WASTE, PROPERTY, AND USELESS THINGS

Meredith M. Render

CONTENTS

WASTE, PROPERTY, AND USELESS THINGS

Meredith M. Render[*]

How should the law respond to intentionally useless objects that are constructed from scarce materials and thrust into an overcrowded world?

Approximately sixty million tons of electronic waste, or "e-waste" — for example, discarded iPhones, refrigerators, desktop computers — is produced each year. This annual pile of electronic rubbish represents sixty-two billion dollars' worth of tangible raw materials (such as gold and other scarce metals) that has been rendered useless. In addition to wasting raw materials, e-waste clogs our landfills, poisons the groundwater, and taxes our capacity to store it. Worst of all, much of this waste is intentionally created by electronics manufacturers through the profit-maximizing strategy of planned obsolescence.

Planned obsolescence is a strategy by which manufacturers intentionally limit the utility of their products so that consumers are forced to discard them and buy new products. Planned obsolescence creates intentionally useless objects and imposes significant social costs. While some of the costs of planned obsolescence are felt within the manufacturer-purchaser transaction (a purchaser must consider whether a product will last long enough to justify its price), the most significant social costs of the strategy remain external to that transaction.

This Article offers three principal contributions. First, a normative thesis: More of the social costs of intentionally useless objects should be borne by the manufacturers that profit from the strategy. Second, a theoretical insight: Avoiding waste is a central commitment of property law. In fact, many of the rules of property law are rendered more coherent when they are understood as a series of instantiations of an antiwaste imperative. Often confused with an efficiency principle, property law's antiwaste commitment best explains doctrinal choices that otherwise would seem inconsistent. Finally, a doctrinal analysis: The antiwaste imperative (when applied to the existing rules of property) disallows the conveyance of a fee simple in an intentionally useless object. Recognizing an antiwaste imperative in this context would mean that manufacturers can only convey a defeasible interest in the object, retaining a reversionary interest that serves to correct some of the negative externalities associated with the strategy of planned obsolescence.

INTRODUCTION

In 2020, Apple "agreed to pay up to $500 million" in a consumer-fraud lawsuit that alleged that it had issued a software update to

[*] Professor of Law at the University of Alabama School of Law. The author would like to thank Dean Mark Brandon, whose support of this project made it possible. The author is also thankful to Dean William Brewbaker, Paula Monopoli, and Shalini Ray for their support of this project. The author is grateful for exceptionally helpful comments from Gregory Alexander, Lee Fennell, Jason Gillmer, Luke Herrine, Paul Horwitz, Gordon Hull, Ronald Krotoszynski, Ela Leshem, Brandi Lupo, Anna Mance, Timothy Mulvaney, Michael Pappas, Michael Pardo, Joseph Singer, Tyler Valeska, Fredrick Vars, and participants in the 2024 Grey Fellows Forum at Stanford Law School.

intentionally slow down older phones.[1] The suit alleged that the slowdown was intended to frustrate consumers into discarding their existing phones and purchasing new phones rather than simply replacing the phone battery.[2]

If the allegations in the suit were accurate, then Apple was engaged in a strategy of planned obsolescence.[3] Planned obsolescence is a business strategy where a product is intentionally designed to have a limited lifespan and to become obsolete within a designated time frame.[4] This strategy encourages (or in some cases, forces) consumers to replace their existing products with newer models, leading to repeat purchases and increased income for the manufacturer.[5] In designing products to fail within a designated time frame, manufacturers are engaged in the mass production of intentionally useless objects.

Unsurprisingly, planned obsolescence strategies also generate enormous amounts of physical waste in the form of discarded objects.[6] Electronic waste is one of the most harmful forms of this waste.[7] Electronic waste is generated when consumers discard obsolete refrigerators,

---

[1] Jonathan Stempel, *Apple to Pay up to $500 Million to Settle U.S. Lawsuit over Slow iPhones*, WESTLAW J. CLASS ACTION, Mar. 17, 2020, https://www.westlaw.com/Document/Id82330aa62d211eaadfea8290353 1a62/View/FullText.html?transitionType=Default&contextData=(sc.Default)&VR=3.0&RS=cblt1.0 [https://perma.cc/VQ83-F4G9].

[2] *See* Aaron Perzanowski, *Consumer Perceptions of the Right to Repair*, 96 IND. L.J. 361, 367 (2021) ("Many bought new devices rather than simply replace their phone's battery. Apple's throttling and the secrecy surrounding it steered consumers away from repair and toward replacement, inflating Apple's bottom line in the process." (footnote omitted) (citing Adi Robertson, *Apple Agrees to $500 Million Settlement for Throttling Older iPhones*, THE VERGE (Mar. 2, 2020, 12:01 PM), https://www.theverge.com/2020/3/2/21161271/apple-settlement-500-million-throttling-batterygate-class-action-lawsuit [https://perma.cc/U35V-MPDU])).

[3] *See* Jeremy Bulow, *An Economic Theory of Planned Obsolescence*, 101 Q.J. ECON. 729, 729 (1986) (defining planned obsolescence as "the production of goods with uneconomically short useful lives so that customers will have to make repeat purchases").

[4] Shmuel I. Becher & Anne-Lise Sibony, *Confronting Product Obsolescence*, 27 COLUM. J. EUR. L. 97, 101 (2021). There are at least five ways in which a product can be intentionally rendered obsolete, including: (1) planned obsolescence: the strategy by which companies strategize "for their product to become objectively useless after a certain period of time," *id.*; (2) functional obsolescence: the practice of manufacturing products with lower quality components that are intended to fail or become outdated within a specific time frame, *see id.* at 102; (3) technological obsolescence: the phenomenon when advancements in technology make a functioning product undesirable, *id.* at 103; (4) postponement obsolescence: the decision by companies to only apply new features to their flagship devices, despite those features being compatible with existing devices, increasing consumer desire and waste, *id.* at 103–04; and (5) psychological obsolescence: the phenomenon where objects become subjectively undesirable due to marketing or other methods, *id.* at 104. For a history of planned obsolescence, see KAMILA POPE, UNDERSTANDING PLANNED OBSOLESCENCE: UNSUSTAINABILITY THROUGH PRODUCTION, CONSUMPTION AND WASTE GENERATION 9–42 (2017).

[5] Perzanowski, *supra* note 2, at 367.

[6] Joseph Guiltinan, *Creative Destruction and Destructive Creations: Environmental Ethics and Planned Obsolescence*, 89 J. BUS. ETHICS (SPECIAL ISSUE) 19, 19 (2009) ("Today, the mounting numbers of functioning durable goods ending up in landfills have led to renewed criticism of product obsolescence.").

[7] *See id.* ("[T]he rapid pace of product upgrading ha[s] resulted in negative environmental consequences for consumers and society.").

laptops, smartphones, gaming consoles, microwaves, cameras, printers, and so forth.[8] These electronic objects contain toxic materials such as lead, mercury, cadmium, and brominated flame retardants that leach into the surrounding environment, poisoning water supplies and wildlife and posing grave risks to human health.[9]

Nearly sixty million tons of electronic waste is discarded annually, much of it produced by planned obsolescence, representing a substantial form of resource depletion.[10] Intentionally useless objects require enormous amounts of energy and raw material, including rare and precious metals.[11] As of 2019, electronic waste represented approximately sixty-two billion dollars' worth of tangible raw materials (such as gold and other scarce metals) that have been intentionally rendered useless.[12]

Electronic waste also accounts for seventy percent of our toxic waste production.[13] Only about twenty percent of electronic waste is

---

[8] Faheem Gul Gilal et al., *Consumer E-Waste Disposal Behaviour: A Systematic Review and Research Agenda,* 46 INT'L J. CONSUMER STUD. 1785, 1785 (2022) (describing commonly discarded e-waste).

[9] *Soaring E-Waste Affects the Health of Millions of Children, WHO Warns*, WORLD HEALTH ORG. (June 15, 2021), https://www.who.int/news/item/15-06-2021-soaring-e-waste-affects-the-health-of-millions-of-children-who-warns [https://perma.cc/AA3V-JECE] ("'With mounting volumes of production and disposal, the world faces . . . a mounting "tsunami of e-waste," putting lives and health at risk.' . . . As many as 12.9 million women are working in the informal waste sector, which potentially exposes them to toxic e-waste and puts them and their unborn children at risk. . . . [C]hildren live, go to school and play near e-waste recycling centres where high levels of toxic chemicals . . . can damage their intellectual abilities." (quoting Tedros Adhanom Ghebreyesus, *Preface to* WORLD HEALTH ORG., CHILDREN AND DIGITAL DUMPSITES: E-WASTE EXPOSURE AND CHILD HEALTH, at vi–vii (2021))); Richard Grant, *E-Waste Challenges in Cape Town: Opportunity for the Green Economy?*, URBANI IZZIV, Feb. 2019, at 5, 5 (describing e-waste as producing toxic substances such as "cadmium, mercury, lead, brominated flame retardants, or polychlorinated biphenyls . . . [that] pose environmental health risks from inhalation of toxic fumes as well as from accumulations of chemicals in soil, water, and food, particularly in the vicinities of unregulated landfills").

[10] *See* Victoria Gill, *Waste Electronics Will Weigh More than the Great Wall of China*, BBC (Oct. 13, 2021), https://www.bbc.com/news/science-environment-58885143 [https://perma.cc/C3YL-4RHV]; Olivia Rosane, *This Year's E-Waste to Outweigh Great Wall of China*, WORLD ECON. F.: F. INSTITUTIONAL (Oct. 18, 2021), https://www.weforum.org/agenda/2021/10/2021-years-e-waste-outweigh-great-wall-of-china [https://perma.cc/9D6B-PMFN].

[11] *See* Tamar Makov & Colin Fitzpatrick, *Is Repairability Enough? Big Data Insights into Smartphone Obsolescence and Consumer Interest in Repair*, J. CLEANER PROD., Sept. 1, 2021, art. 127561, at 1 ("[E]ach [smartphone] makes use of over 75 different elements of the periodic table, many of which have very low recycling and recovery rates, including a variety of precious, critical, and conflict materials." (citation omitted)).

[12] Gill, *supra* note 10 ("'A tonne of discarded mobile phones is richer in gold than a tonne of gold ore,' said Dr Ruediger Kuehr, director of the UN's Sustainable Cycles (SCYCLE) programme.").

[13] Ankit et al., *Electronic Waste and Their Leachates Impact on Human Health and Environment: Global Ecological Threat and Management*, ENV'T TECH. & INNOVATION, Nov. 2021, art. 102049, at 2 ("Although e-waste occupies only 2%–5% of the total solid volume, it contributes more than 70% in terms of toxicity. The toxicants such as lead (Pb), chromium (Cr)[,] beryllium (Be), palladium (Pd), gallium (Ga) etc. contaminate our food chain by mixing in air, water and soil. When ingested, they cause several adverse health effects on the human body. Besides the harmful metals

recycled.[14] The remaining eighty percent ends up in landfills and other waste repositories.[15] Not only does this impose land use and other environmental costs, but it also imposes significant costs on human health, environmental justice, and community wellbeing.[16]

A great challenge posed by planned obsolescence is that most of the costs imposed by the practice are not borne by the manufacturers who profit from it.[17] From the perspective of manufacturers, planned obsolescence is an extremely profitable strategy.[18] In other words, planned obsolescence produces excessive negative externalities in the form of resource depletion and the proliferation of useless, toxic objects.[19]

---

e-waste [is] also associated with several chemical pollutants like phthalate, esters benzene, dioxins, polyaromatic hydrocarbons, polyvinyl chloride, etc. that are hazardous not only for the humans directly but also to the plant, soil and microbial species found in the nearby area." (citations omitted)).

[14] Seth Doane, *The Tragic Cost of E-Waste and New Efforts to Recycle*, CBS NEWS (Nov. 26, 2023, 10:11 AM), https://www.cbsnews.com/news/the-tragic-cost-of-e-waste-and-new-efforts-to-recycle [https://perma.cc/LAT5-4698]. Of the 20% of electronic waste that is recycled "50%–80% [is] shipped to third world nations where workers use dangerous, primitive processes for extracting recyclable materials, often exposing themselves to toxic gases in the process." Guiltinan, *supra* note 6, at 19.

[15] *See* Guiltinan, *supra* note 6, at 19.

[16] POPE, *supra* note 4, at 76 ("[E]lectronic waste contain[s] high levels of persistent biological toxins (PBTs), ranging from arsenic to antimony, cadmium, beryllium, lead, nickel and zinc. When electronic waste is burned anywhere in the world, dioxins, furans and other pollutants are released into the air and land, with potentially disastrous consequences for health around the globe. When electronic waste is burned in landfills, PBTs eventually leak into the groundwater, causing contamination." (citation omitted)); *see also* Joanna Diane Caytas, *Legal Aspects of Technology Assessment and Systems Analysis in Sustainable Urban Development*, 14 CONSILIENCE 71, 83 (2015) ("As a result of planned obsolescence, shiploads of electronic waste . . . are carried from industrialized countries to the Third World, creating vast environmental problems with grave consequences."). Planned obsolescence also imposes both economic and annoyance costs on consumers who have to expend time, energy, and money to replace objects that are designed to fail. As Giles Slade (quoting Lewis Mumford) puts it, "No one is better off for having furniture that goes to pieces in a few years." GILES SLADE, MADE TO BREAK 79 (2006) (quoting LEWIS MUMFORD, TECHNICS AND CIVILIZATION 394 (1934)).

[17] *See* STIJN VAN EWIJK & JULIA STEGEMANN, AN INTRODUCTION TO WASTE MANAGEMENT AND CIRCULAR ECONOMY 142 (2023) ("The cost of waste generation and management may not be reflected in prices — it is 'external' to the producer. For a long time, it was very cheap to landfill waste, despite the environmental impacts. When the price of landfill does not reflect its environmental cost, it is used excessively.").

[18] Indeed, Professor Jospeh Guiltinan asserts that planned obsolescence has become a necessary strategy for competing in a durable goods market. He observes "advances in manufacturing practice that yield faster product cycles are now a defining force in business strategy. . . . [T]he existence of a highly competitive environment, combined with the fundamental economic motives for obsolescence . . . have created a sort of path-dependence for product development strategies geared toward faster replacement of durables." Guiltinan, *supra* note 6, at 21–22.

[19] Press Release, United Nations Env't Programme, UN Report: Time to Seize Opportunity, Tackle Challenge of E-Waste (Jan. 24, 2019), https://www.unep.org/news-and-stories/press-release/un-report-time-seize-opportunity-tackle-challenge-e-waste [https://perma.cc/LQ8L-F3BZ] ("Less than 20% of e-waste is formally recycled, with 80% either ending up in landfill or being informally recycled — much of it by hand in developing countries, exposing workers to hazardous and carcinogenic substances such as mercury, lead and cadmium. E-waste in landfill contaminates soil and groundwater, putting food supply systems and water sources at risk.").

To some degree, consumer protection law has attempted to address the issue (as evidenced by the Apple case), but consumer protection law has not succeeded in causing manufacturers to bear enough of the costs associated with planned obsolescence to disincentivize the practice.[20] Legislation that specifically addresses planned obsolescence could potentially force manufacturers to internalize more of the social costs associated with the strategy.[21] Indeed, the European Union has adopted a legislative model known as "extended producer responsibility" that requires manufacturers to take economic (and in some cases, physical) responsibility for the electronic waste generated by planned obsolescence.[22] However, a successful legislative response to planned obsolescence has not been forthcoming in the United States.[23] Fortunately, a legislative response is not the only means of correcting the negative externalities associated with planned obsolescence.

