1923).

³⁶⁸ *Id.* at 508.

³⁶⁹ See *id.* at 508-09.

³⁷⁰ *Id.* at 510. The examples given included an embargo, a new tariff, fighting a war, and drafting into military service one of the parties to a contract. *Id.*

³⁷¹ *Id.* (quoting *Louisville & Nashville R.R. Co. v. Mottley*, 219 U.S. 467, 484 (1911) (quoting *Knox v. Lee*, 79 U.S. (12 Wall.) 457, 551 (1870))) (internal quotation marks omitted).

³⁷² *Id.* at 513.

³⁷³ *Id.* at 507-08.

³⁷⁴ *Id.* at 508.

³⁷⁵ See *id.* at 510-11.

to fulfill. The contract was not directly appropriated but rather ended.³⁷⁶

Instead of attempting to distinguish between direct and indirect damage, the Court in *Omnia Commercial* could have provided a more satisfying rationale for the uncompensated taking by focusing on the nature of the public necessity. Without sufficient steel, United States war efforts would have been seriously disadvantaged, putting more troops at risk and increasing the enemy's ability to prevail. The government requisition reflected necessary priorities during the war. As Nestor Davidson explained in putting forth a doctrine of economic necessity, "vulnerability to this kind of exigency is inherent in the obligations of ownership and membership in a community."³⁷⁷

For the most part, the cases involving the seizure of private property for military service suggest that compensation normally is owed when government takes possession of or destroys private property.³⁷⁸ Further, this principle generally applies even when impending public danger or urgent necessity justifies the seizure or destruction. Only a few of the military seizure cases affirmatively recognize the possibility that exceptional circumstances may justify seizure or appropriation without compensation.³⁷⁹ The meaning of those exceptional circumstances and of the distinction between noncompensable and compensable takings becomes clearer after examining the cases involving strategic destruction of private property.

b. Strategic Destruction of Property

The cases involving strategic destruction of property by the military have played an important role in defining when a compensable taking exists. In the 1887 decision *United States v. Pacific Railroad*, the Court established that military necessity justifies the strategic destruction of property without payment of compensation.³⁸⁰ In that decision, the

³⁷⁶ See *id.* at 511.

³⁷⁷ Nestor M. Davidson, *Nationalization and Necessity: Takings and a Doctrine of Economic Emergency*, 3 BRIGHAM-KANNER PROP. RTS. CONF. J. 187, 205 (2014). For support for a doctrine of economic emergency that sometimes would excuse the just compensation requirement, see *id.* at 202-11.

³⁷⁸ See, e.g., *Armstrong v. United States*, 364 U.S. 40 (1960) (concluding that the government's seizure of partially constructed navy boats after default by the contractor destroyed the value of the liens already attached to the boats because of government immunity and thus was a taking).

³⁷⁹ See *United States v. Caltex (Phil.), Inc.*, 344 U.S. 149, 155 (1952); *Omnia Commercial Co.*, 261 U.S. at 510.

³⁸⁰ See *United States v. Pac. R.R.*, 120 U.S. 227, 234-35 (1887).

Court announced that “no action lies against the state . . . for losses which she has occasioned, not wilfully, but through necessity and by mere accident, in the exertion of her rights” during times of war.³⁸¹ All property is held subject to being “temporarily occupied, or even actually destroyed, in times of great public danger, and when the public safety demands it.”³⁸² When the government destroys property during “actual and necessary military operations,” the government has no obligation to pay compensation to the owner.³⁸³ Although the Court recognized that compensation had sometimes been allowed, it described those cases as a “matter of bounty rather than of strict legal right.”³⁸⁴ As the Court explained, the “safety of the state . . . overrides all considerations of private loss.”³⁸⁵ Personal injuries and destruction of property occurring during war were inevitable consequences of war that had to be “borne by the sufferers.”³⁸⁶ If the state had to indemnify all who suffered injuries to their property during war, “the public finances would soon be exhausted,” creating an “utterly impracticable” situation.³⁸⁷ Though these comments were dicta, the Court’s forceful and broad language reflects recognition of the vulnerability of membership in a society threatened by war.³⁸⁸

The Court was quick to distinguish cases like *Mitchell v. Harmony* and *Russell v. United States* that involved private property being

³⁸¹ *Id.* (quoting 3 M. DE VATEL, LAW OF NATIONS, § 232, at 402 (Joseph Chitty ed., 5th ed. 1839) (1760)) (internal quotation marks omitted).

³⁸² *Id.* at 238 (quoting CONG. GLOBE, 42d Cong., 2d Sess. 4156 (1872) (veto statement of President Ulysses S. Grant)) (internal quotation marks omitted).

³⁸³ *Id.* (quoting CONG. GLOBE, 42d Cong., 2d Sess. 4156 (veto statement of President Ulysses S. Grant)) (internal quotation marks omitted).

³⁸⁴ *Id.* at 239 (quoting CONG. GLOBE, 42d Cong., 2d Sess. 4156 (veto statement of President Ulysses S. Grant)) (internal quotation marks omitted).

³⁸⁵ *Id.* at 234.

³⁸⁶ *Id.*

³⁸⁷ *Id.* at 235 (quoting 3 M. DE VATEL, LAW OF NATIONS, § 232, at 402 (Joseph Chitty ed., 5th ed. 1839) (1760)) (internal quotation marks omitted). For a discussion of President Lincoln’s changing views on whether compensation should be paid, see WILLIAM WHITING, WAR POWERS UNDER THE CONSTITUTION OF THE UNITED STATES: MILITARY ARRESTS, RECONSTRUCTION, AND MILITARY GOVERNMENT 407-09 (Leonard W. Levy ed., De Capo Press, 43d ed. 1972) (1871).

³⁸⁸ In *United States v. Pacific Railroad*, the government attempted to make the railroad pay for the cost of rebuilding the bridges. *Pac. R.R.*, 120 U.S. at 228-29. During the Civil War, Union and Confederate forces destroyed a number of the railroad’s bridges to prevent the advance of the other forces. *Id.* The Court concluded that government could not require the property owner to rebuild the destroyed structure at the owner’s expense. *Id.* at 233. Nor could the government rebuild the structure and then charge the owner for the costs of construction. *Id.* at 239.

pressed into military service.³⁸⁹ The government owed compensation in those situations, but not in the strategic destruction cases, because the public bore the general costs of engaging in war, as opposed to defending against an actual and imminent enemy attack or advance.³⁹⁰ Through this distinction, the Court was able to both define and limit the concept of “necessary military operations.”³⁹¹

One of the cases the Supreme Court relied on in developing its no-compensation rule for strategic destruction of property was an early decision of the Pennsylvania Supreme Court, *Respublica v. Sparhawk*.³⁹² Decided before the Fifth Amendment was ratified, *Respublica* involved the question of whether the capture of private property by the enemy, while the property was under government care, required compensation.³⁹³ Concluding that no compensation was owed, the state court recognized that “many things are lawful” during times of war “which would not be permitted in a time of peace.”³⁹⁴ Further, “rights of necessity, form a part of our law.”³⁹⁵ A person, for example, could pass through a private gate when a road was in disrepair, bulwarks could be built on private property in time of war, people traveling on navigable waters could use the banks of the waterway to tow barges, and hunters could pursue foxes onto private property.³⁹⁶ The state court noted the folly of failing to rely on necessity to justify destruction of property by pointing to the Great Fire of London in 1666.³⁹⁷ Half of that city burned, according to the court, after the Mayor failed to order the destruction of homes to stop the fire “for fear he should be answerable for a trespass.”³⁹⁸ The court stressed that Congress had the power to direct the removal of property

³⁸⁹ See *supra* notes 340–66 and accompanying text.