This Article demonstrates that common law property rules — as currently constituted and consistently applied — are capable of correcting some of the negative externalities of planned obsolescence. Property rules — when viewed through the lens of an antiwaste principle — limit manufacturers' capacity to convey title to an object that has been intentionally rendered useless. When a manufacturer creates an object with an intentionally limited lifespan, the object has a defeasible condition[24] built into the thing itself. Because the manufacturer has intentionally equipped the object with a utility time bomb, the manufacturer cannot convey title beyond the point in time of the planned obsolescence.

For example, if the object is a phone, it will only be a phone *until* the point of intentional obsolescence at which point it no longer functions as a phone and will transition into an intentionally useless object. In that scenario, the manufacturer cannot convey title to the phone in

---

[20] *See generally* Larry A. DiMatteo & Stefan Wrbka, *Planned Obsolescence and Consumer Protection: The Unregulated Extended Warranty and Service Contract Industry*, 28 CORNELL J.L. & PUB. POL'Y 483 (2019).

[21] One potential legislative approach would be to prohibit the practice directly as a form of consumer fraud, imposing a civil (or even criminal) penalty structure. France adopted this approach in 2016, defining planned obsolescence as "techniques by which the person who places a product on the market aims to deliberately reduce the lifespan of the product to increase its replacement rate." Stefan Wrbka & Larry A. DiMatteo, *Comparative Warranty Law: Case of Planned Obsolescence*, 21 U. PA. J. BUS. L. 907, 916 (2019) (quoting CODE DE LA CONSOMMATION [CONSUMER CODE] art. L441-2 (Fr.)).

[22] Becher & Sibony, *supra* note 4, at 131–33 ("In 2013, the European Economic and Social Committee (EESC) was the first to link EPR with the fight against obsolescence, noting that 'manufacturers should also cover the cost of recycling if their goods have an expected lifetime of less than five years.'" *Id.* at 132 (quoting European Economic and Social Committee Press Release CES/13/61, The EESC Calls for a Total Ban on Planned Obsolescence (Oct. 17, 2013))).

[23] *Id.* at 127 ("[In] the United States, there has been little interest in regulating planned obsolescence.").

[24] For an explanation of the phrase "defeasible condition," see *infra* note 28 and accompanying text.

fee simple.[25] Fee simple title means ownership of the object could potentially extend into infinity.[26] It is impossible to own a phone indefinitely if it will — by design — cease existing as a functional phone within a predetermined period of time.[27] Consequently, the manufacturer can only convey a *defeasible* title[28]: title *until* the intended obsolescence.[29] Because the manufacturer can only convey a defeasible title,

---

[25] A "fee simple" is the most robust package of ownership rights with respect to an object, in that it is generally an unlimited estate that could potentially "endure forever." JESSE DUKEMINIER ET AL., PROPERTY 218 (8th ed. 2014).

[26] *See* 1 GERRY W. BEYER & JAMES M. KOSAKOW, IRREVOCABLE TRUSTS § 3:4 (4th ed. 2023) ("[T]he interest of the person holding the fee simple absolute goes inward to the center of the earth and outward to infinity . . . .").

[27] *See* Guiltinan, *supra* note 6, at 20 (describing the practice of "death dating" and offering the example of portable radios, which carried a scheduled "death date" of three years after which time they would become intentionally useless objects); SLADE, *supra* note 16, at 164.

[28] A defeasible title, or a "defeasible estate," is a more limited form of ownership than a fee simple in that a defeasible estate will end if a particular condition comes to pass. *See* 1 RESTATEMENT (FIRST) OF PROP. § 16 cmt. b, at 43 (AM. L. INST. 1936). An example of a defeasible estate might be: "Blackacre to *A*, until *A* goes to prison." This conveyance would create a type of defeasible estate known as a "fee simple determinable," and "going to prison" is a defeasible condition that could trigger the end of *A*'s estate. *See id.* § 44, at 121. In this example, *O* (the original owner and grantor of this estate) has a "reversionary interest" in the estate. If *A* goes to prison, Blackacre will automatically return to *O*, and *O* will be the owner in fee simple again. "Reversionary interest" is a broad term that roughly describes an interest retained by *O* in a conveyance. 1 RESTATEMENT (SECOND) OF PROP.: DONATIVE TRANSFERS § 1.4 cmt. c, at 49 (AM. L. INST. 1983) ("A reversionary interest is what remains in a transferor who owns a vested interest and has made a transfer that does not exhaust the transferor's interest in the property transferred, so that an interest in the transferred property may return to the transferor at some future date."). Here, *O*'s "reversionary interest" is technically a "possibility of reverter." *See* DUKEMINIER ET AL., *supra* note 25, at 296. Other reversionary interests that can be retained by *O* include a "reversion" and a "right of entry." *Id.* For a discussion of defeasible estates and their corresponding future interests, see 1 RESTATEMENT (FIRST) OF PROP. § 16, at 43 (AM. L. INST. 1936): "An estate in fee simple defeasible is an estate in fee simple which is subject to a special limitation (defined in § 23), a condition subsequent (defined in § 24), an executory limitation (defined in § 25) or a combination of such restrictions."

[29] This is both a descriptive point and a normative point. It describes an understanding of property law's existing commitment to an antiwaste principle that disallows the destruction of property in the absence of use and enjoyment. *See* JOHN LOCKE, TWO TREATISES OF GOVERNMENT 249 (London, Awnsham Churchill 1690). Applying this preexisting commitment in the context of planned obsolescence compels this result. However, it is reasonable to also characterize this as a normative point: that the antiwaste principle should be recognized to extend to this context.

Some scholars might question whether a defeasible interest can be created in personal property, given the restriction of *numerus clausus*. *See, e.g.*, Thomas W. Merrill & Henry E. Smith, *Optimal Standardization in the Law of Property: The* Numerus Clausus *Principle*, 110 YALE L.J. 1, 17–18 (2000) ("A number of standard reference works state that personal property is subject to the same elaborate structure of forms that applies to estates in land (including future interests). Yet the case law does not fully support this broad proposition. It is reasonably well established that one can create a life estate in personal property. But there are few if any cases that address the question of whether more exotic interests, such as defeasible fees and executory interests, can be created in personal property." (footnotes omitted)).

However, in terms of the values that are supported by the rule of *numerus clausus* (for example, controlling complexity, lowering information costs, increasing certainty, and so forth, *see id.* at

the manufacturer necessarily retains a reversionary interest[30] in the object.[31] The reversionary interest requires the manufacturer to assume responsibility for disposing of the intentionally useless object when it becomes obsolete.[32]

The idea that a fee simple cannot be conveyed in an object of planned obsolescence is consistent with property law's broader commitment to an antiwaste principle.[33] Antiwaste is a fundamental commitment of property law, although the relationship between common law property rules and antiwaste principles has been both misunderstood and undertheorized.[34] In fact, many of the rules of property are rendered more coherent when we understand them as a series of instantiations of the Lockean imperative against waste.[35] Often confused with a consequentialist efficiency imperative, the Lockean imperative against waste is a deontological proposition that it is wrong to intentionally (or negligently) destroy objects of property.[36]

Regardless of whether Locke gets this right (that is, whether the content of the proposition is true), this imperative against waste forms a

---

8), there is little (if any) difference between the creation of a life estate in personal property (which is well established by case law) and a defeasible estate in personal property given that the defining characteristic in each estate is a future interest created in someone other than the present interest holder. In fact, a defeasible interest may serve to better control complexity, lower information costs, and increase certainty as compared to a life estate given that the termination date of a life estate is inherently unknowable, while a defeasible condition could potentially arise at a predictable point in time.

Without a contrary directive from the courts, it is reasonable to assume that estates that exist in real property likewise exist in personal property. *See* Meredith M. Render, *The Law of the Body*, 62 EMORY L.J. 549, 563 (2013) ("[I]n real and personal property the principal forms of ownership interest are the fee simple, fee simple defeasible, life estate, and leasehold."); 96 C.J.S. *Wills* § 1355 (1936) ("A will may create a defeasible interest in personal property, meaning an interest subject to defeat by an executory bequest over on the happening of a future event or contingency.").

30 For a discussion of the phrase "reversionary interest," see *supra* note 28.

31 Technically, this conveyance is a fee simple determinable. The future interest that follows a fee simple determinable is a possibility of reverter. A possibility of reverter becomes immediately possessory when the triggering defeasible event occurs. *See* 14C MASSACHUSETTS PRACTICE SERIES: SUMMARY OF BASIC LAW § 14:15 (5th ed. 2023).

32 Functionally, this is similar to the extended producer responsibility model. *See supra* note 22 and accompanying text.

33 *See infra* Part II, pp. 1274–305.

34 *See* Tara K. Righetti & Joseph A. Schremmer, *Waste and the Governance of Private and Public Property*, 93 U. COLO. L. REV. 609, 611–13 (2022) (identifying a waste principle in property law and noting that "[f]ew scholars have devoted careful attention to the details of the [waste] doctrine's different manifestations," *id.* at 612).

35 *See* LOCKE, *supra* note 29, at 249; Gordon Hull, *Clearing the Rubbish: Locke, The Waste Proviso, and the Moral Justification of Intellectual Property*, 23 PUB. AFFS. Q. 67, 68–69 (2009) (claiming that Locke believed that "we are to strive for the optimal productive use of the resources given [to] us," *id.* at 68).

36 LOCKE, *supra* note 29, at 249 ("But how far has he given it us, *to enjoy?* As much as any one can make use of to any advantage of life before it spoils; so much he may by his labour fix a Property in. Whatever is beyond this, is more than his share, and belongs to others. Nothing was made by God for Man to spoil or destroy.").

central commitment of property doctrine as it is currently constituted.[37] Central to the Lockean imperative against waste is the understanding that the right of ownership simply does not *extend to* the power to destroy.[38] Insofar as we intentionally destroy an object, we lose the right to own it — and thereby the power to convey it.[39]

A consistent application of property law's existing commitment to an antiwaste principle reveals that property law is already positioned to prompt manufacturers to bear more of the social costs of planned obsolescence. The existing rules of property, when consistently applied, prohibit the conveyance of a fee simple in an intentionally useless object.[40] Applying the Lockean antiwaste imperative in this context would mean that manufacturers can only convey a defeasible interest in the object, retaining a reversionary interest that serves to correct some of the negative externalities associated with the strategy of planned obsolescence.

These arguments are presented in the following format. Part I of this piece offers an overview of the problem of intentionally useless objects. Part II describes the relationship between property law and the imperative against waste. Part III illuminates how a consistent application of property law's preexisting commitment to the Lockean imperative against waste creates a reversionary interest in intentionally useless objects.

I. USELESS THINGS IN AN OVERCROWDED WORLD

How should the law respond to intentionally useless things that are constructed from scarce resources and thrust into an already overcrowded world?[41] To contextualize the theses offered here, it is helpful to first get a sense of the contours of the problem. The problem of planned obsolescence (and the e-waste that it causes) is a problem of

---

[37] *See infra* section II.A, pp. 1275–89.

[38] LOCKE, *supra* note 29, at 249 (describing that ownership of property only goes as far as "one can make use of to any advantage of life before it spoils" and emphasizing that the right of ownership does not extend to the right "to spoil or destroy").

[39] The right to convey is itself an ownership interest (or the right of a fiduciary acting on behalf of an owner) such that we cannot convey what we do not own. 5 RESTATEMENT (FOURTH) OF PROP. § 4.3 cmt. a (AM. L. INST., Tentative Draft No. 5, 2024) ("[T]he grantor who owns the property is usually also the person with the authority to convey. Yet the owner may not have the power to convey, or the power to convey an interest may be held by a different person than the owner or possessor.").

[40] *See infra* Part III, pp. 1305–15.

[41] Throughout this piece the terms "usefulness" and "utility" are used as though they are interchangeable concepts, although they are not. "Utility" describes the capacity of an object to satisfy a want, while "usefulness" describes the benefit obtained from an object. N. GREGORY MANKIW, ESSENTIALS OF ECONOMICS 387 (9th ed. 2021) ("[U]tility . . . is a person's subjective measure of well-being or satisfaction." (emphasis omitted)). However, in the context of intentionally useless things, both the utility and the usefulness of an object are intentionally diminished or destroyed in similar and intersecting ways, so this discussion does not take pains to express each harm independently.

scale and a problem of exponential growth.[42] Consider this passage from Gile Slade's 2006 work on planned obsolescence:

> [I]n 2004 about 315 million working PCs were retired in North America. . . . These still-functioning but obsolete computers represented an enormous increase over the 63 million working PCs dumped into American landfills in 2003. . . .
>
> In 2005 more than 100 million cell phones were discarded in the United States. This 50,000 tons of still-usable equipment joined another 200,000 tons of cell phones already awaiting dismantling and disposal. . . .
>
> . . . .
>
> . . . [T]he e-waste problem will soon reach such gigantic proportions that it will overwhelm our shipping capacity. The world simply cannot produce enough containers for America to continue at its current level as an exporter of . . . electronic waste.[43]

Nearly twenty years later, the problems associated with planned obsolescence have accelerated.[44] The sheer number of electronic devices in use per capita has increased dramatically in the last twenty years.[45] While many electronic devices have gotten smaller, more compact devices are, by design, more difficult to disassemble, repair, and reuse.[46] This is a particular problem because elements like cobalt and indium that are used to create smaller devices such as smartphones are scarce in the Earth's crust.[47] At the same time, constant upgrades coupled with lack of support (or in some cases, intentional sabotage) of older

---

[42] *See* Gilal et al., *supra* note 8, at 1785 ("[E]-waste[] has increased dramatically as a result of exponential technological advancements, resulting in unprecedented pollution around the world." (citations omitted)).

[43] SLADE, *supra* note 16, at 1, 3 (emphasis omitted).

[44] *See* Gilal et al., *supra* note 8, at 1785 ("E-waste is widely regarded as the world's fastest-growing waste stream.").

[45] *See Mobile Fact Sheet*, PEW RSCH. CTR. (Nov. 13, 2024), https://www.pewresearch.org/internet/fact-sheet/mobile [https://perma.cc/ALV4-WVR2] ("98% [of Americans] now own a cellphone of some kind. About nine-in-ten (91%) own a smartphone, up from just 35% in the Center's first survey of smartphone ownership conducted in 2011.").

[46] *See* Makov & Fitzpatrick, *supra* note 11, at 1 ("Despite their small size, smartphone production requires significant energy and material inputs. For example, the climate change impacts associated with a single iPhone 11 Pro are up to 110 kg CO_2 e."); Geoffrey Giller, *Electronic Waste on the Decline, New Study Finds*, YALE SCH. OF THE ENV'T (Dec. 1, 2020), https://environment.yale.edu/news/article/electronic-waste-on-the-decline-new-study-finds [https://perma.cc/S497-XEXD] (noting that new problems have emerged related to recycling small devices).