³⁹⁰ See *Pac. R.R.*, 120 U.S. at 239.

³⁹¹ *Id.*

³⁹² *Respublica v. Sparhawk*, 1 Dall. 357 (Pa. 1788); see also *Pac. R.R.*, 120 U.S. at 234.

³⁹³ *Respublica*, 1 Dall. at 362.

³⁹⁴ *Id.*

³⁹⁵ *Id.*

³⁹⁶ See *id.* at 363.

³⁹⁷ See *id.*

³⁹⁸ See *id.* An old English law apparently required a person who pulled down another's house to build it again. According to some accounts, the Mayor of London was not willing to destroy houses to stop the fire because of this law. Other accounts, however, suggest that Aldermen of the city tried to stop homes from being torn down because their houses would be the first to be pulled down. According to one eyewitness, the Mayor eventually began pulling down houses hours after the fire started, but it was apparently ineffective until the Duke of York took over control of the city. See WALTER GEORGE BELL, *THE GREAT FIRE OF LONDON IN 1666*, at 316 (2d ed. 1920).

“necessary to the maintenance of the Continental army, or useful to the enemy, and in danger of falling into their hands.”³⁹⁹ This authority to act is a “natural and necessary incident” of the war powers.⁴⁰⁰

In the 1909 decision, *Juragua Iron Co. v. United States*, the Court relied on *Pacific Railroad* and other cases to conclude that the strategic destruction rule includes destruction of the property of American citizens located in enemy country.⁴⁰¹ In *Juragua Iron*, plaintiff mined iron ore and manufactured iron and steel products.⁴⁰² Some of its business was located in Cuba.⁴⁰³ During the war with Spain, the United States ordered troops engaged in military operations in Cuba to destroy all places suspected of harboring the yellow fever germ to protect the health of the troops.⁴⁰⁴ Plaintiff’s property was burned as a result.⁴⁰⁵ In rejecting *Juragua Iron*’s takings claim, the Court described plaintiff’s business in Cuba as enemy property subject to the rules of war and therefore liable to seizure and confiscation when necessary for military purposes.⁴⁰⁶ Because of this designation as enemy property, constitutional protection for property did not apply.⁴⁰⁷ The Court stressed that situations involving strategic destruction of property in times of war were different than those involving destruction of property in times of peace.⁴⁰⁸

The Court also relied on the distinction between strategic destruction and seizure of property to conclude, in *United States v. Caltex (Philippines), Inc.*, that the Fifth Amendment did not always require compensation for the wartime destruction of property having strategic value.⁴⁰⁹ In *Caltex*, the military destroyed plaintiff’s oil facilities as part of an evacuation plan for the Philippines implemented after the Japanese attack on Pearl Harbor.⁴¹⁰ Although the Court recognized that decisions like *Mitchell v. Harmony* and *Russell v. United States* provided support for requiring compensation, the Court also noted that “[i]n neither was the Army’s purpose limited, as it was in

³⁹⁹ *Respublica*, 1 Dall. at 363.

⁴⁰⁰ *Id.*

⁴⁰¹ *See* *Juragua Iron Co. v. United States*, 212 U.S. 297, 305-07 (1909).

⁴⁰² *Id.* at 301.

⁴⁰³ *Id.*

⁴⁰⁴ *Id.*

⁴⁰⁵ *Id.*

⁴⁰⁶ *Id.* at 306-07.

⁴⁰⁷ *Id.* at 308.

⁴⁰⁸ *See id.* at 305.

⁴⁰⁹ *United States v. Caltex (Phil.)*, Inc., 344 U.S. 149, 155 (1952).

⁴¹⁰ *See id.* at 150-51.

this case, to the sole objective of destroying property of strategic value to prevent the enemy from using it to wage war.”⁴¹¹ Stressing the importance of the distinction between strategic destruction and seizure, the Court reiterated that “in times of imminent peril — such as when fire threatened a whole community — the sovereign could, with immunity, destroy the property of a few that the property of many and the lives of many more could be saved.”⁴¹² Here, “due to the fortunes of war,” the property in *Caltex* “had become a potential weapon of great significance” to the enemy.⁴¹³ In such a situation, the “safety of the state” overrode “all considerations of private loss.”⁴¹⁴

Jim Ely has argued that *Caltex*’s distinction between strategic destruction and property seizure ignores the purpose of the Takings Clause to ensure that “the financial burden of implementing public policy” is not “unfairly placed on individual property owners but shared by the public as a whole through taxation.”⁴¹⁵ According to Ely, the destruction of the oil facility was “simply a necessary cost of conducting the war,” much as the acquisition of property for maintenance of the troops.⁴¹⁶ Both the positions of the majority and Ely have some appeal, and resolution of the matter ultimately should turn on the nature of the threat to the community. Because of the potentially unlimited power of the military during war, a narrow approach that builds in restraints on application of the doctrine of military necessity makes more sense in a democracy with strong individual rights.⁴¹⁷ The Court’s restraints have included requiring an immediacy to the threat, a genuine and real emergency distinct from the general course of the military campaign, and an urgency that rules out waiting for civil action.⁴¹⁸

⁴¹¹ *Id.* at 153.

⁴¹² *Id.* at 154.

⁴¹³ *Id.* at 155.

⁴¹⁴ *Id.* at 154 (quoting *United States v. Pac. R.R.*, 120 U.S. 227, 234 (1887)) (internal quotation marks omitted). *But see* EAGLE, *supra* note 138, § 6-5(b), at 693 (arguing that the fair market value of the refineries at the time of their destruction probably approached zero and therefore payment of just compensation posed little problem for the public fisc).

⁴¹⁵ James W. Ely, Jr., *Property Rights and the Supreme Court in World War II*, 1 J. SUP. CT. HIST. 19, 26 (1996) [hereinafter *Property Rights*].

⁴¹⁶ *Id.* Justices Douglas and Black agreed with this logic in their dissenting opinion. *See Caltex*, 344 U.S. at 156 (Douglas, J., with Black, J., dissenting).

⁴¹⁷ *See* Davidson, *supra* note 377, at 203-04.

⁴¹⁸ *See id.* at 207; Ely, *Property Rights*, *supra* note 415, at 33 n.47 (“[M]any properties, such as laundries, or coal mines, or railroads, may be subjected to public operation only for a short time to meet war or emergency needs, and can then be returned to their owners.” (quoting *United States v. Pewee Coal Co.*, 341 U.S. 114,

The cases involving military seizure and strategic destruction of property collectively establish several important principles for resolving conflicts between constitutionally protected property and military operations. First, the courts view the destruction or abrogation of private property as “an extreme exercise of the police power” that typically will require payment of just compensation.⁴¹⁹ Although property rights are held subject to regulations adopted to promote the public welfare, “total sacrifice negatives altogether the right of property”; therefore, the conditions justifying such a demand must be carefully reviewed.⁴²⁰ Second, the Supreme Court’s distinction between cases involving property pressed into service and property strategically destroyed makes clear that extreme circumstances occasionally will justify destruction or abrogation of property rights even without payment of just compensation.⁴²¹ If a sovereign faces a threat to its very existence or to the health of its people, it may take necessary action, including the destruction of private property without paying compensation. Part of the obligation of membership in a community is vulnerability in times of severe crisis. Finally, a comparison of the cases involving property pressed into military service and property strategically destroyed shows that the compensation question can turn on whether the government action involves general military operations or instead an urgent situation requiring quick action to protect the sovereign and its people. Although seizing private property in the normal course of a military campaign typically constitutes a compensable taking, destroying or using property to defend against an enemy attack often may not require compensation.