[47] *See* Shengen Zhang et al., *Supply and Demand of Some Critical Metals and Present Status of Their Recycling in WEEE*, 65 WASTE MGMT. 113, 114 (2017). Ever increasing demand for these scarce elements also has devastating impacts on poor countries with histories of colonial exploitation. *See* MAX AJL, A PEOPLE'S GREEN NEW DEAL 66–67 (2021) ("Cheap cobalt and other minerals from the Democratic Republic of Congo (which are part of highly disposable iPhones) has meant massive human and material degradation, people suffering with cancer, and an ongoing US-incited war, which prevents the country from exercising national-popular sovereignty over its resources and demanding a just price on world markets.").

devices means that consumers are replacing their electronic devices more quickly than ever before.[48]

Equally concerning is the fact that the strategy of planned obsolescence has spread to electronic products once prized for their longevity and durability.[49] An industry-wide shift toward planned obsolescence in the manufacture of large household appliances, for example, has radically accelerated the pace at which those bulky objects move through the production-to-landfill pipeline.[50]

In recent decades, manufacturers of large appliances (such as refrigerators and clothes washers) have deliberately cut short the lifespan of necessary components like compressors and restricted access to necessary replacement parts.[51] At the same time, manufacturers have made parallel changes to the terms of manufacturers' warranties that shorten the warranty period and severely restrict independent repair options.[52] These steps have succeeded in rendering most large appliances virtually unrepairable, forcing consumers to discard them and buy new ones.[53]

---

[48] *See* Makov & Fitzpatrick, *supra* note 11, at 1 ("In major markets including Europe, the USA and China, smartphones are typically replaced within 24 months of purchase, a strikingly short lifespan compared with other consumer goods, let alone similarly expensive ones."); Mauro Cordella et al., *Durability of Smartphones: A Technical Analysis of Reliability and Repairability Aspects*, J. CLEANER PROD., Mar. 1, 2021, art. 125388, at 1 ("Recent trends show that [smartphones'] replacement cycle has become on average shorter than two years, which comes with environmental impacts that could be mitigated through a prolonged use of such devices.").

[49] *See, e.g.*, Margaret DeBell & Rachel Dardis, *Extending Product Life: Technology Isn't the Only Issue*, 6 ADVANCES CONSUMER RSCH. 381, 381 (1979) (describing a static life span of major appliances between 1957 and 1975); *see also* George Nelson, *Obsolescence*, 11 PERSPECTA 171, 172 (1967) ("[O]ur present pattern of obsolescence is by no means uniform. We do trade in cars after a relatively short period of use, but . . . [w]e do not consider a 15-year-old refrigerator obsolete.").

[50] *See* DiMatteo & Wrbka, *supra* note 20, at 485 (describing the problem in the context of refrigerators).

[51] *See* AARON PERZANOWSKI, THE RIGHT TO REPAIR: RECLAIMING THE THINGS WE OWN 8 (2022) ("Putting aside product design, there are other powerful tools companies use to limit repair. . . . Device makers use patents and trademarks to limit the availability of replacement parts. They claim schematics and other repair information as trade secrets. And they leverage copyright to lock down the software tools necessary to diagnose and repair today's devices.").

[52] *See, e.g.*, Takara Small, *Your Right to Repair*, CORP. KNIGHTS, Summer 2018, at 18, 18–19 ("So much waste is shipped overseas or dropped here [in the United States] because manufacturers won't share critical repair documentation." *Id.* at 19 (alteration in original)); *see also* PERZANOWSKI, *supra* note 51, at 9 ("Without enlisting a John Deere technician, the tractor's software won't even recognize replacement parts.").

[53] Another way in which repair options are limited is through the increased use of technology that the manufacturer exclusively controls. *See* S. Kyle Montello, Comment, *The Right to Repair and the Corporate Stranglehold over the Consumer: Profits over People*, 22 TUL. J. TECH. & INTELL. PROP. 165, 165–66 (2020) ("Cars, televisions, coffee makers, refrigerators, and printer ink cartridges are all embedded with computers and software. Without that software, these products would not function. With the addition of these embedded computers and software, it is now more difficult for individuals to repair their products. However, this difficulty does not arise from any inherent complexities within the product itself, but rather . . . [m]anufacturers implement[ing] digital rights management (DRM) software to artificially 'lock out' consumers from performing basic repairs." (footnotes omitted)).

These giant objects, which once lasted thirty or forty years,[54] are now designed to break after only a few years.[55] For the most part, large appliances still operate with the same basic technology and features available fifty years ago, but now the products last one-third to one-fifth as long.[56] Moreover, because the move to planned obsolescence has been lockstep and industry-wide, consumers have become acculturated to ever-lower expectations in terms of the longevity of their large appliances.[57] Consumers are largely resigned to the fact that their large appliances are designed to break.[58]

To be clear, planned obsolescence is not a new phenomenon. One of the first documented examples of a global conspiracy to engage in planned obsolescence happened at a meeting of light bulb manufacturers in Geneva on December 23, 1924.[59] At the meeting, representatives of incandescent light bulb manufacturers from around the world (including representatives from the United States's General Electric, Germany's Osram, and the Netherlands's Philips) agreed to reduce the hours that a standard incandescent bulb lasted from 2,500 hours (which was the norm in 1924) to 1,000 hours (which is still the norm today).[60] This group of global light bulb manufacturers — calling themselves the

---

[54] *See* Anne Marie Green, *You're Not Crazy: Your Appliances Were Built to Fail You*, PIRG (May 13, 2021), https://pirg.org/articles/youre-not-crazy-your-appliances-were-built-to-fail-you [https://perma.cc/5CY2-5HCX].

[55] PERZANOWSKI, *supra* note 51, at 19 ("Empirical studies support this shared anecdotal sense that products' lifespans are dwindling. That's true for household appliances like washing machines and refrigerators. By some estimates, the lifespan of the average washing machine dropped by three years over the course of a single decade. According to a survey conducted by Consumer Reports, 30 percent of new washers break within just five years. And an estimated 40 percent of refrigerators last only five years before problems emerge." (footnotes omitted)).

[56] *See* Green, *supra* note 54.

[57] Although consumers may still have unrealistic expectations of the repairability of their electronic objects. *See* PERZANOWSKI, *supra* note 51, at 201–06.

[58] *See id.* at 202.

[59] Markus Krajewski, *The Great Lightbulb Conspiracy: The Phoebus Cartel Engineered a Shorter-Lived Lightbulb and Gave Birth to Planned Obsolescence*, IEEE SPECTRUM (Sept. 24, 2014), http://spectrum.ieee.org/geek-life/history/the-great-lightbulb-conspiracy [https://perma.cc/L76A-VEQE]; *see* Timothy Taylor, Feature, *Recommendations for Further Reading*, J. ECON. PERSPS., Fall 2014, at 227, 233.

[60] Krajewski, *supra* note 59 ("The household lightbulb in 1924 was already technologically sophisticated: The light yield was considerable; the burning time was easily 2,500 hours or more. By striving for something less, the cartel would systematically reverse decades of progress."). The cartel collaborated to make light bulbs that would burn out after about 1,000 hours. Empirical support for the longer-lived pre–1924 (that is, pre–planned obsolescence) bulb exists in a bulb in a firehouse in Livermore, California that burned almost continuously between 1901 and 2016. J.B. MacKinnon, *The L.E.D. Quandary: Why There's No Such Thing as "Built to Last,"* NEW YORKER (July 14, 2016), https://www.newyorker.com/business/currency/the-l-e-d-quandary-why-theres-no-such-thing-as-built-to-last [https://perma.cc/8AHB-J78Y] (describing the 115-year-old lightbulb as well as the Phoebus Cartel's planned obsolescence conspiracy).

"Phoebus Cartel" — agreed to redesign their light bulbs for the sole purpose of reducing the product's lifespan.[61]

But perhaps the most noteworthy aspect of the light bulb conspiracy is how long it has endured.[62] For the past 100 years, the technology has existed to manufacture light bulbs that last 150% longer than the bulbs available for sale, but it has evidently not been in any one manufacturer's economic interest to sell a competing, longer-lasting, incandescent bulb that would reduce the need for more frequent repurchase (and thereby reduce waste). In the mid-1920s light bulb manufacturers conditioned consumers to expect their light bulbs to suddenly become obsolete 60% faster than they had in the past, and the strategy was so successful that it is still in place today.[63]

In essence, an inverse relationship exists between the durability of a product and its profitability.[64] Durability depresses manufacturer sales growth (and thereby profits), while rapid obsolescence produces the opposite effect.[65] Planned obsolescence is such a wildly successful strategy for manufacturers that, unchecked, it causes virtually all incentives to point in the direction of an ever-accelerating production-to-landfill pipeline.[66]

In other words, manufacturers are incentivized to build mountains of objects that are designed to break. How then should the law respond to the problem of these Frankensteinian objects — these vast quantities of useless things that have been intentionally hobbled by their creators and thrust into a world that is already saturated in its capacity to absorb them? Given the scale and urgency of the problem of planned obsolescence, it is perhaps surprising that little scholarly attention has been directed at the manner in which the practice is inconsistent with existing normative commitments in the law.[67]

---

[61] Caytas, *supra* note 16, at 81 ("In the 1920s, major global lightbulb manufacturers including Osram, Philips, and General Electric entered into a secret agreement to reduce the quality and thus the life span of their bulbs (the *Phoebus cartel*).").

[62] An incandescent bulb still lasts 1,000 hours on average. John Knox, *LED into the Light*, SANCTUARY, Sept. 2011, at 78, 78.

[63] The Phoebus Cartel is just one of many twentieth-century examples of planned obsolescence. Caytas, *supra* note 16, at 81 ("[A decade after the light bulb conspiracy,] DuPont discovered that the first pantyhose had a nearly unlimited lifespan. DuPont ordered its product designers to change that. Laser and inkjet printers sold by HP, Canon, Epson and Brother contain a chip that counts pages. After a certain number is reached, the chip renders the printer dysfunctional and forces the customer to request maintenance — consisting of a technician inserting a code that resets the page counter chip — for a fee." (footnote omitted)).

[64] *See* Bulow, *supra* note 3, at 746.

[65] *Id.* at 734–35 (describing durability incentives for monopolists and oligopolists).

[66] Guiltinan, *supra* note 6, at 21 ("[The inverse relationship between durability and profitability is] the core driving force behind planned obsolescence in any market structure . . . . The more reliable and long-lasting the product, the longer the repeat purchase cycle and the slower the rate of sales growth.").

[67] *But see* Righetti & Schremmer, *supra* note 34, at 611 (recognizing a general antiwaste principle "as a foundational, though long-neglected, concept of American law" but defining the principle in efficiency terms).

Of special note is the fact that the problem of intentionally useless objects is a crisis of *things*.[68] There is, as property scholars might describe it, a distinct "thingness" to the problem of an overabundance of objects.[69] By this I mean that the *physical reality* of a useless object is itself the problem. No matter where one puts the object or who is made to be responsible for it, the problem of the object endures. The very fact that the useless object exists, potentially in perpetuity, is a forever kind of problem. We can (and do) export our useless objects abroad to tuck them out of our sight,[70] but their physicality just presents even greater problems on distant shores.[71] We can assign responsibility for storing or dismantling the object, but unless the assignment of responsibility results in fewer intentionally useless objects being created going forward, we have only succeeded in relocating or rearranging the problem.[72]

In this light, the dimensions of the problem cannot be completely or satisfactorily captured by an abstract computation of the value lost or costs imposed because the problem is inherently *corporeal*. The space in the world that these mangled objects occupy is finite and nonfungible.[73] The intractability of their physical presence in the world is a literal poison to the water, soil, air, wildlife, and human beings that surround them.[74] Once created, these objects are a weight that we

---

[68] *See* Render, *supra* note 29, at 573 ("[P]roperty rights are in rem interests, and . . . in rem interests are unique in that they accommodate the attributes of 'thingness' attendant to the tangible world, including: (1) the fact that tangible objects are unique to varying degrees (the paradigmatic example of a unique resource is real property) and finite; (2) that they exist independent of our claims and promises concerning them; (3) that we often encounter and interact with objects in the absence of their owners; (4) that the interests that exist in material substances are binding on everyone, and yet those interests do not necessarily depend upon an agreement between anyone; and (5) that as a general matter the existence of an object provides notice as to our legal obligations with respect to that object." (footnote omitted)).

[69] *See id.* at 563 ("The 'thingness' of property rights is significant in that we know things about our legal duties with respect to a thing that is owned even if we do not know who the owner is. We know, for example, that we cannot take it, or use it, or destroy it without permission. We know, too, that we have these duties with respect to a thing even though we are not party to a contract. We know this because everyone has the same duties with respect to that thing." (footnotes omitted)).

[70] LUIS I. PRÁDANOS, POSTGROWTH IMAGINARIES 165 (2018) ("The more waste modern societies produce, the less their members want to think about it . . . . '[W]e dispose of leftovers in the most radical and effective way: we make them invisible by not looking and unthinkable by not thinking.'" (quoting ZYGMUNT BAUMAN, WASTED LIVES 27 (2004))).

[71] Louisa Olds, Note, *Curb Your E-Waste*: *Why the United States Should Control Its Electronic Waste Exports*, 20 CARDOZO J. INT'L & COMP. L. 827, 827–28 (2012) ("The United Nations has recognized the issue of electronic waste (e-waste) disposal and recycling as an urgent problem . . . that is growing exponentially and that is particularly acute in several regions of the developing world that have become the receivers of the world's e-waste.").

[72] Much of the e-waste we send to domestic recycling centers also ends up abroad. PERZANOWSKI, *supra* note 51, at 40 ("[A] 2016 study that tracked displays and printers sent to formal recyclers in the United States found that 40 percent of those devices were exported. Nearly all of them ended up in developing economies that rely on . . . dangerous, unregulated recycling practices.").

[73] *See supra* note 16 and accompanying text.

[74] *See* POPE, *supra* note 4, at 76.

collectively carry, whether or not we participate in the market that produces them.[75] The problem of intentionally useless objects is that they exist not only as abstract representations of value lost, but as actual, physical things.[76]

Fortunately, we already have a law of things.[77] From time immemorial, the law has recognized that special problems arise when human beings share space and objects in a finite world.[78] The peculiarities of property law are especially adapted to attend to the thingness of intentionally useless objects, as the next Part demonstrates.

II. PROPERTY LAW AND WASTE

Waste is a central concept in property law.[79] It makes sense that property law would be organized around the value of minimizing waste.[80] Property law is uniquely tasked with the stewardship of the finite, physical resources of this world.[81] Property law governs the things that take up physical space and are made of inherently scarce elements.[82] The physical elements that comprise the electronic device on which you are likely reading this Article, for example, are intractably committed to the project of being your computer monitor (or phone or notebook, and so forth). They cannot be another thing while they are being your device. This physical limitation cannot be altered by fiat or contract: Things can only be in one place at one time. Property law cannot alter the laws of physics, and so it must contend with what is immutable: that the physical existence of your device represents a

---

[75] It is a weight disproportionately carried by people living in areas with a history of colonial exploitation. *See supra* note 47.

[76] *See* Gill, *supra* note 10.

[77] *See* Henry E. Smith, *Property as the Law of Things*, 125 HARV. L. REV. 1691, 1691 (2012) ("An 'in rem' right originally meant a right 'in a thing,' and I argue that it is the mediation of a thing that helps give property its *in rem* character — availing against persons generally." (emphasis added)).

[78] The oldest known legal code, the Code of Ur-Nammu, contains a set of property rules that include the penalties for failing to cultivate a field that has been let for that purpose and thereby letting the field become a "wasteland." 1 ANDREAS ASIMIS, LAWS OF ANCIENT WORLD: MESOPOTAMIA loc. 144 (2023) (ebook).