In the next category of military use cases, the physical takings claim is tied to an argument based on loss of use and diminution in value. Because these cases typically do not involve the affirmative seizure or destruction of property, the physical aspect of the takings claim is more difficult to see. Reliance on loss of use or diminution in value instead provides a means for buttressing and highlighting the impact of military action on physical use of property.

119 (1951) (Reed, J., concurring)) (internal quotation marks omitted)).

⁴¹⁹ ERNST FREUND, *THE POLICE POWER: PUBLIC POLICY AND CONSTITUTIONAL RIGHTS* § 517, at 550 (1904); see *supra* Part II.A.2 (discussing cases involving property pressed into military service).

⁴²⁰ FREUND, *supra* note 419, § 517, at 551.

⁴²¹ See *id.* at 550; *supra* notes 340–414 and accompanying text.

c. Diminution in Value by Military Use

Whether the Court accepts diminution in value resulting from military use as evidence of physical impact and therefore of a physical taking depends on how transitory or permanent the offending military use is and how much the military use adversely affects physical use of the land. In two cases arising in the early 1900s, for example, the Court focused on whether the military uses were too occasional to constitute a physical taking.⁴²² In one of those cases, the plaintiffs' land was located near a military installation that had tested its battery guns over their land after installation.⁴²³ The plaintiffs claimed the test firings, combined with the possibility of future firings, significantly diminished the value of their property.⁴²⁴ In concluding that no taking had resulted, the Court in *Peabody v. United States* acknowledged that "if the government had installed its battery, not simply as a means of defense in war, but with the purpose" of firing the battery guns "directly across" plaintiffs' land for practice, "in time of peace . . . depriving the owner of its profitable use, the imposition of such a servitude would constitute an appropriation of property" requiring payment of just compensation.⁴²⁵ But absent proof of intent to repeat the test and impose such a servitude, the initial test firings would not effect a taking.⁴²⁶ The Court explained that firing the guns shortly after their installation for the purpose of testing them did not establish such intent.⁴²⁷ "The mere location of a battery . . . [was] not an appropriation of the property within the range of its guns."⁴²⁸ Property could not be taken simply because the land was suitable for use as a firing range or because apprehension caused diminution in value.⁴²⁹ In *Peabody* the claimants failed to establish the intent to repeat the test.⁴³⁰

The other decision, *Portsmouth Harbor Land & Hotel Co. v. United States*, involved the same property.⁴³¹ This time the takings claim was

⁴²² See *Portsmouth Harbor Land & Hotel Co. v. United States*, 260 U.S. 327, 330 (1922); *Peabody v. United States*, 231 U.S. 530, 539-40 (1913).

⁴²³ *Peabody*, 231 U.S. at 536.

⁴²⁴ *Id.* at 538. Prior to the test firings, the land had been used profitably as a resort. *Id.* at 535-37. Within two years after the firings, the resort was closed. *Id.* at 538.

⁴²⁵ *Id.* at 538.

⁴²⁶ See *id.* at 539-40.

⁴²⁷ See *id.* at 538.

⁴²⁸ *Id.* at 539.

⁴²⁹ *Id.*

⁴³⁰ See *id.* At the time of the suit, "none of the guns had been fired for over eight years." *Id.* at 540.

⁴³¹ See *Portsmouth Harbor Land & Hotel Co. v. United States*, 260 U.S. 327, 328

brought after the government replaced the guns with large coast defense guns and fired the replacement guns over plaintiffs' land.⁴³² The government had also built a fire control station and service.⁴³³ In rejecting the position that *Peabody* controlled the matter, Justice Holmes noted that "[e]very successive trespass adds to the force of the evidence" of intent to continue to fire at will across plaintiffs' land.⁴³⁴ Because the lower court had not addressed whether the government intended to use the weapons in the future, the Court remanded the matter for further consideration.⁴³⁵

These cases demonstrate the importance of a permanent physical impact to the early Court. Rather than focus solely on the degree of diminution in value resulting from a physical act, the early Court looked at both the degree of permanence and the degree of physicality in evaluating physical takings claims. Because the guns were not being used defensively in war, military necessity could not justify the firings, and ordinary physical takings analysis controlled. In the next category of traditional physical takings cases, the Court considers nonmilitary emergency situations that might justify a conclusion that no physical taking had occurred, or that no compensation was owed.

3. Other Public Necessity and Emergency Uses

The military necessity cases make clear that nonmilitary public necessities may also justify the physical takeover or destruction of private property without payment of compensation. *Omnia Commercial Co.*, for example, discussed how public necessity justified destroying property to prevent the spread of fire or disease without compensation,⁴³⁶ while *Respublica* identified a number of situations where necessity justified the use or destruction of property, including passage through a private gate, pursuit of foxes, and preventing the spread of fire.⁴³⁷ In a 1992 decision, the Court referred collectively to these possibilities as "or otherwise" examples of legitimate limitations on property that severely affect its use or value yet do not require compensation.⁴³⁸ In a footnote, the Court then explained that the

(1922).

⁴³² *Id.* at 329.

⁴³³ *Id.*

⁴³⁴ *Id.* at 328, 330.

⁴³⁵ *See id.*

⁴³⁶ *See supra* notes 367–76 and accompanying text.

⁴³⁷ *See supra* notes 392–400 and accompanying text.

⁴³⁸ *Lucas v. S.C. Coastal Council*, 505 U.S. 1003, 1029 (1992).

“principal ‘otherwise’” situation involved “cases of actual necessity, to prevent the spreading of a fire’ or to forestall other grave threats to the lives and property of others.”⁴³⁹ As with the military necessity doctrine, uncompensated takings for other public necessities thus are allowed when private property likely would have been destroyed anyway because of a grave emergency or an “acute collective action problem” requires “swift action.”⁴⁴⁰ The nonmilitary public necessity cases also highlight the inherent vulnerability of community members to a serious and specific public emergency. A brief review of a few public necessity cases shows some of these rationales at play.

In *Block v. Hirsh*, the Court upheld a statute limiting a landowner’s right to exclude tenants after World War I.⁴⁴¹ The law allowed tenants in the District of Columbia to remain in a lease after the expiration of the lease’s term, provided the tenants met their lease obligations, unless the landlord gave thirty days’ notice to reclaim the premises.⁴⁴² Effective for two years, the law was adopted in 1919 to deal with the housing crisis caused by the war.⁴⁴³ In upholding the law against a takings challenge, the Court gave the government considerable deference.⁴⁴⁴ Writing for the majority, Justice Holmes explained that the “circumstances have clothed the letting of buildings in the District of Columbia with a public interest so great as to justify regulation by law.”⁴⁴⁵ According to Justice Holmes, “a public exigency will justify the legislature in restricting property rights in land to a certain extent without compensation.”⁴⁴⁶

Subsequent decisions have clarified that the public exigency in *Block v. Hirsh* was not open-ended or indefinite. In *Chastleton Corp. v. Sinclair*, the Court returned to the statute at issue in *Block* after Congress renewed the act.⁴⁴⁷ This time, Justice Holmes’s majority effectively struck down the law, explaining that the crisis caused by the war was over and that price inflation, by itself, was not enough to justify the deferential approach taken in *Block* in evaluating the

⁴³⁹ *Id.* at 1029 n.16 (quoting *Bowditch v. Boston*, 101 U.S. 16, 18-19 (1880)).

⁴⁴⁰ Davidson, *supra* note 377, at 205. An acute collection action problem requires a sense of urgency and public emergency that generally does not exist when transaction costs are blocking a beneficial Coasean bargain. *See id.*

⁴⁴¹ *Block v. Hirsh*, 256 U.S. 135, 158 (1921).

⁴⁴² *Id.* at 153-54.

⁴⁴³ *Id.*

⁴⁴⁴ *Id.* at 154-55.

⁴⁴⁵ *Id.* at 155.

⁴⁴⁶ *Id.* at 156.