[79] It is important to clarify two distinct senses of the term "waste." First, there is the broader Lockean notion: to intentionally or negligently destroy or spoil. But within property doctrine there is also a distinct conception of "waste" applied in the context of certain tenancies, by which tenants are obliged not to inflict permanent damage to real property because to do so is to steal value from future interest holders. *See infra* notes 196–218 and accompanying text. The term "waste" as used in this piece refers to the former rather than latter sense, unless otherwise specified. For a general description of the law of waste in the context of life tenancies, see JEDEDIAH PURDY, THE MEANING OF PROPERTY 45–47 (2010).

[80] *See generally* Michael Pappas, *Anti-Waste*, 56 ARIZ. L. REV. 741, 789 (2014) ("Anti-waste measures harness the contested concept of waste to create adaptable laws that steer property uses.").

[81] *See* Righetti & Schremmer, *supra* note 34, at 627 ("Embedded in the principle [of antiwaste] is a standard of good husbandry.").

[82] *See* Smith, *supra* note 77, at 1693 ("The purposes of property relate to our interest in using things.").

particular kind of opportunity cost. Given corporeal limitations, waste presents a special problem in the context of physical space and physical objects.[83]

On the account offered here, the minimization of waste can be understood to be a central commitment of property law.[84] Indeed, many of the rules of property law are rendered more coherent when they are understood as a series of instantiations of an antiwaste principle.[85] The origin and content of that commitment are considered in the sections that follow.

A. The Lockean Imperative Against Waste

The origin of property law's antiwaste commitment is almost certainly Locke,[86] who quite clearly understood property rights to be literally limited — in quality and quantity — by our ability to *enjoy* and *make use* of the raw materials we claim by right to own.[87] This Lockean notion, referred to as the "spoilage proviso,"[88] is expressed as:

---

[83] The problem of waste may have different dimensions in the context of nontangible objects of property like intellectual property. *See* Justin Hughes, *The Philosophy of Intellectual Property*, 77 GEO. L.J. 287, 298 (1988) (discussing the Lockean nonwaste principle in the context of intellectual property).

[84] When I say that the imperative against waste is a central commitment of property law, I mean that many of the common law rules of property are best explained and make the most sense (that is, are the most internally consistent, coherent, and parsimonious) when we try to understand them as individual applications of an imperative that requires us to avoid waste as Locke understands it (that is, the intentional or negligent waste of an object of property in the absence of use or enjoyment of the object). It is perilous to assert that a single principle or conceptual commitment explains every single common law rule (and every application of every rule), but the idea offered here is much more modest. The claim offered here is that the Lockean imperative against waste was adopted as a tacit commitment in the earliest iterations of Anglo-American property law, that the rules of property continue to reflect this commitment, and that the Lockean imperative against waste offers a better explanation of many common law property rules than other, competing explanations. The argument offered here is that a Lockean antiwaste principle offers an explanatory (rather than justificatory) account of many of the common law property rules. *See generally* JULES L. COLEMAN, THE PRACTICE OF PRINCIPLE 25–26 (2001) (describing how a general principle can offer an explanatory account of legal doctrine).

It is important to acknowledge, as I hope this discussion makes clear, that the Lockean imperative against waste is not the sole commitment of American property law. It stands, of course, in constitutive community with other values that sometimes compete with it, sometimes coincide with it, and sometimes complement or reinforce it. For a general discussion of competing and coinciding values in property doctrine, see generally HANOCH DAGAN, PROPERTY: VALUES AND INSTITUTIONS (2011), and also GREGORY S. ALEXANDER, COMMODITY & PROPRIETY (1997), offering a historical account of two competing understandings of the nature of property in American legal thought.

[85] See the discussion of property rules as antiwaste, *infra* section II.B, pp. 1289–303.

[86] Locke is widely regarded as one of the most important progenitors of our Anglo-American conception of property rights. *See* Kristin Shrader-Frechette, *Locke and Limits on Land Ownership*, 54 J. HIST. IDEAS 201, 206 (1993) ("Much U.S. property law is grounded in Jeffersonian and Lockean notions . . . .").

[87] LOCKE, *supra* note 29, at 249; *see also* Hull, *supra* note 35, at 68.

[88] Hull, *supra* note 35, at 68.

> The same Law of Nature that does by this means give us Property, does also bound that Property too. *God has given us all things richly* . . . . But how far has he given it us, *to enjoy*? As much as any one can make use of to any advantage of life before it spoils; so much he may by his labour fix a Property in . . . beyond this, is more than his share, and belongs to others. Nothing was made by God for Man to spoil or destroy.[89]

Embedded in this Lockean imperative against the spoilage or destruction of objects are three premises: (1) that these resources are physically bounded and finite; (2) that they play an indispensable role in human survival and human flourishing;[90] and (3) that an object is not wasted if it is *used* or *enjoyed*.[91] Because objects are physical, finite entities that are essential to human survival, Locke concludes that it is a moral wrong to intentionally or neglectfully destroy or spoil an object without first using or enjoying it.[92]

The Lockean idea then is a kind of stewardship model of resources, wherein an owner assumes *custody* of objects (or land) but the owner's lawful (or moral) claim of right is limited by the degree to which the owner is willing or able to use or enjoy the object.[93] When we claim legal ownership, we separate the object from other would-be users and enjoyers.[94] Our lawful claim of right precludes the resource from being put to use elsewhere.[95] This is one justification of Locke's prohibition against waste: To spoil or destroy resources is to steal value from others.[96]

---

89 LOCKE, *supra* note 29, at 249 (citation omitted) (quoting 1 *Timothy* 6:17).

90 *See* Jeremy Waldron, *Enough and as Good Left for Others*, 29 PHIL. Q. 319, 325 (1979) ("Locke insists that the fundamental duty of the law of nature is the preservation of mankind . . . .").

91 *See* Shrader-Frechette, *supra* note 86, at 216–17 (arguing that Locke's property provisions are based in right by use).

92 *See id.* at 208 ("[D]esire for more than we need is, for Locke, the root of all evil.").

93 The limitation is created by the fact that resources come from the commons and that others also need them. *See* Waldron, *supra* note 90, at 325–26 (ascribing to Locke the view that if someone takes more than he can use "he is violating the rights of the poor in failing to provide for their needs, where they have no other means of subsistence, and is thus violating the very law of nature which, he claims, entitles him to his property in the first place," *id.* at 326).

94 *See* Susan P. Liebell, *The Text and Context of "Enough and as Good": John Locke as the Foundation of an Environmental Liberalism*, 43 POLITY 210, 229 (2011) ("In Locke's state of nature, one appropriates only what one can use. If a man hoards more apples than he can eat or trade, the apples will spoil and he would be no better off. Such hoarding of surplus is against reason, self-interest, and natural law, and is an affront to God."). For an excellent account of how ownership itself imposes moral obligations, see generally JOSEPH WILLIAM SINGER, THE EDGES OF THE FIELD: LESSONS ON THE OBLIGATIONS OF OWNERSHIP (2000).

95 *See* Waldron, *supra* note 90, at 326 (explaining that Locke's property provisions disallow hoarding more resources than we can use because we are obliged to leave enough for others).

96 LOCKE, *supra* note 29, at 256 ("[B]ut if [resources] perished, in his Possession, without their due use; if the Fruits rotted, or the Venison putrified, before he could spend it, he offended against the common Law of Nature, and was liable to be punished; he invaded his Neighbour's share, for he had no Right, farther than his Use called for any of them, and they might serve to afford him Conveniencies of Life."); Righetti & Schremmer, *supra* note 34, at 616 ("Locke wrote that allowing property to go to waste by using or taking more than could be efficiently used 'offended against the

In this way, Locke understands objects as existing within a kind of zero-sum scenario: When we claim the right to use an object, we hold hostage its potential value.[97] Having sequestered the object's potential value, we are obliged not to waste it.[98] Consider an apple. If we assume an apple's primary value is as food, an unconsumed apple has potential value as food.[99] If I consume the apple, then I have transformed the potential food value into a realized food value. Once I have consumed it, the apple cannot be consumed again by someone else. But if I allow the apple to rot in a bin, no one can consume it and any good (as food) that could come from *that specific apple* is lost forever.

Similarly, consider the example of apples in an orchard. Assume that *O* owns the apples. One conception of what it means to own the apples would hold that *O* has the right to let the apples fall from the tree and spoil on the ground.[100] The Lockean conception of ownership holds that *O* owns only so many of the apples that *O* has the capacity to harvest, use, and enjoy (by consuming, selling, or sharing them with others).[101] Or perhaps that *O* owns only those apples that *O* did in fact consume, sell, or share. Or perhaps to the extent that *O* let apples fall to the ground and spoil, *O*'s act of intentional or negligent waste exceeded *O*'s property right in the apples. Any of these is a plausible interpretation of the way the Lockean concept of ownership is bounded by the imperative against waste.

Two interesting observations are revealed by Locke's take on waste. First, there is a "thingness" to Locke's understanding of the importance of objects.[102] For Locke, the good of the apple is not fungible with the

---

common law of nature' and 'invaded his neighbour's share.'" (quoting LOCKE, *supra* note 29, *reprinted in* TWO TREATISES OF GOVERNMENT AND A LETTER CONCERNING TOLERATION 100, 116 (Ian Shapiro ed., Yale Univ. Press 2003))).

97 Hughes, *supra* note 83, at 299–300 ("Locke condemned waste as an unjustified diminution of the common stock of potential property. To allow goods to perish after appropriating them — and thereby removing them from a state in which others could have made use of them — violates 'the Law of Nature.'" *Id.* at 299.).

98 Liebell, *supra* note 94, at 229 (explaining that Locke's imperative disallows hoarding more than we can use).

99 Of course, an apple can have other value: aesthetic value, value as a source of fragrance, even symbolic value. Value is a complex concept, and the brief discussion and simple examples offered here do not contemplate the whole of the concept.

100 Some scholars hold this view of ownership. *See infra* notes 191–94 and accompanying text.

101 *See* JEREMY WALDRON, THE RIGHT TO PRIVATE PROPERTY 161 (1988).

102 This discussion is focused on the spoilage proviso in the context of in rem objects — physical objects in the world. Important distinctions lay between the waste or spoiling of physical objects (for example, durable goods, consumables, and land) and the excessive accumulation of money (or other abstract or symbolic value systems) that could also be understood to be Lockean waste in the context of taking more than one can use, taking more than one's share, and so forth. Some scholars have argued that the spoilage proviso fails to set an upper limit on wealth accumulation and thereby is not a meaningful limitation on excess in a monetary economy. Waldron, *supra* note 90, at 319–26 (explaining how the spoilage proviso ceases to work as a constraint on property acquisition when land or goods can be exchanged for money, but arguing that Locke's "'enough and as good'

price of the apple. If I pay for an apple and then intentionally allow it to spoil, it is the same moral wrong as if I found a free apple — say a forgotten apple that fell from the apple cart on the way to market — and intentionally allowed it to spoil.[103] Even though the forgotten apple would likely have rotted alongside the road anyway, the act of intentionally *allowing* it to rot is a moral wrong in Locke's view.[104] The wrong is corporeal: It lies in the willful destruction of the object itself. That specific apple is a thing that can never again exist, so to intentionally spoil it means to intentionally inflict a specific net loss of a resource that can never be recouped.

In this light, it becomes apparent that *culpability* is a key aspect of Lockean waste. On Locke's view, it is not just the fact that the apple rots that creates waste. It is the fact that the owner intentionally or negligently *allowed* it to rot that transforms the rotted apple into an object of Lockean waste.[105]

It is fair, of course, to consider situations in which letting an apple rot might create more resources or otherwise produce utility that putatively outweighs the utility of the wasted apple.[106] One obvious example might be letting apples rot to increase the price of apples in a market saturated with apples.[107] This situation would seem to explicitly violate the Lockean imperative against the intentional destruction of an object, although it might result in an increase in the market value of each

---

clause" serves the same purpose as the spoilage proviso in a monetary economy). *But see* Shrader-Frechette, *supra* note 86, at 206–07 (making the case that the spoilage proviso also serves as an important limitation in a monetary economy).

103 *See* LOCKE, *supra* note 29, at 256.

104 *See* WALDRON, *supra* note 101, at 208.

105 *See id.*

106 For example, the 1933 Agricultural Adjustment Act, ch. 25, 48 Stat. 31 (codified as amended in scattered sections of 7 U.S.C.) controlled the sale and production of agricultural products (which meant, in some instances, crops were allowed to waste). Suyin Haynes, *"The Saddest, Bitterest Thing of All." From the Great Depression to Today, A Long History of Food Destruction in the Face of Hunger*, TIME (May 28, 2020, 11:03 AM), https://time.com/5843136/covid-19-food-destruction [https://perma.cc/M5JL-P9V8] ("[T]he Agricultural Adjustment Act of 1933 (AAA) . . . led to depressing scenes as farmers were forced to kill their pigs and burn their corn.").

107 *See, e.g.*, Alexandra I. Evans & Robin M. Nagele, *A Lot to Digest: Advancing Food Waste Policy in the United States*, 58 NAT. RES. J. 177, 188 (2018) ("[I]n 2009 alone, farmers allowed thirty million pounds of tart cherries to rot because a marketing order prohibited them from selling the entirety of their yield."); *see also* Elayne Allen & Daren Bakst, Commentary, *How the Government Is Mandating Food Waste*, DAILY SIGNAL (Aug. 19, 2016), http://dailysignal.com/2016/08/19/how-the-government-is-mandating-food-waste [https://perma.cc/SAL5-UBA3] ("Fruit and vegetable marketing orders are a relic of the New Deal, authorized by the Agricultural Marketing Agreement Act of 1937. These orders are supposed to stabilize prices for commodities."); WALDRON, *supra* note 101, at 208 (describing a scene in which oranges are destroyed to "maintain the market price" (citing JOHN STEINBECK, THE GRAPES OF WRATH 369 (1939))).

apple.[108] Letting the apples rot in this scenario might be a utility-increasing strategy.[109]

Nonetheless, on Locke's view, *O*'s ownership right does not extend to the act of intentional destruction.[110] In practice, this means that if someone other than *O* came along and rescued the apples from destruction (assuming no trespass, and so forth) this act of rescue would not violate *O*'s ownership right to the apples within Locke's account of ownership.[111] *O*'s rights have not been revoked. Instead, *O*'s ownership right *never included* the right to destroy the apples.[112] Even if the interloper were to sell the apples and thereby frustrate *O*'s purpose in allowing the apples to rot, there would still not be a violation of *O*'s right as owner. This remains true even if *O* would have succeeded in increasing overall welfare by allowing the apples to rot.[113]

We learn from this example that Locke's deontological position on object-wasting does not admit much space for consequentialist justifications.[114] Locke explains the spoilage proviso in consequentialist terms: It is wrong to waste because doing so invades the shares of others.[115] But the contrapositive is not necessarily true: that it is not wrong to waste when doing so does *not* invade the shares of others. This is because the wrong that Locke identifies with intentional wasteful destruction is not only that it harms others who could use the resources, but also that it is *malum in se*.[116] Locke explains, "Nothing was made

---

[108] *See* Evans & Nagele, *supra* note 107, at 187 ("[T]he Agricultural Adjustment Act of 1933[] was enacted to stabilize agricultural markets and promote farmland stewardship by encouraging farmers not to over-produce."); *see also* WALDRON, *supra* note 101, at 208.

[109] *See* WALDRON, *supra* note 101, at 208.

[110] *See* LOCKE, *supra* note 29, at 249 ("But how far has he given [property to] us, to enjoy?" (emphasis omitted)); WALDRON, *supra* note 101, at 208.

[111] While it may seem far-fetched, this rescuing of crops that would otherwise be left rot (to keep prices stable or because labor costs make it inefficient to harvest them) does happen, albeit usually with the owner's permission and support. *See, e.g.*, Kerry Sheridan, *After the Harvest, Farmers Let Their Crops Rot. These Volunteers Come to the Rescue*, CENT. FLA. PUB. MEDIA (Dec. 20, 2023, 11:24 AM), https://www.wmfe.org/environment/2023-12-20/after-the-harvest-farmers-let-their-crops-rot-these-volunteers-come-to-the-rescue [https://perma.cc/6C26-TCRL] ("We're rescuing fruit and veggies that would normally go to waste. And instead we're feeding people with that.").

[112] LOCKE, *supra* note 29, at 256 ("[I]f either the Grass of his Inclosure rotted on the Ground, or the Fruit of his planning perished without gathering . . . [this] was still to be looked on as Waste, and might be the Possession of any other.").

[113] *Cf.* WALDRON, *supra* note 101, at 208 (describing a scene from *The Grapes of Wrath* in which rotting oranges are destroyed by their owners to increase the price of oranges as "a classic violation of the proviso").

[114] By "deontological" I simply mean a duty or an obligation that exists without regard to consequences. Locke says, "Nothing was made by God for Man to spoil or destroy." LOCKE, *supra* note 29, at 249.

[115] *Id.*

[116] An act that is *malum in se* is wrong in itself.

by God for Man to spoil or destroy."[117] Objects on the earth are fixed and finite, they have inherent value, and they derive from Divine benevolence.[118] For all of these reasons, to waste them is a moral failing.[119] In this light, the Lockean prohibition against waste is an obligation that does not prioritize consequences.[120]

That is not to say that a consequentialist argument might not command greater moral sway (depending on the audience) under certain circumstances, only that Locke's antiwaste imperative does not attend to the problem of waste from a primarily consequentialist perspective.[121] In this way, we might understand other aspects of Locke's property theory to mediate what we owe to one another, while the spoilage proviso identifies a second duty to honor the value of the object itself.[122]

The example also makes clear that Locke's imperative is about the character of ownership itself. The imperative is not a punishment; this is just what it means to own. Nonwaste is a criterion of ownership.[123] For Locke, ownership is bounded by a responsibility to not intentionally destroy.[124] To intentionally destroy is to violate the most important

---

[117] LOCKE, *supra* note 29, at 249. Excised of Locke's religious reference, Locke's proposition is simply that the natural resources of the world are limited and that they initially belong to all in common. When an individual, through their labor, claims a resource by right, the validity of that rightful claim is limited, Locke believes, by the individual's willingness or capacity to use or enjoy the object and not to destroy it through negligence or an intentional act, as it is a resource that could be used by someone else.

[118] Although some critics have discounted Locke's spoilage proviso because they understand its justification to depend on Locke's religious views, the justification is unchanged if we regard it as an imperative that issues from the fact that physical resources are valuable and finite such that intentional (or negligent) destruction (where destruction itself is the point and serves no further purpose) is *malum in se*.

[119] LOCKE, *supra* note 29, at 256 (describing waste as an "offen[se] against the common Law of Nature").

[120] Locke is not hostile to consequentialist justifications as a general matter. Indeed, Locke's overall account of property rights can be justified from a consequentialist perspective, and Locke himself employed those arguments. Professor Gordon Hull has argued: "[T]his is a central feature of Locke's narrative: against those who claim property rights regimes damage the commons, Locke claims that proprietized labor, in fact, *gives back* to the commons, and results in an increase to it; hence, 'he who appropriates land to himself by his labor, does not lessen but increase the common stock of mankind.'" Hull, *supra* note 35, at 69 (quoting JOHN LOCKE, THE SECOND TREATISE OF CIVIL GOVERNMENT AND A LETTER CONCERNING TOLERATION 20 (J.W. Gough ed., Basil Blackwell 1948)).

[121] Outside the context of the spoilage proviso, Locke does justify his labor theory of property with some consequentialist arguments. *See* Shrader-Frechette, *supra* note 86, at 204 ("Locke maintains that it is *efficient* for appropriation to be based on labor.").

[122] Although it is clear that, for Locke, objects exist for the use and benefit of humanity (and not the other way around), in this light we might understand Locke as a proto-environmentalist who is explicating a duty to the earth and its resources for their own sake.

[123] *See* Shrader-Frechette, *supra* note 86, at 208 ("[For Locke,] ownership of property is subject to the productivity criterion . . . .").

[124] To whom is the duty owed? We could plausibly understand the duty to be owed to all of the nonowners who are deprived of the benefit of the object by the owner's lawful claim. On the other hand, it could be a moral duty owed to no one in particular. As conceptually awkward as it might seem, we could even conceive of a duty that is owed to the object (or the sum of the natural world) itself.

norm of ownership, such that the very *status* of "owner" no longer obtains.[125]

The example further demonstrates that the imperative is not solely directed at distributive justice.[126] While we might be tempted to view the imperative as taking property from owners who have too much and giving it to owners who have too little, the person who "rescues" the apples in our example might not be a person who has too little, much less *the* person who has the least (or needs the apples the most). So, while Locke's imperative might have a positive impact on the just distribution of title, that impact is collateral to the goal of ensuring that the property itself is used rather than wasted.[127]

This example also illuminates that the Lockean imperative against waste is not coterminous with an efficiency imperative.[128] The Lockean imperative does not require (or necessarily encourage) utility maximization.[129] The object need not be put to its best, highest purpose. The imperative does not deliver an object into the hands of the owner who values it most, nor does it award title in a manner that necessarily promotes the efficient use or distribution of resources.[130] The imperative against waste is not necessarily inconsistent with efficiency values.[131] Indeed, an imperative against waste and an imperative prioritizing efficiency might often point in the same direction.[132] But it is important to be clear that the imperative against waste represents a value that is *independent* of efficiency values.[133]

In Locke's view, the question of waste is not centered on whether an owner has extracted the most (or more) potential value from an object

---

125 *See* LOCKE, *supra* note 29, at 249, 256.

126 That is not to say that Locke's imperative against waste is incompatible with or hostile to distributive justice. In fact, the imperative against waste likely advances distributive justice goals in some circumstances. *See* Shrader-Frechette, *supra* note 86, at 214.

127 *See id.*

128 Hull has made the case that the spoilage proviso is compatible with efficiency values. Hull, *supra* note 35, at 68 ("Locke's claim is [that] . . . we are to strive for the optimal productive use of the resources given us.").

129 *But see id.* (arguing that Locke's spoilage proviso encourages the efficient use of resources).

130 Certainly, there is much potential for overlap between the ideas of efficiency maximization and Lockean waste avoidance, a full treatment of which exceeds the scope of this piece. *See, e.g.*, *id.* at 68–69.

131 Indeed, Locke's property views have frequently been interpreted as supporting efficiency values. *See, e.g.*, Cara Nine, *Ecological Refugees, States Borders, and the Lockean Proviso*, 27 J. APPLIED PHIL. 359, 371 (2010) ("A strong theme in Locke's theory of property is that the right to property is grounded in the efficient use of that property.").

132 *See* UGO MATTEI, BASIC PRINCIPLES OF PROPERTY LAW: A COMPARATIVE LEGAL AND ECONOMIC INTRODUCTION 54 (2000) (describing nonwaste as an aspect of efficiency and noting that an efficient rule "will dictate the best possible solution for a controversy regarding a scarce resource, inasmuch as it reduces the amount of resources rendered useless instead of profitable for everybody").

133 *See, e.g.*, Waldron, *supra* note 90, at 327 (reading Locke's account to encourage distributive justice values rather than only wealth-maximizing values, stating that Locke's constraint would permit the legislature to ensure "that the abundance of possessions of some men is neither based on nor results in the abject deprivation and impoverishment of others").

as compared to other potential uses.[134] In articulating his antiwaste imperative, Locke is mindful of opportunity costs, but primarily from an initial entitlement perspective.[135] To take more property than an owner can use is to take another person's share.[136] But Locke's attentiveness to opportunity cost is a toggle, not a continuum. We know that an owner has taken more than their share if the owner's intentional or negligent act causes the object to be destroyed or to spoil. Beyond that, Locke's account of waste is unconcerned with *how* the owner uses or enjoys the property.[137]

Yet conceptions about *whether* an object is being used and enjoyed are also sometimes entangled with *how* it is used and enjoyed (and by *whom*). Returning to the example of an owner who allows apples to fall to the ground and rot, it is important to be clear that the apples are only wasted if the rotting serves no purpose beyond the owner's intent to destroy (or the owner's neglectful failure to prevent destruction). However, if instead the owner intends the apples to rot on the ground to fertilize or replenish the soil, the same act — allowing the apples to rot — is no longer waste. Here again we see the importance of the owner's state of mind and *culpability* in distinguishing between wasted rotted apples and not-wasteful natural fertilizer. In the replenishment scenario, the apples *are* being put to a use and therefore are not waste within the Lockean ownership paradigm.

It is worth noting that the practice of naturally replenishing the land through intentional spoilage was a blind spot for both Locke and the colonial expropriators of Indigenous lands who were influenced by his writings.[138] As a general matter, Locke condemned what he perceived

---

134 *See* WALDRON, *supra* note 101, at 161 (reading Locke as holding the owner of an object to be the final arbiter in terms of the wisdom of a given use, observing, "anything [the owner] takes to be useful to himself counts as a use of the object however wasteful it may seem to someone else").

135 Locke views the initial entitlement to ownership as bounded by the requirement that an owner leave "enough[] and as good left in common for others." LOCKE, *supra* note 29, at 246.

136 *Id.* at 249; Righetti & Schremmer, *supra* note 34, at 616.

137 Locke is also concerned with property uses that harm another owner's property, but that has less bearing on this discussion. *See* LOCKE, *supra* note 29, at 222 ("The State of Nature, has a Law of Nature to govern it, which obliges every one . . . [t]hat being all equal and independent, no one ought to harm another in his Life, Health, Liberty or Possessions . . . .").

138 For example, Professor James Tully describes colonialists who sought to expropriate Indigenous lands and justified the practice in light of what was known as the "agriculturist" view of land ownership:

> The coastal Indians lived in villages and engaged in non-sedentary agriculture. Several of the English settlers sought to expropriate the agricultural lands of the natives, for this eliminated the hard labour of clearing land themselves. To justify expropriation, they argued that the Indians, who left their cornfields for the clam beds each year, neither tilled nor fenced, and who let the fields rot and compost every three years, for purposes of soil enrichment, did not cultivate the land in the proper fashion, and, therefore the land was open for use by others. 'They [the Indians] are not industrious', Robert Cushman explained, 'neither have they art, science, skill or faculty to use either the land or the

> commodities of it; but all spoils, rots, and is marred from want of manuring, gathering and ordering'.

JAMES TULLY, AN APPROACH TO POLITICAL PHILOSOPHY: LOCKE IN CONTEXTS 156–57 (1993) (alteration in original) (footnotes omitted) (quoting Robert Cushman, *Reasons and Considerations Touching the Lawfulness of Removing out of England into Parts of America*, *in* CHRONICLES OF THE PILGRIM FATHERS OF THE COLONY OF PLYMOUTH 239, 243 (Alexander Young ed., 1841)). Tully ascribes to Locke an elevation of the agriculturist argument in favor of Indigenous dispossession, stating: "Locke elevates this justification of expropriation to the status of a law of nature." *Id.* at 157; *see also* David Armitage, *John Locke, Carolina, and the* Two Treatises of Government, 32 POL. THEORY 602, 618 (2004) ("Locke's argument from divine command to cultivate those '*great Tracts*' of unappropriated land became the classic theoretical expression of the agriculturalist argument for European *dominium* over American land.").

However, to be clear, Robert Cushman, who died in 1625, Joshua J. Mark, *Robert Cushman*, WORLD HIST. ENCYCLOPEDIA (Nov. 9, 2020), https://www.worldhistory.org/Robert_Cushman [https://perma.cc/EX3K-QD6E], did not take his agriculturist argument from Locke, who was born in 1632, Graham A.J. Rogers, *John Locke*, BRITANNICA (Dec. 3, 2024), https://www.britannica.com/biography/John-Locke [https://perma.cc/4HDG-BXF9]. Indeed, the agriculturist argument in favor of Indigenous expropriation was already in prominent use by the 1630s by European colonialists who were intent on Indigenous dispossession. TULLY, *supra*, at 148. John Winthrop, a founder of the Massachusetts Bay Colony, notoriously made the agriculturist argument in a legal land dispute with the Plymouth colony in 1633, as did Samuel Purchas in 1629 and John White in 1630. *Id.* at 148–49. As Tully describes it: "The arguments and the very terms used in the pamphlets [pre-dating Locke's birth] are strikingly similar to chapter five of the *Two* [*T*]*reatises*. No author puts forth an account that is as theoretically sophisticated as Locke's, but the basic terminology, premises, and conclusions for such a theory are present." *Id.* at 149.

In fact, this idea that "idle" or "uncultivated" land was "waste," and that people who did not cultivate their land could be justifiably dispossessed of it, was first (and famously) put forth in Thomas More's deeply influential 1516 book, *Utopia*. THOMAS MORE, UTOPIA 52 (New York, Columbian Publ'g Co. 1891). More (who coined the term "utopia") described a fictional ideal society in which:

> [I]f there is any increase over the whole island, then they draw out a number of their citizens out of the several towns, and send them over to the neighbouring continent; where, if they find that the inhabitants have more soil than they can *well cultivate*, they fix a colony . . . . But if the natives refuse to conform themselves to their laws, they drive them out of those bounds which they mark out for themselves, and use force if they resist. For they account it a very just cause of war, for a nation to hinder others from possessing a part of that soil of which they make no use, but which is suffered to lie *idle* and *uncultivated*; since every man has by the law of Nature a right to such a *waste* portion of the earth as is necessary for his subsistence.

Id. at 51–52 (emphases added). It is More, then, rather than Locke, who appears to be the originator of the agriculturalist idea of (and later, justification for) colonial expropriation of Indigenous lands (that is, the idea that "idle" or "uncultivated" land is up for grabs even if other peoples are currently in possession of it). *Id.* More's reasons for describing in 1516 what turned out to be a template for seventeenth- and eighteenth-century colonial land expropriation in the Americas are sources of debate among More scholars. Alfred A. Cave, *Thomas More and the New World*, 23 ALBION 209, 210–12 (1991). It is unclear how much More knew about or was influenced by late fifteenth-century European contact with Indigenous peoples in the Americas. *Id.* at 210. But it is clear that in *Utopia*, More was primarily focused on criticizing European political and economic abuses. *Id.* at 221 n.47 ("More's purpose was not to provide a consistent New [W]orld history, but to make a statement about Old World abuses."). Among other things, More was writing critically about the practice of land "enclosure" in Tudor-era England in which productive land was increasingly being seized from peasants and enclosed for the exclusive profit of the aristocracy, after which it was often left fallow and uncultivated owing to overaccumulation by the "greed[y]" (More's word) aristocracy. *See* Mildred Witt Caudle, *Sir Thomas More's* Utopia*: Origins and Purposes*, 45 SOC. SCI. 163, 163, 165 (1970) (for More's protagonist, "greed for property is the root of all evil," *id.* at 165, and "[t]he

to be a lack of industry on the part of Indigenous peoples in the Americas with respect to the cultivation of land.[139] This condemnation extends to characterizing as waste Indigenous land management practices such as intentionally allowing orchards, clam beds, and corn fields to spoil as a form of land restoration and rejuvenation.[140] This condemnation was the result of both ignorance of intentional Indigenous land

---

greatest disaffection [for More's protagonist] . . . is the result of the detrimental effects of the enclosure movement. The rich live like drones feeding on the labor and poverty of the peasantry," *id.* at 163 (footnote omitted)).