⁴⁴⁷ *Chastleton Corp. v. Sinclair*, 264 U.S. 543, 547 (1924).

takings claim.⁴⁴⁸ The Court again discussed *Block* in *Home Building and Loan Association v. Blaisdell*.⁴⁴⁹ The Minnesota statute at issue authorized a mortgage foreclosure and sales moratorium in response to the Great Depression.⁴⁵⁰ In upholding the law against a Contract Clause challenge, the Court referred to *Block* on several occasions as support for the exercise of expanded police powers to protect vital interests during an emergency.⁴⁵¹

United States v. Central Eureka Mining Co. involved a different type of war-related crisis that raised regulatory, and perhaps even physical, takings claims.⁴⁵² During World War II, the nation experienced a critical shortage of essential metals necessary to the war effort, as well as the machines and skilled laborers needed for mining.⁴⁵³ To handle the shortages, the government issued a series of orders that prohibited the use of mining equipment in nonessential mines and closed down gold mines to induce laborers to relocate.⁴⁵⁴ Owners of gold mines sued for compensation, claiming a taking of their right to mine because of the government action.⁴⁵⁵ In rejecting the takings claim, the Court stressed that government had not physically occupied the mines or the equipment.⁴⁵⁶ Though the government orders effectively prohibited the operation of the mines, “[w]ar, particularly in modern times, demands the strict regulation of nearly all resources. It makes demands which otherwise would be insufferable.”⁴⁵⁷ The losses caused by the wartime restrictions were “insignificant when compared to the widespread uncompensated loss of life and freedom of action which war traditionally demands.”⁴⁵⁸ Because the damage to the gold mine owners

⁴⁴⁸ *Id.* at 547-49. Some believe that *Chastleton* had little impact. See generally Roger I. Roots, *Government by Permanent Emergency: The Forgotten History of the New Deal Constitution*, 33 SUFFOLK U. L. REV. 259, 271 n.59 (2000) (“This doctrine of emergency was extended in *Block v. Hirsh*, 256 U.S. 135 Not until *Home Building & Loan Ass’n v. Blaisdell*, 290 U.S. 398 (1934), did the Supreme Court ever hint at applying an emergency doctrine when no war or warlike situation existed.” (citation omitted)).

⁴⁴⁹ 290 U.S. 398 (1934).

⁴⁵⁰ *Id.* at 415-18.

⁴⁵¹ *Id.* at 440-41, 444, 447-48.

⁴⁵² *United States v. Cent. Eureka Mining Co.*, 357 U.S. 155, 156-61 (1958); *id.* at 179, 181-84 (Harlan, J., dissenting) (comparing the wartime action to a temporary confiscation of property).

⁴⁵³ *Id.* at 157 (majority opinion).

⁴⁵⁴ *Id.* at 157-61.

⁴⁵⁵ *Id.* at 166-68.

⁴⁵⁶ *Id.* at 165-66.

⁴⁵⁷ *Id.* at 168.

⁴⁵⁸ *Id.*

was incidental to the lawful regulation of matters “essential to the war effort,” the majority concluded that no compensation was owed.⁴⁵⁹

Justice Harlan’s dissenting opinion bridges both physical and regulatory takings cases. In his dissent, Justice Harlan explained how he found persuasive the Court of Claims finding that the “dominant” reason for the closure was the relocation of gold miners to essential mining operations.⁴⁶⁰ The wartime order shutting down the mines was not simply a regulation causing incidental loss, but rather a temporary taking of the right to mine gold.⁴⁶¹ Because of the order, owners were deprived of all beneficial and profitable use of the mines.⁴⁶² As a practical matter, the government action had the same consequences as the “temporary acquisition of physical possession” of the mines.⁴⁶³ Resolution of the case should not, in Harlan’s view, turn on whether government physically entered the mines, “planting the American flag on the mining premises.”⁴⁶⁴ Labeling the government action “confiscatory,” Justice Harlan ruled out applicability of the cases dealing with wartime regulation of prices, rents, and profits in part because they dealt with a “nationwide regulatory system,” not “a narrowly confined order directed to a small, singled-out category of individual concerns.”⁴⁶⁵ Wartime regulations that touched everyone to some degree were different than action putting the government in a position equivalent to an outright physical seizure of property.⁴⁶⁶ Justice Harlan’s analysis harkens back to the equivalence logic used in the public works cases,⁴⁶⁷ and illustrates how physical takings analysis generated the regulatory takings doctrine. Though some may view his analysis and the Court’s decision solely as a regulatory taking case,⁴⁶⁸ the similarities between his logic and the traditional physical takings cases demonstrate the complexity of the physical takings concept and the need for a governance strategy for multi-faceted disputes.

⁴⁵⁹ *Id.* at 169.

⁴⁶⁰ *Id.* at 179-80 (Harlan, J., dissenting).

⁴⁶¹ *Id.* at 181.

⁴⁶² *Id.*

⁴⁶³ *Id.*

⁴⁶⁴ *Id.*

⁴⁶⁵ *Id.* at 182.

⁴⁶⁶ *Id.* at 183-84.

⁴⁶⁷ See, e.g., *supra* notes 209–20 and accompanying text (discussing the *Pumpelly* Court’s focus on the impairment of use value).

⁴⁶⁸ See, e.g., Ely, *Property Rights*, *supra* note 415, at 26-27 (discussing Justice Harlan’s dissent in *Central Eureka Mining Co.*).

In *National Board of YMCA v. United States*, riots in Panama led to the destruction of private property despite the military's efforts to protect the property.⁴⁶⁹ Noting the "unusual circumstances" surrounding the property's destruction, the Court rejected the takings claim of the property owner.⁴⁷⁰ Though the troops had temporarily occupied the buildings "in the course of battle," this action did not deprive the owner of any use that could have occurred.⁴⁷¹ Trying to protect a building by occupying it is no different than "entry by firemen upon burning premises."⁴⁷² Compensation is not owed "every time violence aimed against government officers damages private property."⁴⁷³

Like the earlier military necessity cases, these decisions instinctively recognize the need for a governance approach to delineating rights and managing societal resources when imminent public exigencies exist. The Court's references to property "clothed with a public interest" in situations involving defined public crises indicate that a simpler, exclusion strategy was not being used. The exclusion strategy measures only the impact of the government act on the private property owner, focusing on the degree of permanence and physicality of the act.⁴⁷⁴ This two-dimensional analysis does not adequately capture or address the public crisis. The two-dimensional approach works well with simple property situations. If, for example, someone buys a pizza, government generally cannot seize the pizza without repercussions, absent a true necessity justification. It would be wrong though, to generalize from this simple property arrangement to other more complicated ones. The simple property picture does not involve a public good, a necessity situation, or a property sharing arrangement of any sort. With more complicated property arrangements, greater

⁴⁶⁹ *Nat'l Bd. of YMCA v. United States*, 395 U.S. 85, 87 (1969).

⁴⁷⁰ *Id.* at 93.

⁴⁷¹ *Id.*

⁴⁷² *See id.*

⁴⁷³ *Id.*

⁴⁷⁴ The strength of the causal link between the government act and the damage to the property owner also is important but appears to be influenced by the other two factors. That is, the more permanent or physical the government action, the more likely a sufficient causal link exists. A case that involves a one-time physical or nontrespassory invasion would not have the necessary intent to repeat to move it from a single trespass to indefinite or permanent interference (e.g., *Peabody*). A case that involves a law limiting rights important to possession and use would turn on evidence of physical impact on use (e.g., rent control cases), the voluntariness of the affected private transaction (e.g., rent and rate regulation cases), or the existence of physical change (e.g., *Ark. Game & Fish Comm'n and Lynah*).

judicial intervention is needed to resolve conflicts — for example, to determine whether the public necessity is compelling enough to justify the government action without compensation. The governance strategy recognizes and calls for such intervention. The next Subpart discusses how the governance strategy helps to define the reach of constitutionally protected property as the complexity of property arrangements increases.

B. *The Governance Function of Constitutional Property*

The early physical invasion cases involving public works provided much of the foundation for the development of modern takings law. In *Pumpelly v. Green Bay Co.*, the Supreme Court announced that it was not going to define a taking “in the narrowest sense”;⁴⁷⁵ it was not going to look simply at whether the government had converted the property to public use, but rather at whether the government-authorized public work inflicted irreparable and permanent injury, totally destroyed the value of property, or otherwise subjected the property to “total destruction.”⁴⁷⁶ Early on, in other words, the Court adopted a functional equivalence test for analyzing physical takings claims and did not simply ask whether a physical invasion existed.

Using this functional equivalence test, the Court established that a physical taking could occur even though the government-authorized project did not involve an actual, direct physical occupation or appropriation of private property.⁴⁷⁷ Not all of the public works cases, however, resulted in a takings finding. To determine whether a public works project produced a physical taking, the Court applied a number of factors to measure how close the government interference was to an actual, direct physical occupation or appropriation.⁴⁷⁸ These proximity⁴⁷⁹ factors included entry, practical ouster, loss or destruction of use, intent to repeat, and destruction of value.⁴⁸⁰ Early

⁴⁷⁵ See *Pumpelly v. Green Bay Co.*, 80 U.S. (13 Wall.) 166, 177-78 (1871).

⁴⁷⁶ See *id.*

⁴⁷⁷ See *id.* at 180.

⁴⁷⁸ See *id.* at 177-78.

⁴⁷⁹ Professors Merrill and Smith use this term in the teachers’ manual to their casebook in discussing various common law property concepts. See THOMAS W. MERRILL & HENRY E. SMITH, *TEACHER’S MANUAL TO PROPERTY: PRINCIPLES AND POLICIES* 40, 52 (2d. ed., 2012) (“One way to help . . . is to describe the question in terms of a series of possible proximity rules. . . . One can again construct a proximity line to try to capture the dispute over first possession.”).

⁴⁸⁰ See, e.g., *Portsmouth Harbor Land & Hotel Co. v. United States*, 260 U.S. 327, 330 (1922) (finding a sufficient basis for a takings claim where “the United States has

on, then, the Court's takings cases reflected an effort to place each alleged physical taking on a continuum.

One often overlooked aspect of the early physical takings cases concerns the way the physical invasion or alteration was linked to economic impact. Although the early Court stated that the amount of damages or the degree of diminution of value was not determinative in physical takings cases,⁴⁸¹ the Court frequently explained the physical taking concept in the context of the relationship between physical impact and loss of value.⁴⁸² Indeed, in some public works cases, the Court clearly stated that destroying the use and value of land through a physical invasion or physical alteration was a taking.⁴⁸³ The Court also stressed that a "serious interruption to the common and necessary use" of property was functionally equivalent to a taking.⁴⁸⁴ The introduction of the economic impact perspective in the early physical takings cases eventually would have great significance in takings law.⁴⁸⁵

The factors used by the traditional Court to detect physical takings provide a basis for identifying two key dimensions important to the Court's physical takings analysis. Assuming sufficient causality exists between the government act and the harm to the property owner,⁴⁸⁶ all

set up heavy coast defence guns with the [arguable] intention of [repeatedly] firing them over the claimants' land and without the intent or ability to fire them except over that land"); *Pumpelly*, 80 U.S. (13 Wall.) at 177-80 ("[W]here real estate is actually invaded by superinduced additions of water, earth, sand, or other material, or by having any artificial structure placed on it, so as to effectually destroy or impair its usefulness, it is a taking, within the meaning of the Constitution . . .").

⁴⁸¹ See *United States v. Cress*, 243 U.S. 316, 328 (1917), limited by *United States v. Chi., Milwaukee, St. Paul & Pac. R.R. Co.*, 312 U.S. 592, 597 (1941).

⁴⁸² *E.g.*, *id.* at 327-28.

⁴⁸³ See, *e.g.*, *id.* at 328 (concluding that a government project leading to "a permanent liability to intermittent but inevitably recurring overflows" constituted a physical taking of the use and value of the property).

⁴⁸⁴ *Pumpelly*, 80 U.S. (13 Wall.) at 179.

⁴⁸⁵ Eventually, in *Pennsylvania Coal Co. v. Mahon*, the Court would separate the economic impact inquiry and make it the basis of the regulatory takings concept. See *Pa. Coal Co. v. Mahon*, 260 U.S. 393, 416 (1922); *supra* notes 39-42 and accompanying text (discussing the impact of the diminution in value factor in physical and regulatory takings).

⁴⁸⁶ In examining the takings causal connection between the government act and the injury to private property, the Court has asked whether the government action directly caused the injury and whether the injury was peculiar to the property owner. Traditional courts distinguished between direct damages and consequential damages, denying compensation for the incidental or consequential damages that naturally and unavoidably arose from the proper operation of the project and that were shared generally by the public. See, *e.g.*, *Richards v. Wash. Terminal Co.*, 233 U.S. 546, 554 (1914) (declaring that "the constitutional inhibition against the taking of private

of the factors appear to be measuring the degree of permanence and physicality of the alleged government interference. Using these two dimensions, the results of physical takings cases can be represented on a Cartesian plane with the degree of permanence as the x-axis and the degree of physicality as the y-axis. For these two dimensions to provide sufficient explanatory and predictive power, the plotted results should reveal a relationship between permanence and physicality, and show some correlation with the results in physical takings cases. Figure 1 depicts the results of such a graphing exercise for Supreme Court physical takings cases mentioned in this Article.⁴⁸⁷ Each case has been assigned x and y values based on the case's degrees of permanence and physicality as measured by scales adapted from the standards and tests of the Court's physical takings decisions.⁴⁸⁸ The scales and references to some of their sources appear below.

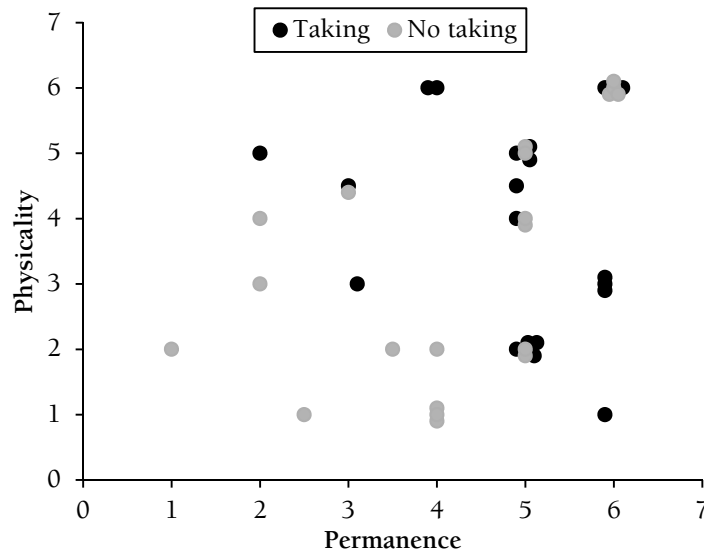
property for public use without compensation does not confer a right to compensation upon a landowner, no part of whose property has been actually appropriated, and who has sustained only those consequential damages that are necessarily incident" to the railroad's operation). Damages that were not the result of a direct invasion but rather were incidental, inconveniencing the landowner, were not compensable. *See, e.g., Transp. Co. v. Chicago*, 99 U.S. 635, 640 (1878) ("[I]t is inferred, the city is responsible to [landowners] for the injurious consequences resulting [from building a tunnel]. The answer to this is that the assumption is unwarranted."). The apparent thinking was that to rule otherwise would paralyze government. Consequential damages were incidental to the normal operation of important public projects for which the public generally bore the burdens and benefits.