Locke was almost certainly influenced by More, and particularly by More's two ideas about land use: that uncultivated land is wasted, and that resource hoarding leads to lack of use (and so waste). Locke's spoilage proviso reflects these ideas, and later in the *Second Treatise*, Locke elaborates:

> He that gathered a hundred bushels of acorns or apples had thereby a property in them; they were his goods as soon as gathered. He was only to look that he used them before they spoiled, else he took more than his share, and robbed others; and, indeed, it was foolish thing, as well as dishonest, to hoard up more than he could make use of. If he gave away part to anybody else, so that it perished not uselessly in his possession, these he also made use of . . . .
>
> . . . .
>
> . . . [I]t is very easy to conceive without any difficulty how labour could at first begin a title of property in the common things of nature, and how the spending it upon our uses bounded it . . . . Right and conveniency went together; for as a man had a right to all he could employ his labour upon, so he had no temptation to labour for more than he could make use of.

LOCKE, *supra* note 120, at 24–26. In the context of land, this hoarding (or overaccumulation) appeared to Locke as spoilage and lack of cultivation:

> The same measures governed the possessions of land, too. Whatsoever he tilled and reaped, laid up, and made use of before it spoiled, that was his peculiar right; whatsoever he enclosed and could feed and make use of, the cattle and product was also his. But if either the grass of his enclosure rotted on the ground, or the fruit of his planting perished without gathering and laying up, this part of the earth, notwithstanding his enclosure, was still to be looked on as waste, and might be the possession of any other.

Id. at 20–21. However, in the context of Indigenous lands, these same ideas of cultivation and industry were conscripted in service of the agriculturalist justification (in contrast to the conquest- or religious-based justifications) for European domination over Indigenous peoples' land, which was used to justify the atrocity of mass Indigenous dispossession. *Cf.* Johnson v. M'Intosh 21 U.S. (8 Wheat.) 543, 567, 576–77 (1823). *Johnson* described the conquest- and religious-based justifications for the dispossession of Indigenous peoples as follows:

> [T]he settled law, as laid down by the tribunals of civilized states, denied the right of the Indians to be considered as independent communities, having a permanent property in the soil, capable of alienation to private individuals. They remain in a state of nature, and have never been admitted into the general society of nations. . . .
>
> . . . .
>
> . . . The right of discovery given by this commission, is confined to countries "then unknown to all Christian people;" and of these countries Cabot was empowered to take possession in the name of the king of England. Thus asserting a right to take possession, notwithstanding the occupancy of the natives, who were heathens, and, at the same time, admitting the prior title of any Christian people who may have made a previous discovery.

Id. at 567, 576–77.

[139] LOCKE, *supra* note 120, at 22 ("[The] several nations of the Americans are . . . rich in land and poor in all the comforts of life, whom nature having furnished as liberally as any other people with the materials of plenty — *i.e.*, a fruitful soil, apt to produce in abundance what might serve for food, raiment, and delight — yet, for want of improving it by labour, have not one-hundredth part of the conveniences we enjoy.").

[140] TULLY, *supra* note 138, at 157.

management practices and racist biases about the superiority of European cultural and farming practices.[141] Ultimately, Locke's "uncultivated" critique was used to justify colonial exploitation of Indigenous lands, to notoriously disastrous ends.[142]

It is nonetheless clear that, absent these biases, a consistent application of Locke's conception of ownership would conclude that using apples (or clams or corn) to fertilize and replenish the soil is not an example of waste but is instead a resourceful way of using and enjoying these objects of property. In applying Locke's antiwaste imperative in a modern context, we can discern the crucial role that intentionality and culpability play in distinguishing neglectful spoilage from intentional non-cultivation for the purpose of land replenishment and species conservation.

Some additional examples might further illustrate how an owner's culpability can distinguish Lockean waste (which is excluded from the right of ownership) from an owner's innovative, unexpected, idiosyncratic, unconventional, inefficient, or even unwise use of an object (which ownership permits). Consider a performance artist who allows an apple to rot as part of an art installation or an owner who simply enjoys watching an apple rot. Are these examples of waste within the Lockean imperative against waste?

In the example of the performance artist, the artist could be understood to be enjoying the object although not using it in the traditional sense (for example, consuming it).[143] The artist could be said to be deriving a nontangible benefit from the apple, as when one enjoys a view of the sunset from a back deck.[144] The person who wants to watch the apple decay for its own sake is arguably a closer case, but that too might constitute a form of enjoying the apple.[145] The concepts of use and enjoyment contemplate deriving nontangible, noncommodifiable, and

---

[141] Locke never crossed the Atlantic and was never physically present in the Americas, yet his writings were influential in justifying English colonialism through the lens of property ownership. Because he had no firsthand experience of Indigenous people or Indigenous land management practices, his understanding of Indigenous land use was dependent upon secondhand written accounts, and from his time working as a secretary to the proprietors of the new English colony in Carolina from 1669–1675, and from 1673–1674 as secretary and treasurer for the English Council for Trade and Foreign Plantations. Armitage, *supra* note 138, at 603–05.

[142] As Professor Jill Lepore described it: "Without ever crossing the ocean, Locke dug deep into the soil of the colonies and planted seeds as small as the nibs of his pen." JILL LEPORE, THESE TRUTHS: A HISTORY OF THE UNITED STATES 52 (2018).

[143] WALDRON, *supra* note 101, at 161 ("Locke . . . does not limit use to physical consumption. . . . [Locke] says that giving things away rather than consuming them oneself, and exchanging them for other things, are ways of making use of them, and he also suggests that some objects may be kept for aesthetic reasons rather than for the satisfaction of bodily needs." (citing LOCKE, *supra* note 120, at 24)).

[144] *Id.* at 207 (quoting LOCKE, *supra* note 120, at 24–25) (using objects for artistic purposes is within Locke's understanding of use).

[145] *Id.* ("Locke's concept of use is very broad.").

nonmonetizable benefit from owned objects.[146] Use and enjoyment in the Lockean sense are not coterminous with consumption or marketable use and enjoyment.[147]

Yet we can problematize intangible enjoyment further and imagine an owner who allows the apple to rot because *O* enjoys *knowing that others are deprived of the apple's value*, in, for example, a sadistic or antisocial way. In this example, *O* is not enjoying the apple, *O* is enjoying the suffering of others who cannot have the apple.[148] This mental state places *O* in violation of the Lockean imperative.[149] In this example, *O*'s *culpability* plays a role: *O*'s purpose is to deprive. *O*'s intent is to sequester or steal a tangible benefit from others. Although it can be an admittedly challenging line to draw, culpability can potentially distinguish the *O* who likes to watch things decay from the *O* who likes to watch others suffer.[150]

Consider the real example of Martin Shkreli who bought the one-of-a-kind Wu-Tang Clan album *Once Upon a Time in Shaolin* for two million dollars in 2016 and then threatened to destroy it.[151] The physical object of the actual album was uniquely valuable in that the artists created only a single copy as a means of protesting the treatment of art in the age of digital reproduction.[152] Shkreli made headlines by announcing that he was considering destroying the irreplaceable work of art because he wanted to become "not just the heel of the music world. [He wanted] to be the world's heel."[153] By his own description, Shkreli was motivated to destroy the album solely to prevent others from enjoying it.[154]

---

146 *Id.* ("As long as 'Support and Comfort' of some sort are derived from [a use] the spoilation proviso is satisfied." (quoting LOCKE, *supra* note 120, at 15)).

147 *Id.* at 161 ("[A]nything [an owner] takes to be useful to himself counts as a use of the object however wasteful it may seem to someone else.").

148 A salient example is the owner who buys a cherished work of art solely to destroy it, as is suggested by the Shkreli example discussed *infra* notes 151–56 and accompanying text.

149 *See* WALDRON, *supra* note 101, at 208–09 (stating that the spoilation proviso prohibits the accumulation of resources "purely to beggar his neighbours, to diminish their ability to satisfy their needs").

150 *See generally* JOSEPH L. SAX, PLAYING DARTS WITH A REMBRANDT: PUBLIC AND PRIVATE RIGHTS IN CULTURAL TREASURES (1999) (arguing that an owner of a culturally significant work of art has no right to destroy it).

151 Lars Brandle, *Martin Shkreli Considers Destroying or Leaving Wu-Tang Clan's "Shaolin" in a Remote Place*, BILLBOARD (Jan. 28, 2016), https://www.billboard.com/music/music-news/martin-shkreli-destroy-leaving-wu-tang-clan-shaolin-album-6858388/ [https://perma.cc/A6SQ-Y54X].

152 Gregory Day, *The Infringement of Free Art*, 107 IOWA L. REV. 747, 757–58 (2022) ("[T]he Wu Tang Clan issued only a single unit of *Once upon a Time in Shaolin* which it auctioned for $2 million.").

153 Brandle, *supra* note 151.

154 In perhaps a bit of karmic comeuppance, the album was ultimately rescued from Shkreli's menacing possession. In 2021, *Once Upon a Time in Shaolin* was seized by the DOJ (and later sold to a private buyer) when Shkreli was convicted of securities fraud and ordered to pay $7.4 million in restitution. Andrew Limbong, *Wu-Tang Clan Album Once Owned by Martin Shkreli Sold by U.S. Government*, NPR (July 27, 2021, 3:14 PM), https://www.npr.org/2021/07/27/1021284593/martin-shkreli-wu-tang-clan-album-sold [https://perma.cc/52HQ-FEH6].

By Locke's lights, if Shkreli had proceeded with his plan to destroy and another individual had swooped in at the last instant to rescue the object, Shkreli's ownership rights would not have been violated, because Shkreli's right to own never included the right to destroy.[155] For Locke, Shkreli loses the right to exclude others from the object when he attempts to permanently destroy the object for the sole purpose of permanently excluding others.[156]

These examples help to tease out the complexity of the concept of waste at work in Locke's imperative. Locke understands *O* to not waste an object when *O uses* or *enjoys* it.[157] It is permissible for *O* to destroy an object in the process of using or enjoying it, as long as destruction is the byproduct of another end and not the end itself.[158] After all, one destroys an apple when one consumes it and we do not regard eating an apple as a form of wasting an apple.[159] But what if we take only a bite of the apple and discard the rest? Or what if *O* cuts out the seeds to plant a tree and throws the rest of the apple away?

These examples also illustrate the difficulty of line-drawing around the Lockean concept of waste. When a fraction of the object is used, but much of it remains intentionally unused, is there waste? Surely this is a question of degree. We can imagine scenarios in which such a tiny fraction of utility is extracted from the apple as compared with its potential value, such that it is nearly indistinguishable from tossing the entire apple in the bin. On the other hand, the Lockean imperative likewise does not limit ownership rights to only those uses that extract *all* potential value,[160] or even *most* of the value, or, under the right circumstances, maybe *any* of the value.[161]

Here, the Lockean idea of *culpability* seems to play a pivotal role: Is *O* acting with intention or negligence in discarding most of the apple? When the potential value of the apple is lost as an unintended byproduct of *O*'s use or enjoyment, then the Lockean imperative against waste is likely satisfied. In this light, we see that the imperative against waste is

---

155 Assuming no trespass or other wrongful act.

156 LOCKE, *supra* note 29, at 249, 251–52.

157 Or behaves such that the object can be used or enjoyed, as when *O* does not personally use or enjoy the object but permits others to use or enjoy it. *See id.* at 249.

158 For example, as one destroys an apple when eating it. *See* WALDRON, *supra* note 101, at 208 ("Destruction in itself does not violate the spoilation proviso: often we destroy a thing in using it." (citing LOCKE, *supra* note 29, at 47)).

159 Indeed, Locke views destruction by use as the heart of ownership itself, stating: "[T]he utmost Property Man is capable of . . . is to have a right to destroy any thing by using it." LOCKE, *supra* note 29, at 47; *see also* WALDRON, *supra* note 101, at 208.

160 Reportedly, Justice Souter is one of the few people to have consistently extracted *all* of the potential food value from an apple, having reportedly had a custom of eating an entire apple, including the core. Debra Cassens Weiss, *Odd Details of Souter's Life Chronicled, Including Apple Appetite*, A.B.A. J. (May 4, 2009, 1:55 PM), https://www.abajournal.com/news/article/retiring_justice_eats_whole_apples_gets_mugged_while_jogging [https://perma.cc/Y6YM-NXFZ].

161 For example, when one destroys pathogen-infested linens because they are dangerous.

capable of tolerating uses that impose a considerable degree of inefficiency without categorizing that inefficiency as waste.[162]

It is also important to be clear about the consequence of waste within Locke's framework. Locke's idea is simply that ownership *does not extend to* the right to spoil or destroy.[163] So, when *O* intentionally or negligently wastes an object, *O* is acting outside of *O*'s property right.[164] If ownership were a Venn diagram, acts of intentional or neglectful waste would simply lie outside of it. Ownership ends at waste.[165]

Thus, to summarize Locke's account, when we waste (by failing to use) the potential value of an object, we have exceeded the boundary of our lawful (and moral) claim of ownership.[166] It is not a punitive notion — that is, waste is a malfeasance, and so we punish the waster by revoking his property rights.[167] It is a notion of *inherent limitation*: The right to own simply does not include the right to waste.[168] By wasting an object, *O* steps outside the boundary of ownership and thereby ceases to be an owner.[169]

Given that the spoilage proviso describes a fundamental limitation to the right of ownership, it is somewhat surprising that it has garnered little scholarly attention in the context of property theory.[170] What attention it has received has arisen mainly in the context of intellectual property, where it is of limited application given the fact that the proviso's moral and logical justifications depend upon the "thingness" of the finite, physical objects.[171] In a world in which valuable (if

---

[162] *See* WALDRON, *supra* note 101, at 207–08 (describing Locke's conception of "use" as "broad").

[163] LOCKE, *supra* note 29, at 249 ("But how far has he given it us, *to enjoy?* . . . Nothing was made by God for Man to spoil or destroy.").

[164] *Id.*

[165] WALDRON, *supra* note 101, at 161 ("An owner is not entitled to decide to allow his goods to perish uselessly in his possession." (citing LOCKE, *supra* note 120, at 24)).

[166] Locke's idea that ownership is bounded by use is fundamental not only to American property law but also to common law property systems around the world. Nine, *supra* note 131, at 371 (positing Locke's view is "reflected in most common laws around the world, and it is also taken up in formal law. If an owner leaves land left vacant or unutilized for a certain period of time, the owner's rights may diminish, especially if there is another agent who is suffering because she is not allowed to make use of the land").

[167] On the other hand, Locke does speak of "[p]enalties" to "[e]nforce the[] observation" of natural obligations, of which the spoilage proviso is one. LOCKE, *supra* note 29, at 356.

[168] *Id.* at 249 ("But how *far* has he given [property to] us, *to enjoy?*" (first emphasis added)). Locke literally understands ownership to extend this far, and no farther.

[169] Professor Jeremy Waldron describes it as: "In Locke's view, [the decision to intentionally destroy or spoil] is tantamount to an *abandonment* of exclusive property in the goods." WALDRON, *supra* note 101, at 161 (emphasis added).