⁴⁸⁷ Again, the Supreme Court cases being considered only involve situations where the government did not formally condemn private property. Also, while not all of the Court's physical takings cases are considered, the cases are, in the author's judgment, representative of the Court's decisions in this area. The graph was prepared by Matthew Peck, a mathematics and economics major who graduated from the University of Virginia in 2014.

⁴⁸⁸ The author coded each case according to these scales and has the table reflecting the codes on file.

Figure 1. Two-Dimensional View of the Court's Physical Takings Cases

- *Degree of permanence*, moving towards greater permanence with ascending values, using the following benchmarks:
 - 1: One-time trespass or interference⁴⁸⁹
 - 2: Interference occurring more than one time but not necessarily recurring⁴⁹⁰
 - 3: Intermittent and inevitably recurring interference⁴⁹¹
 - 4: Interference for a set period but not necessarily indefinite⁴⁹²
 - 5: Permanent, indefinite, indirect interference⁴⁹³
 - 6: Permanent, indefinite, direct interference⁴⁹⁴
- *Degree of physicality*, moving towards greater physicality with ascending values, using the following benchmarks:
 - 1: Economic regulation affecting the right to exclude or use⁴⁹⁵
 - 2: Nontrespassory interference affecting use, value, or access⁴⁹⁶
 - 3: Continuous passage⁴⁹⁷
 - 4: Indirect, unexpected physical invasion or occupation⁴⁹⁸
 - 5: Indirect, foreseeable physical invasion or occupation⁴⁹⁹
 - 6: Direct, intended physical invasion or occupation⁵⁰⁰



For visual purposes, overlapping points were arbitrarily assigned a value of plus or minus .1 to break a tie; any sort of cluster thus represents the same point.

⁴⁸⁹ See, e.g., *Peabody v. United States*, 231 U.S. 530, 539-40 (1913) (requiring proof of “intention to repeat”).

⁴⁹⁰ See, e.g., *Ark. Game & Fish Comm’n v. United States*, 133 S. Ct. 511, 518-19 (2012) (focusing on the temporary nature of the flooding).

⁴⁹¹ See, e.g., *United States v. Cress*, 243 U.S. 316, 328 (1917) (finding that “a permanent liability to intermittent but inevitably recurring overflows” was only a difference in degree from a “permanent condition of continual overflow”), *limited by United States v. Chi., Milwaukee, St. Paul & Pac. R.R. Co.*, 312 U.S. 592, 597 (1941).

⁴⁹² Compare *Block v. Hirsh*, 256 U.S. 135, 153-55 (1921) (refusing to find a physical taking where a law that was effective for two years limited a landlord’s right to exclude because of a serious housing shortage due to the war), *with Chastleton Corp. v. Sinclair*, 264 U.S. 543, 548-49 (1924) (upholding the challenge to an extension of the law because the war was over and price inflation was not enough, by itself, to justify the deferential approach).

⁴⁹³ See, e.g., *Pumpelly v. Green Bay Co.*, 80 U.S. (13 Wall.) 166, 179 (1871) (noting that a permanent and “serious interruption to the common and necessary use of property” was “equivalent to the taking of it”).

⁴⁹⁴ See, e.g., *Loretto v. Teleprompter Manhattan CATV Corp.*, 458 U.S. 419, 426-27 (1982) (describing the government’s proximate involvement in an “extreme form of a permanent physical occupation” as “determinative” of a physical taking claim).

⁴⁹⁵ See, e.g., *Yee v. City of Escondido*, 503 U.S. 519, 531 (1992) (concluding that a rent control law limiting landlords’ right to evict tenants was not a physical occupation because the owners “voluntarily open[ed] their property to occupation by others”).

⁴⁹⁶ Compare *United States v. Causby*, 328 U.S. 256, 265-66 (1946) (concluding that low-level flights destroying enjoyment and use of the land below were equivalent to invasions of the surface even if temporary in duration), *with Transp. Co. v. Chicago*, 99 U.S. 635, 642 (1878) (concluding that acts “not directly encroaching” on property but “impair[ing]” use by obstructing access were not physical takings).

⁴⁹⁷ See, e.g., *Nollan v. Cal. Coastal Comm’n*, 483 U.S. 825, 832 (1987) (concluding that a “permanent and continuous right to pass to and fro” was a permanent physical occupation).

⁴⁹⁸ See, e.g., *Bedford v. United States*, 192 U.S. 217, 225 (1904) (concluding that an attempt to correct and prevent erosion caused by natural conditions was not a physical taking even though unexpected flooding and erosion occurred).

⁴⁹⁹ See, e.g., *Ark. Game & Fish Comm’n v. United States*, 133 S. Ct. 511, 522 (2012) (describing the foreseeability of a temporary physical invasion as an important factor in evaluating a temporary physical takings claim).

⁵⁰⁰ See, e.g., *Loretto v. Teleprompter Manhattan CATV Corp.*, 458 U.S. 419, 435 (1982) (describing a permanent physical occupation as the “most serious form of invasion”).

This graphic representation of the Court's physical takings cases reveals some unpredictable results. Though cases with low permanence and low physicality values yield no physical taking, as expected, other cases receiving the same low score on permanence (2) produce a different result depending on their level of physicality (with a value of 5 yielding a taking). Similar variation also can be found with cases receiving the same low value on physicality (1), resulting in a taking only when the level of permanence reaches 6. These results, by themselves, are not necessarily troubling, for a high score on either dimension could be determinative. Yet, the inconsistencies existing in certain clusters of cases suggest otherwise. Instead of the odds of a physical taking increasing, as might be expected, with the degree of permanence and physicality, the results are mixed. Two of the cases receiving values of (6,6), for example, resulted in a physical taking, while four did not. Other inconsistent clusters include: the (5,5) grouping, where three decisions found a taking and two did not; the (5,4) cluster, with one decision finding a taking and two concluding otherwise; the (5,2) cluster, with four finding a taking and two finding none; and the (3,4.5) grouping, where one found a taking and one did not. These inconsistencies suggest that neither dimension is determinative or sufficient to describe the physical takings concept, despite what the modern Court would like to think.

What explains the unpredictable clusters and the cases receiving an identical low score for one dimension and a varying score for the other? For the most part, the divergent results appear to occur in situations needing a governance strategy to manage conflicting rights and complex property arrangements. Those situations arise when: (1) a longstanding public right (for example, the right to navigation) exists in a resource also subject to private rights — that is, a resource subject to a complex property sharing arrangement; (2) an imminent public necessity exists, affecting private property with an overriding public interest (whether military or otherwise); (3) a public good (for example, highways) or a resource subject to a complex property sharing arrangement (such as air or navigable waters) needs extra management to handle a problem (for example, flooding or congestion); or (4) a technological advance makes a new use possible in a resource subject to a complex property sharing arrangement (for example, rail or air travel, cable transmission, or drilling for gas in shale deposits).

Results in the cluster of cases having high values for both dimensions seem to depend on whether the decisions involve at least one of these “governance” situations. In the (6,6) cluster, the four cases finding no

physical taking all were military necessity cases,⁵⁰¹ while the two concluding otherwise did not involve any type of public necessity situation.⁵⁰² Similarly, in the (5,5) cluster, one of the two cases finding no physical taking involved the longstanding navigational servitude,⁵⁰³ and the other involved a technological advance having generalized spillovers (the railroad).⁵⁰⁴ Though one of the other three cases in the (5,5) cluster to find a physical taking also dealt with an improvement to navigable waters, the improvement went too far by permanently flooding and destroying private property.⁵⁰⁵ In the (5,4) cluster, the two cases with no physical taking involved either a serious public safety issue⁵⁰⁶ or a problem with a resource subject to a complex property sharing arrangement that needed extra management.⁵⁰⁷ Similar observations describe the “no physical taking” cases in the (5,2) cluster (the navigational servitude)⁵⁰⁸ and in the (3,4.5) cluster (extra

⁵⁰¹ See *United States v. Caltex (Phil.), Inc.*, 344 U.S. 149, 150 (1952); *Omnia Commercial Co. v. United States*, 261 U.S. 502, 507-08 (1923); *Juragua Iron Co. v. United States*, 212 U.S. 297, 300-01 (1909); *United States v. Pac. R.R.*, 120 U.S. 227, 228-29 (1887).

⁵⁰² See *Loretto*, 458 U.S. at 421-25; *Armstrong v. United States*, 364 U.S. 40, 41-42 (1960). *Loretto*, however, arguably involves a complex property sharing arrangement, because of the landlord-tenant relationship, as well as the existence of a technological advance, the delivery of information and news by cable.

⁵⁰³ *United States v. Chi., Milwaukee, St. Paul & Pac. R.R. Co.*, 312 U.S. 592, 595-97 (1941).

⁵⁰⁴ *Richards v. Wash. Terminal Co.*, 233 U.S. 546, 553-54 (1914) (concluding that normal operation of the railroad generally inconvenienced all surrounding property owners). The Court, however, upheld the property owner's second claim of physical takings for damage from the railroad's tunnel operation because of the “direct and peculiar” burden imposed on the landowner. *Id.* at 556-57. This part of the decision is included as one of the three decisions in the (5,5) cluster that found a taking.

⁵⁰⁵ *United States v. Dickinson*, 331 U.S. 745, 746-47, 751 (1947) (concluding that a physical taking resulted when government construction of a dam led to permanent flooding of private property). The other two cases in the (5,5) cluster to find a physical taking were *United States v. Kan. City Life Ins. Co.*, 339 U.S. 799, 800-04 (1950) (concluding that a government project that improved navigation by raising the water level to the high water mark was a physical taking because it prevented drainage of waterfront land and destroyed its agricultural value), and *Richards*, 233 U.S. at 556-57 (finding a physical taking for the second claim due to damage to private property from the railroad's operation of the tunnel).

⁵⁰⁶ *Nat'l Bd. of YMCA v. United States*, 395 U.S. 85, 93-94 (1969).

⁵⁰⁷ *Bedford v. United States*, 192 U.S. 217, 225 (1904). The one case to find a physical taking was *Pumpelly v. Green Bay Co.*, 80 U.S. (13 Wall.) 166, 175-77 (1871) (concluding that flooding of waterfront property caused by the government's construction of a dam was a physical taking).

⁵⁰⁸ *United States v. Willow River Power Co.*, 324 U.S. 499, 500-01, 511 (1945); *Scranton v. Wheeler*, 179 U.S. 141, 164-65 (1900). The four decisions in the (5,2)

management of a resource subject to a complex property sharing arrangement).⁵⁰⁹ In the “low-score anomalies,” five of the six cases with no physical taking involved one or more of the following: private property opened to the public (and thus subject to a complex sharing of sorts),⁵¹⁰ promotion of the navigational servitude,⁵¹¹ extra management of a resource subject to a complex property sharing arrangement,⁵¹² provision of public utilities,⁵¹³ or public necessity.⁵¹⁴ Only one case that did not find a physical taking failed to fit within these categories,⁵¹⁵ though an argument can be made that leasehold property is subject to a complex property sharing arrangement and sometimes needs a governance approach to managing the overlapping interests.

Analyzing physical takings cases under the management function of property — using both the governance and the exclusion strategies — adds a much-needed dimension. Physical takings should not be divorced from the underlying property concept.⁵¹⁶ The complexity of

cluster concluding that a physical taking had occurred or was possible were: *Griggs v. Allegheny Cnty.*, 369 U.S. 84, 88-90 (1962) (concluding that government-authorized low-level flights were a physical taking of the private property adversely affected by the flights); *United States v. Causby*, 328 U.S. 256, 261-63 (1946) (concluding that a physical taking resulted from government-authorized low-level flights); *Portsmouth Harbor Land & Hotel Co. v. United States*, 260 U.S. 327, 330 (1922) (concluding that the intent to repeat test firings of military guns over private property could establish a physical taking); *United States v. Cress*, 243 U.S. 316, 328 (1917) (concluding that permanent alteration of the physical conditions of property by a government navigation project could constitute a physical taking), *limited by Chi., Milwaukee, St. Paul & Pac. R.R. Co.*, 312 U.S. at 597.

⁵⁰⁹ *United States v. Sponenbarger*, 308 U.S. 256, 260-64, 270 (1939). The one case in the (3,4,5) cluster to find a physical taking was *Dickinson*, 331 U.S. at 746-47, 751 (concluding that a physical taking resulted when government construction of a dam led to erosion of the banks of waterfront property).

⁵¹⁰ *PruneYard Shopping Ctr. v. Robins*, 447 U.S. 74, 77, 88 (1980).

⁵¹¹ *Sanguinetti v. United States*, 264 U.S. 146, 146-47, 150 (1924), *limited by Ark. Game & Fish Comm'n v. United States*, 133 S. Ct. 511, 520 (2012).

⁵¹² *FCC v. Fla. Power Corp.*, 480 U.S. 245, 247-50 (1987); *Sanguinetti*, 264 U.S. at 146-48, 150.

⁵¹³ *Fla. Power Corp.*, 480 U.S. at 247-50.

⁵¹⁴ *United States v. Cent. Eureka Mining Co.*, 357 U.S. 155, 156-57 (1958); *Block v. Hirsh*, 256 U.S. 135, 153-54, 158 (1921).

⁵¹⁵ *Yee v. City of Escondido*, 503 U.S. 519, 539 (1992).

⁵¹⁶ See Underkuffler-Freund, *supra* note 24, at 165-66 (agreeing that takings analysis needs to consider the nature and concept of property). Laura Underkuffler-Freund identifies two conceptions of property used in the Court's takings cases: the Apparent model, which conceives of property as protection for individual autonomy; and the Operative model, which views property as defining the tension between individuals and the collective. *Id.* at 167-69. In her view both are necessary and do not conflict, but rather define different aspects of the property concept. *Id.* at 193.

the property concept will necessarily affect and inform physical takings analysis. Our institution of property is not simply about allocating rights in resources. It also performs an important and often overlooked management function.⁵¹⁷ The exclusion and the governance strategies help to define the nature of that management function by delineating the scope of the rights at stake and prescribing different methods of conflict resolution.

For the most part, the exclusion strategy has dominated the discussion and analysis of constitutional and common law property.⁵¹⁸ The logic of the exclusion strategy is appealing and seductive, giving primacy to the autonomy interest of the gatekeeper — the property owner — and allowing marketplace incentives to influence the owner's decisions. The autonomy interest is critical to the definition of physical takings, helping the courts to identify when a physical theft by government has occurred. When the government interference involves a high degree of permanence and physicality, the logic of the exclusion strategy suggests that a physical taking should be found. Yet this suggestion does not hold up when a specific public crisis arises or when the resource subject to the private property rights is also shared by the public or by other private parties. Nor does it hold up when a technological advance makes a new use possible and when a public good or shared resource is overused, congested, or facing significant changing conditions. In these cases, more complex management of the resource and the interests in the resource is needed. An approach that relies only on the exclusionary perspective does not meet this need. Instead, the focus is on private property owners in a vacuum — on their interest, on their autonomy, on their decision making power. Today, this focus has produced a *per se* approach that ignores the complexity of shared property arrangements, the health of the resource being used, and the need for more nuanced management decisions.