[170] *See* Hull, *supra* note 35, at 67 ("[T]he spoilage proviso's neglect is undeserved . . . it deserves a more central place in our understanding of Locke."). Waldron's comprehensive analysis of Locke's theory of property (in the context of asking whether private property is justified) stands as an important exception to this general neglect of the spoilage proviso. WALDRON, *supra* note 101, at 161, 209–10.

[171] *See* Hull, *supra* note 35, at 78.

intangible) objects can be endlessly replicated, a rule against waste is understandably less imperative.[172]

However, importantly, the thesis offered here does not depend on the strength of the normative content of Locke's account that ownership does not extend to the right to waste.[173] Instead, the argument offered here depends on the descriptive accuracy of this proposition: Locke's imperative against waste forms a central commitment of property law doctrine as it stands today.[174] A discussion of that proposition follows.

B. The Imperative Against Waste in American Property Law

American property law has always been focused on waste.[175] Anglo-American property law has embraced the Lockean imperative against waste from its earliest iterations.[176] Locke's specific conception of waste, rooted as it is in the concepts of use and enjoyment, is consistently reflected in early Anglo-American property doctrine and commentary.[177] For example, when Blackstone's influential *Commentaries on the Laws of England* appeared in 1765, it described the right to own property in Lockean terms as "the free *use*, *enjoyment*, and disposal of all his acquisitions, without any control or diminution, save only by the laws of the land."[178]

---

[172] In the context of intellectual property, the normative content of Locke's imperative against waste has been subject to criticism, particularly as it departs from other competing values. There are those who have claimed that the spoilage proviso should be abandoned to the degree that it departs from efficiency values, or that it has been made superfluous by advanced economic systems. *Cf.* Note, *Richard Epstein on the Foundations of Takings Jurisprudence,* 99 HARV. L. REV. 791, 791–92, 798 n.42 (1986) ("Locke is sometimes interpreted as maintaining that the prohibition against waste and the mandate that 'enough and as good' be left behind are superseded by the introduction of money." *Id.* at 798 n.42 (quoting LOCKE, *supra* note 120, at 15) (citing FRANK M. COLEMAN, HOBBES AND AMERICA: EXPLORING THE CONSTITUTIONAL FOUNDATIONS 103–04 (1977))). While these critiques raise important points that merit independent attention, they generally have less purchase in the context of corporeal objects that take up space in the world. *See supra* notes 73–76 and accompanying text.

[173] Although a defense could be made of the normative content of Locke's imperative against waste, that project exceeds the scope of this piece.

[174] *See infra* section II.B, pp. 1289–303.

[175] It is hoped that the reader will tolerate an anthropomorphizing of the concept of property law here. Of course, property law does not think or value or believe. It has no interests or concerns. This is a metaphor routinely employed in legal scholarship, *see, e.g.*, Eric R. Claeys, *Exclusion and Private Law Theory: A Comment on* Property as the Law of Things, 125 HARV. L. REV. F. 133, 139 (2012) (discussing "property law's internal point of view"), which does warrant greater interrogation, but that interrogation is beyond the scope of this piece. For the purposes it is used here, it is sufficient to acknowledge that the anthropomorphized concept of property law is in reality a collection of legal rules constructed by lawmakers and judges who, individually, may or may not share a set of values or beliefs about waste, but who have nonetheless constructed a doctrine that is fairly characterized as consistent with a set of values about waste, as described in the main text.

[176] *See, e.g.*, Keeble v. Hickeringill (1707) 103 Eng. Rep. 1127, 1128; 11 East 574, 575–76 (KB).

[177] *See* 3 WILLIAM BLACKSTONE, COMMENTARIES *237–38.

[178] 1 *id.* at *134 (emphasis added). Blackstone further communicated accord with Locke's imperative against waste in various contexts, including his description of "arson as an 'offence of very

Locke's account of property ownership was highly influential during the period of the founding of American law.[179] Professor Richard Epstein, for example, has noted that "[t]he Lockean system was dominant at the time when the Constitution was adopted."[180] Professors Tara K. Righetti and Joseph A. Schremmer note that in his 1896 treatise, *Commentaries on American Law*, James Kent "referred to undeveloped land in a colony or territory as 'waste and uncultivated territory.'"[181] This account is consistent with a Lockean imperative that understands waste to be defined by the absence of use or enjoyment. An uncultivated territory is land that is unused and thereby wasted.[182] The Lockean concepts of use and enjoyment remain the defining criteria of property ownership that courts use to this day.[183]

American courts have also demonstrated a specific commitment to the imperative against waste by consistently holding — in a myriad of contexts — that owners do not have the right to destroy their own property.[184] Courts have held that an owner lacks the power to destroy their

---

great malignity, and much more pernicious to the public than simple theft . . . because in simple theft the thing stolen only changes [its] master, but still remains *in esse* for the benefit of the public, whereas by burning the very substance is absolutely destroyed.'" Lior Jacob Strahilevitz, *The Right to Destroy*, 114 YALE L.J. 781, 788–89 (2005) (alteration in original) (quoting 5 BLACKSTONE, *supra* note 177, at *220).

179 Righetti & Schremmer, *supra* note 34, at 615 ("Since the colonial period, the concept of waste has been instrumental in shaping American law relative to both the acquisition of property and its governance between multiple owners.").

180 RICHARD A. EPSTEIN, TAKINGS: PRIVATE PROPERTY AND THE POWER OF EMINENT DOMAIN 16 (1985).

181 Righetti & Schremmer, *supra* note 34, at 615 (quoting 1 JAMES KENT, COMMENTARIES ON AMERICAN LAW 212 (John M. Gould ed., Boston, Little, Brown & Co. 14th ed. 1896)).

182 Consensus views of nonuse as waste have evolved since the nineteenth century, such that now we generally recognize wilderness and wild places to have intrinsic value. *See, e.g.*, David A. Dana, *Existence Value and Federal Preservation Regulation*, 28 HARV. ENV'T L. REV. 343, 348–49 (2004). There is room within Locke's account of waste to understand that preserving the wildness of real property is an important way it can be used and enjoyed.

183 *See, e.g.*, Exxon Mobil Corp. v. Albright, 71 A.3d 30, 88 (Md.), *reh'g granted in part and denied in part*, 71 A.3d 150 (Md. 2013) ("[T]he right to use and enjoy one's property exists as a compensable element, independent of the monetary value of real property."); Hodes & Nauser, MDs, P.A. v. Schmidt, 440 P.3d 461, 491 (Kan. 2019) (citing Locke's labor theory of property as the basis of the decision); Kirby v. N.C. Dep't of Transp., 786 S.E.2d 919, 924 (N.C. 2016) (citing Locke as a fundamental source); Falzon v. Ford, 141 N.Y.S.3d 255, 263 (Sup. Ct. 2021) (describing nuisance as an interference with a "property right to use and enjoy land" (quoting, inter alia, Copart Indus., Inc. v. Consol. Edison Co. of N.Y., 362 N.E.2d 968, 972 (N.Y. 1977))).

184 In the past, casebooks and treatises sometimes included a right to destroy among the powers that attend ownership, although neither the common law rules of property nor specific property law cases seem to support this view. It is not clear in what context this right was thought to exist, but the origin is likely Blackstone's discussion of waste in the context of successive tenancies. *See* the discussion of Blackstone *infra* notes 196–218 and accompanying text. Fortunately, this misinterpretation seems to have been largely corrected, as editions of *Black's Law Dictionary* from 1999 forward have excluded the right to destroy as an incident of ownership and updated casebooks and treatises have likewise followed suit. *See Ownership*, BLACK'S LAW DICTIONARY (7th ed. 1999); *see also, e.g.*, DUKEMINIER ET AL., *supra* note 25, at 232–45 (discussing cases in which courts

own houses,[185] jewelry,[186] and works of art.[187] In each of these contexts, courts have echoed a version of the Lockean imperative that the specific type of waste involved in destruction for its own sake (in the absence of use and enjoyment) is impermissible.[188]

Given how influential the Lockean imperative against waste has been in American property law,[189] it is perhaps surprising that there has been little scholarly attention directed at the importance of the spoilage proviso in American property law.[190] In fact, some commentators have suggested that it holds less sway than the account offered here.[191] For

---

declined to recognize a right to destroy, and questioning whether a right to destroy should be recognized); Strahilevitz, *supra* note 178, at 783 ("In 1999, *Black's Law Dictionary* seems to have erased a long-recognized right of property owners.").

185 *See, e.g.*, J.C. & Assocs. v. D.C. Bd. of Appeals & Rev., 778 A.2d 296, 298 (D.C. 2001) (owner could not destroy a fire-damaged house that was designated a historic landmark); *In re* Will of Pace, 400 N.Y.S.2d 488, 492 (Sur. Ct. 1977) (finding that testator could not direct his estate to demolish two houses owned by the estate, even if testator could have done so during his lifetime, because "[d]emolition of the two houses is violative of public policy" in that it is a waste of resources). *But see In re* Estate of Beck, 676 N.Y.S.2d 838, 841 (Sur. Ct. 1998) (upholding testator's request to demolish her house when the affected parties agreed to demolition in advance of decedent's death as part of a settlement).

186 *See, e.g.*, *In re* Meksras Est., 63 Pa. D. & C.2d 371, 373 (C.P. Ct. Phila. Cnty. 1974) (ruling owner-decedent could not direct her estate to bury her valuable jewelry with her).

187 *See* Strahilevitz, *supra* note 178, at 828–30 (discussing the Visual Artists Rights Act (VARA)); *see also* Cohen v. G&M Realty L.P., 320 F. Supp. 3d 421, 427–28 (E.D.N.Y. 2018) (holding a property owner who whitewashed artworks on one of his commercial properties liable for statutory damages under VARA).

188 *See, e.g.*, Eyerman v. Mercantile Tr. Co., 524 S.W.2d 210, 217 (Mo. Ct. App. 1975) (finding that owner-decedent could not direct her estate to destroy her house and stating that "[a] well-ordered society cannot tolerate the waste and destruction of resources when such acts directly affect important interests of other members").

189 Some scholars have addressed the topic of waste more generally. *See, e.g.*, Pappas, *supra* note 80, at 754 (defining waste broadly "as the misuse of a thing of value" and the concept of legal waste as triggered by context and social values).

190 Hull, *supra* note 35, at 67 ("[T]he spoilage proviso's neglect is undeserved.").

191 What attention the spoilage proviso has received (outside the context of intellectual property) has been largely focused on the idea of a right to destroy. Professor Gregory Alexander has offered an illuminating consideration of the right to destroy and its impact on human flourishing. Alexander observes that "the right to destroy, which in past years had been widely assumed to be among the features of ownership, today no longer enjoys much recognition." Gregory S. Alexander, *Of Buildings, Statues, Art, and Sperm: The Right to Destroy and the Duty to Preserve*, 27 CORNELL J.L. & PUB. POL'Y 619, 620–21 (2018) (footnote omitted) ("Despite its importance, the right to destroy is one of the least discussed twigs in the proverbial bundle of rights constituting ownership." *Id.* at 620.). Alexander makes the important point that the physicality and uniqueness of the object that is destroyed are of central concern when evaluating the right to destroy. He observes:

> [D]estruction of the thing, is complete and irrevocable removal of an asset from future market transactions. Where the asset involved is of a fungible sort, a pencil, for example, there is little cause for concern about this loss. The losses about which we worry, however, are those involving non-fungible items, pearls of great price.

Id. at 619–20.

Professor Lior Strahilevitz has undertaken an important consideration of waste in the form of destruction. Strahilevitz has argued that American property law includes (or perhaps more accurately, should include) a "right to destroy," a point that on the surface seems in tension with the

example, some scholars have pointed to the mention of a right to waste, destroy, or injure one's own property by commentators like Dean Roscoe Pound in 1939[192] and A.M. Honoré in 1961[193] to support the view that the spoilage proviso has not been embraced in American property law.[194] However, the origin of these objections seems to be a misinterpretation of Blackstone.[195]

Blackstone has much to say about waste, but he is not referring to Locke's conception of waste.[196] It is not that Blackstone disagrees with Locke's imperative against waste, or that Blackstone is describing the law as standing in contradiction to the imperative.[197] Blackstone is just talking about something different than what Locke is discussing.[198] Blackstone said that "if a man be the absolute tenant in fee-simple . . . he may commit whatever waste his own indiscretion may prompt him to, without being impeachable or accountable for it to any one."[199] However, although Blackstone is using the word "waste" here, he is not referring to the Lockean concept of waste, but instead to the specific

---

thesis advanced here. *See* Strahilevitz, *supra* note 178, at 821. Strahilevitz acknowledges that "Locke's hostility to certain forms of property destruction seems unambiguous," *id.* at 789, but he is skeptical that Locke's imperative has been an influential force in American property doctrine. *Id.* at 790. Strahilevitz makes the case that American property law *should* recognize a right to destroy under certain conditions. *See id.* at 786–87. Strahilevitz recognizes that American courts are almost uniformly hostile to the intentional destruction of property, observing: "While excising theological strains from Locke's antiwaste argument, [courts] have embraced his notion that society must not tolerate the waste of valuable resources. Moreover, courts have stressed the negative externalities that might be associated with an individual owner's destruction of her property." *Id.* at 796. Strahilevitz recognizes that the Lockean imperative finds support among jurists and scholars who have a commitment to protecting important cultural property, but he argues against a blanket imposition of the imperative against waste, favoring instead a rule that is better aligned with efficiency values. *See id.* at 791–93.

192 Roscoe Pound, *The Law of Property and Recent Juristic Thought*, 25 A.B.A. J. 993, 997 (1939).

193 A.M. Honoré, *Ownership*, *in* OXFORD ESSAYS IN JURISPRUDENCE 107, 118 (A.G. Guest ed., 1961).

194 *See also* Edward J. McCaffery, *Must We Have the Right to Waste?*, *in* NEW ESSAYS IN THE LEGAL AND POLITICAL THEORY OF PROPERTY 76–80 (Stephen R. Munzer ed., 2001) (discussing Pound's and Honoré's views of destruction).

195 BLACKSTONE, *supra* note 177, at *223–24 (describing waste in the context of successive tenancies). Strahilevitz and Professor Edward McCaffery also both refer to the older Roman rule of *jus abutendi*, which expressly allowed for the destruction of one's own property. *See* Strahilevitz, *supra* note 178, at 785; McCaffery, *supra* note 194, at 76–77.

196 Blackstone describes waste as "a spoil or destruction in houses, gardens, trees, or other corporeal hereditaments, to the disherison of him that hath the remainder or reversion in fee-simple or fee-tail." 2 BLACKSTONE, *supra* note 177, at *281.

197 On the contrary, Blackstone's summary of property rules is consistently hostile to the intentional destruction of property. *See supra* note 178 and accompanying text.

198 Locke is discussing the waste that follows from taking more than one can use and enjoy from the common stock, LOCKE, *supra* note 29, at 249, while Blackstone is talking about the permanent depletion of value that gives rise to a cause of action in successive estates, BLACKSTONE, *supra* note 177, at *223–24.