The disconnect between the exclusion strategy captured in the physical takings concept through the *per se* approach and the

⁵¹⁷ In recent years some scholars have explored this overlooked function. Elinor Ostrom, for example, examined how different social arrangements led to new structures and human organizations for managing property interests and resources. See ELINOR OSTROM, *GOVERNING THE COMMONS: THE EVOLUTION OF INSTITUTIONS FOR COLLECTIVE ACTION* 18-23 (1990) (discussing how institutional arrangements for managing common pool resources developed). Robert Ellickson studied how community norms led close-knit groups to engage in cooperative behavior to control freeriding. See ROBERT C. ELICKSON, *ORDER WITHOUT LAW: HOW NEIGHBORS SETTLE DISPUTES* 124-26 (1991); Robert C. Ellickson, *Of Coase and Cattle: Dispute Resolution Among Neighbors in Shasta County*, 38 *STAN. L. REV.* 623, 673-76 (1986).

⁵¹⁸ For further discussion, see Butler, *The Resilience*, *supra* note 48, at 856-64.

complexity of certain real-life property arrangements becomes increasingly apparent as physical takings cases move away from high levels of permanence and physicality. The logic of the per se approach becomes more and more strained, turning on factors like involuntary action,⁵¹⁹ some sort of physical presence even if fleeting or transitory,⁵²⁰ and temporary invasions changing the character of the land.⁵²¹ Today, the physical takings concept has been stretched so thin that it could encompass economic regulations limiting the right to exclude,⁵²² a single government trespass inflicting significant damage,⁵²³ a forced transfer of interest earned on previously non-interest-bearing funds,⁵²⁴ and even perhaps a permit denial following a landowner's refusal to accept a regulatory condition.⁵²⁵ Eventually, any sort of government decision that substantially limits physical use of property to manage natural systems, results in physical damage to private property due to unexpected natural conditions, or denies a use permit after a landowner refuses to meet a proposed condition could amount to a physical taking. It is but a small step from the situation in *Arkansas Game & Fish Commission* (where the government managed water levels to benefit one category of downstream user to the detriment of another)⁵²⁶ to a situation where government manages the natural systems by making unavoidable choices resulting in physical damage for some, but not all, users. It is but a small step from the situation in *Arkansas Game & Fish Commission* to government efforts

⁵¹⁹ *FCC v. Fla. Power Corp.*, 480 U.S. 245, 251-52 (1987) (stressing how the law under review only applied to landlords voluntarily leasing to cable companies).

⁵²⁰ *See Nollan v. Cal. Coastal Comm'n*, 483 U.S. 825, 828, 831-32 (1987) (describing passage to and fro over the landowner's property by indiscriminate members of the public as sufficient physical presence).

⁵²¹ *See Ark. Game & Fish Comm'n v. United States*, 133 S. Ct. 511, 515 (2012) (holding that permanent flooding was not a necessary element of a takings claim).

⁵²² Constitutional challenges to rent control laws and rate regulations have been based, in part, on this argument. *See supra* notes 122-41 and accompanying text.

⁵²³ *See Ark. Game & Fish Comm'n*, 133 S. Ct. at 518-19 (rejecting a permanence requirement in favor of looking at the damage caused by a temporary invasion).

⁵²⁴ *See Brown v. Legal Found. of Wash.*, 538 U.S. 216, 235 (2003) (describing such a forced transfer as similar to a *Loretto*-type physical invasion).

⁵²⁵ The argument would be that the denial deprived the landowner of the right not to have property taken for public use without just compensation and therefore is equivalent to the forced transfer required by the condition. *See Koontz v. St. Johns River Water Mgmt. Dist.*, 133 S. Ct. 2586, 2595-96 (2013) (describing the loss of the right to just compensation after a landowner's refusal to accept a permit condition as an "impermissibl[e] burden").

⁵²⁶ *See supra* notes 155-71 and accompanying text.

to manage recurrent flooding and sea level rise by forcing landowners to retreat or adapt in ways that limit physical use.

The governance strategy becomes more important in defining the reach of constitutionally protected property as the complexity of the property arrangements and the conflicting interests increases. A third-party manager is tasked with evaluating the conflicting interests and defining the scope of the rights in relation to one another and to the resource. In many situations, the courts serve this role, exploring the complexities of public and private property rights on the ground in light of resource conditions, norms, and practices. These are the hard cases where the damage to the property owner and the strength of the public interests are equally clear: a deliberate breach of a levee in an upstream area to protect downstream populations from extraordinary flooding, a ban on shoreland development in response to the now relentless rise of the sea, an energy company's mining of shale gas deposits forced on a property owner without the benefit of a neutral, third-party review. As climate change worsens, as the sea level rises, as extreme weather events increase in intensity and frequency, these hard cases will become more and more common. The institution of property is equipped to deal with hard cases as long as the governance strategy becomes part of the calculus — part of the management function of common law *and* constitutional property.

CONCLUSION: TOWARD A MORE NUANCED APPROACH

A study of the evolution of the physical takings concept provides useful lessons for its future development. At the beginning, physical takings basically covered direct physical seizures or appropriations of private property. Eventually, the concept also included physical interference with one of the strands in the bundle of property rights (most notably, the right to exclude), as well as indirect physical occupation resulting from government-authorized projects (such as flooding caused by dam construction). More recently, the concept has even included physical invasions of a shared resource that affect the use and value of adjoining private property (for example, low-level airplane flights), a trespass or temporary invasion changing the character of adjacent land (such as temporary water releases flooding downstream land), and a forced transfer of interest earned on previously non-interest-bearing funds.

Central to the modern Court's physical takings concept is a permanent physical occupation by government. As the Court has explained, permanent physical occupations raise special concerns because of the fundamental importance of the right to exclude to private property rights,

the loss of all key rights in the occupied property, and the danger that government would exploit an individual property owner. For these reasons, the Court has declared a permanent physical occupation to be a *per se* physical taking, regardless of the importance of the public interest. What this approach ignores is the complexity of many property arrangements and of the traditional physical takings concept. Though the Court's earlier decisions likewise applied the exclusion strategy much of the time, they also took a more flexible approach that allowed for greater responsiveness to real-life settings, using a range of factors to measure the impact of a physical act on the property owner. Moreover, older physical takings cases considered the public interest at stake, never speaking in the language of the governance strategy, but clearly extending their takings analysis beyond the two dimensions of permanence and physicality.

The serious resource problems facing present and future generations will require a more nuanced approach than the simple, *per se* rule of modern physical takings jurisprudence. Looking beyond the two dimensions of permanence and physicality to analyze physical takings claims under the governance management strategy would add a third dimension that connects private property rights to actual resource conditions and affected public interests. Physical takings analysis needs to reflect the key functions of the underlying property concept. Modern physical takings cases focus primarily on the allocation function and the exclusion strategy, which turns management decisions inward. The courts stress the importance of individual autonomy and control, leaving out the relationship of the individual property owner to other property owners, to collective interests represented by government, and to larger natural systems. A governance strategy would allow consideration of actual conditions and public interests in complex property arrangements where the exclusion strategy is not particularly effective or sufficiently explanatory. Such a situation at least would arise when a longstanding public right exists in a resource also subject to private rights, an imminent public crisis develops, a resource subject to a complex property sharing arrangement needs extra management, or a technological advance makes a new use possible. Under the governance dimension, a court could consider the resource conditions and public interests in resolving the conflict and managing the resource. The governance dimension, in other words, would allow a more complete assessment of the ground conditions and management needs of complex property arrangements.