199 BLACKSTONE, *supra* note 177, at *223–24.

term of art used to describe the permanent devaluation of real property by tenants who hold less than a fee simple (for example, life tenants).[200]

In this context Blackstone says:

> The fourth species of injury, that may be offered to one's real property, is by *waste*, or destruction in lands and tenements. What shall be called waste was considered at large in a former volume . . . . I shall therefore here only beg leave to remind the student, that waste is a spoil and destruction of the estate . . . ; by demolishing not the temporary profits only, but the very substance of the thing . . . .[201]

If instead of picking the apples in an orchard, a life tenant cuts down the apple trees, the life tenant has committed waste of the kind Blackstone is discussing.[202] The life tenant is entitled to make profitable use of the orchard, but not to destroy it such that future interest holders who own the reversionary interest cannot also someday benefit from the orchard.[203] In that situation, the reversionary interest holder has a cause of action against the life tenant because the life tenant owes the reversion holder a duty not to deplete the value of the estate through misconduct or negligence.[204]

However, Blackstone explains, no one has a cause of action against an owner in fee simple who cuts down the apple trees because the owner of a fee does not owe anyone a duty to maintain the permanent value of the estate.[205] Although Blackstone understands waste by the fee simple holder to be a wrong, it is a wrong without legal redress.[206] But this type of waste (permanent depletion of value in the context of successive estates in land) is not coterminous with Lockean waste. A fee owner may cut down their orchard and not violate the Lockean imperative.[207] If the fee owner sells the wood, or makes a bonfire, or creates an apple-tree art installation, *O* has not violated the Lockean imperative even though each of these uses would violate a duty to preserve value in the context of successive estates.[208]

---

[200] *Id.*; *see also* McCaffery, *supra* note 194, at 79 ("Under a life estate conception of ownership, the property holder cannot waste the property or direct where the remainder is to go."); Strahilevitz, *supra* note 178, at 785 n.15 (confining his critique of limits on the right to destroy to owners in fee simple).

[201] BLACKSTONE, *supra* note 177, at *223.

[202] *Cf.* Anderson v. Hammon, 24 P. 228, 229 (Or. 1890) (holding liable a tenant whose negligence resulted in the waste and destruction of the landowner's orchards).

[203] *See, e.g.*, Fisher's Ex'r v. Haney, 202 S.W. 495, 496 (Ky. 1918) (life tenant committed voluntary waste "by selling and removing from the premises trees and stone" from an orchard).

[204] *See, e.g.*, Moore v. Phillips, 627 P.2d 831, 834 (Kan. Ct. App. 1981) (ruling remainderman had a cause of action against estate of life tenant whose neglect of real property resulted in significant depletion of the value of the estate).

[205] BLACKSTONE, *supra* note 177, at *223–24.

[206] Blackstone describes waste in this context as "*damnum absque injuria*," which means damage without legal injury. *Id.* at *224; *see* McCaffery, *supra* note 194, at 85.

[207] *See supra* section II.A, pp. 1275–89.

[208] *See supra* note 158 and accompanying text.

The Lockean imperative, as American property law currently interprets it, is generally indifferent to the wisdom or efficiency of *O*'s use of *O*'s orchard, and so *O* is not under a duty to preserve its value for future generations.[209] *O* is free to consume the orchard completely without preserving its value for future generations, as long as *O* does so in the service of using and enjoying the orchard.[210] If *O* cuts down the orchard to build a bonfire, it is not because *O* was hoarding more land than *O* could use (that is, took more than *O*'s share from the commons), leaving some of it to necessarily spoil. After all, *O used* and *enjoyed* the orchard. *O* might be a short-sighted or spendthrift owner, but if *O*'s destruction of the orchard is in the service of *O*'s use and enjoyment it does not violate the Lockean imperative.[211] The imperative only prohibits intentional or negligent destruction in the absence of use or enjoyment.[212] So when Blackstone speaks of waste in this oft-cited passage, he is using the same word that we have been using to describe Locke's idea, but he is not referring to the same concept.[213]

Thus, when commentators like Pound[214] and Honoré[215] later include the right to waste, injure, or destroy in their respective descriptions of the bundle of rights that attend ownership, they seem to be referring to the right described by Blackstone that a fee simple owner holds *in contrast to* a life tenant: the right to permanently deplete the value of the estate.[216] *O* is entitled to permanently siphon every drop of value out of *O*'s own estate and not save anything for future generations.[217] Whatever the wisdom of this rule of American property law, it is not inconsistent with the Lockean imperative against waste.[218]

The most persuasive evidence that property law is fundamentally committed to the Lockean imperative against waste is found in the substantive content of common law property rules.[219] Rules such as the rule of adverse possession, the rule of finders, the rules governing easements, and the rules of abandonment can each be best understood as

---

209 It may be that *O should* have a duty to preserve the value of *O*'s durable property for future generations, as McCaffery has argued. *See* McCaffery, *supra* note 194, at 87 (arguing law should impose a duty to use one's property in a nonwasteful manner).

210 *See* WALDRON, *supra* note 101, at 207 ("Locke's concept of use is very broad.").

211 *Id.* at 208.

212 *Id.* ("What Locke means [by waste] is the negligent or deliberate loss of use-value without use . . . .").

213 *See* BLACKSTONE, *supra* note 177, at *223.

214 *See* Pound, *supra* note 192, at 997.

215 *See* Honoré, *supra* note 193, at 118.

216 BLACKSTONE, *supra* note 177, at *223–24.

217 *See* McCaffery, *supra* note 194, at 84–85.

218 It is perhaps possible that a more robust version of Locke's idea could impose on *O* a duty to preserve value for future generations. *See id.* at 89.

219 *But see* Strahilevitz, *supra* note 178, at 800–08 (discussing examples in which American property law or social customs tolerate waste).

instantiations of the imperative against waste.[220] A discussion of each of these would exceed the scope of this Article, but a consideration of two of the more important examples — adverse possession and abandonment — follows.[221]

---

[220] *See, e.g.*, Eloise Harding, *Spoilage and Squatting: A Lockean Argument*, 26 RES PUBLICA 299, 304 (2020) (defending squatting under Lockean antiwaste principles). In this light, other common law property rules can also be best understood as instantiations of the imperative against waste, for example, equitable conversion, capture, gifts, and so forth.

[221] While the influence of a Lockean antiwaste imperative is evident in many common law property rules, adverse possession and abandonment offer especially helpful illustrations of the principle at work in the doctrine. Central features of both the rule of adverse possession and the rules of abandonment are best explained by an antiwaste principle. Perhaps more significantly, central features of these rules cannot be satisfactorily explained in the absence of an antiwaste principle.

For example, adverse possession offers a particularly clear illustration that it is not only disuse, but disuse *plus* culpability, that determines the boundary of ownership. It is only the *neglectful* owner who loses title to unused land through adverse possession. While adverse possession has been heralded as championing use (which is thought to promote more efficient outcomes), the rule does not dispossess an owner based on disuse alone. *See, e.g.*, Alexandra B. Klass, *Adverse Possession and Conservation: Expanding Traditional Notions of Use and Possession*, 77 U. COLO. L. REV. 283, 293 (2006) (citing John G. Sprankling, *The Antiwilderness Bias in American Property Law*, 63 U. CHI. L. REV. 519, 540 (1996); John G. Sprankling, *An Environmental Critique of Adverse Possession*, 79 CORNELL L. REV. 816, 840 (1994)). In this way, while the rule of adverse possession may in fact promote use (and thereby possibly efficiency) in some circumstances, the rule cannot be *explained* in terms of promoting use. If promoting use was the purpose of adverse possession, a more effective rule would simply dispossess the owner of title after a set period of disuse, followed by redistribution by auction (as with foreclosure) regardless of whether the owner is attentive to the property. Instead, the rule of adverse possession takes the time and resource expenditure that is required to monitor the property as evidence that the owner is adequately using and enjoying the property (even if that use and enjoyment is not otherwise evident).

It has also been argued that the rule of adverse possession is best explained as a mechanism for quieting title in a present possessor and thereby increasing the alienability of real property. *See* Henry W. Ballantine, *Title by Adverse Possession*, 32 HARV. L. REV. 135, 135 (1918) ("The [rule of adverse possession] has not for its object to reward the diligent trespasser for his wrong nor yet to penalize the negligent and dormant owner for sleeping upon his rights; the great purpose is automatically to quiet all titles which are openly and consistently asserted, to provide proof of meritorious titles, and correct errors in conveyancing."). The idea is that an absent owner can create conflicting expectations, both in present possessors (for example, second- or third-generation possessors who are unaware that the initial entry was a trespass and understand themselves to be owners) and in subsequent purchasers who may receive an invalid title from a present possessor. The fact that someone in possession for a long period of time might not be able to convey good title is thought to decrease the alienability of real property and also diminishes confidence in the transfer of property as a whole.

However, while quieting title in a present possessor may be a collateral benefit of adverse possession, the rule cannot be explained exclusively in light of that purpose. For example, title by adverse possession is not awarded to a present possessor who uses the land by permission. A lessee or licensee cannot gain title by adverse possession, even if the owner is out of possession and the lessee or licensee is in possession beyond the period for adverse possession. The rule of adverse possession requires that the use of the land be *hostile* to the owner's title. *See* Jeffrey Evans Stake, *The Uneasy Case for Adverse Possession*, 89 GEO. L.J. 2419, 2423 (2001). This again ensures that adverse possession only dispossesses a neglectful owner. However, whether the owner is neglectful has no bearing on whether it would be beneficial to the alienability of real property to quiet title in a present possessor. A licensee who wrongly believes themself to be an owner can convey an invalid title (and thereby create uncertainty of title) in exactly the same way as a possessor whose entry is hostile.

1. Adverse Possession as Antiwaste. — Under common law property rules, a trespasser (*T*) can gain lawful title to real or personal property if *T* takes possession of the owner's (*O*) property and uses the property as a lawful owner would.[222] If *T* openly uses the property for a sufficient period of time, *O* will lose title.[223] It is a rule that perfectly reflects Locke's view that: "[I]f either the grass of his enclosure rotted on the ground, or the fruit of his planting perished without gathering . . . this part of the earth . . . was still to be looked on as waste, and might be the possession of any other."[224]

The rule of adverse possession is often criticized for rewarding the wrong of trespass while at the same time dispossessing an innocent owner who has done no wrong.[225] The rule is a particular sticking point for those who understand the most fundamental commitment of property law to be the right to exclude.[226] However, when the two values are in contest, the rule of adverse possession makes clear that property law's abhorrence of waste exceeds its support for the right to exclude.

The adverse possession rule is consistent with the imperative against waste in that title corresponds to the use and enjoyment of property.[227] If *T* is openly using *O*'s property for a substantial period of time, then it follows that *O* has *not* been using it for a substantial period of time.[228] If property law were to disallow title through trespass (and thereby prioritize the right to exclude) then the property could continue in a state of disuse indefinitely.[229]

Within the Lockean perspective, nonuse of land, in and of itself, can constitute a waste under certain circumstances.[230] An *O* who intentionally or negligently allows their property to fall into a state of extended disuse has taken more than they are able to put to use.[231] Real property

---

[222] *See* Larissa Katz, *Exclusion and Exclusivity in Property Law*, 58 U. TORONTO L.J. 275, 290 (2008) (describing the law of adverse possession).

[223] *See* 3 AM. JUR. 2D *Adverse Possession* § 1 (2024).

[224] LOCKE, *supra* note 120, at 20–21.

[225] *See, e.g.*, Thomas W. Merrill, *Property Rules, Liability Rules, and Adverse Possession*, 79 NW. U. L. REV. 1122, 1136–37 (1985) (questioning whether adverse possession is an "odd spectacle of the law doing virtue while it pays homage to vice," *id.* at 1137).

[226] *See, e.g.*, Lillian R. BeVier, *Give and Take: Public Use as Due Compensation in* PruneYard, 64 U. CHI. L. REV. 71, 75 (1997) (describing adverse possession as a doctrine that "compromise[s] and coerce[s] uncompensated transfers of the absolute right of individual owners to exclude").

[227] *See* O.W. Holmes, *The Path of the Law*, 10 HARV. L. REV. 457, 476–77 (1897) (describing adverse possession as favoring use).

[228] *See* Stake, *supra* note 221, at 2423 ("For [the adverse possessor]'s possession to be 'exclusive,' she cannot share possession with the true owner." (citing WILLIAM B. STOEBUCK & DALE A. WHITMAN, THE LAW OF PROPERTY 853, 859 (3d ed. 2000))).

[229] *See* WALDRON, *supra* note 101, at 207 ("[Locke imposes the qualification] that . . . appropriated resources must be put to some *use* . . . .").

[230] *See* McCaffery, *supra* note 194, at 88 ("A third conception of waste involves nonuse — the failure beneficially to use one's time, talents, or resources.").

[231] Locke understands a person who has laid claim to more property than they can make use of to have "invaded his Neighbour's share, for he had no Right, farther than his Use." LOCKE, *supra* note 29, at 256.

that has not been used for an extended period of time may represent a hoarding of resources of the type that Locke would disallow.[232] In other words, *O* has taken more than *O*'s share from the common stores.[233] *O*'s right of ownership does not extend to the right to sequester a valuable object of property from others and then fail to make use of it.[234] In this situation, *O*'s neglect of the property (neither using it themselves nor monitoring it sufficiently to expel trespassers) has allowed the property to be wasted.[235] In rewarding the trespasser who ends the waste, the rule of adverse possession perfectly mirrors the Lockean imperative.[236]

Consider the examples of an unused field or a vacant house. In either scenario, the potential value of the resource (for food production or shelter) is wasted during the time it remains unused.[237] When an adverse possessor enters and makes use of the resource (for farming or shelter), the waste is ended. The trespasser in this scenario is analogous to the hypothetical music lover who rescues *Once upon a Time in Shaolin* just as Shkreli is setting it aflame.[238] To encourage the productive use of the resource, property law awards title to the trespasser who has: (1) identified a wasted resource; (2) intervened on behalf of the property to put it to advantageous use; and (3) thereby ended the waste.

To destroy permanently is not the same as allowing an object to spoil through disuse (assuming that the spoiling is later reversible).[239] But the law of adverse possession adds a temporal dimension to Locke's imperative. Objects in the world (be they fields, houses, or rap albums) are used and enjoyed (or disused and neglected) from moment to moment through time. This use-time is itself a thing of value that the Lockean imperative vindicates. When we are not using our houses or

---

[232] *See* Waldron, *supra* note 90, at 326 (explaining that Locke would disallow the hoarding of resources).

[233] LOCKE, *supra* note 29, at 249 ("Whatever is beyond this, is more than his share, and belongs to others.").

[234] *See* WALDRON, *supra* note 101, at 208–09 (describing the Lockean limit on ownership in terms of use).

[235] *See* Righetti & Schremmer, *supra* note 34, at 627 (discussing neglect in the context of an antiwaste principle).

[236] *See* Eduardo M. Peñalver, *The Illusory Right to Abandon*, 109 MICH. L. REV. 191, 210 (2010) ("We can also understand the law of adverse possession as . . . reflecting a preference that formal ownership match the actual use of land . . . .").

[237] *See* WALDRON, *supra* note 101, at 207 (describing how the Lockean owner forfeits his right to decide how to use property if "he fails to exercise it"); *see also* Pappas, *supra* note 80, at 753 ("Underuse of resources is one example of an unsatisfactory perceived resource context that can amount to waste.").

[238] In the context of adverse possession of real property, this type of rescue is potentially similar to the real-life rescue of rotting fruit described *supra* note 102 and accompanying text. For the discussion of the Shkreli example, see *supra* notes 151–56 and accompanying text.

[239] Here one could imagine an orchard that is neglected (such that the apples fall to the ground rotting) versus an orchard that is clearcut for timber.

fields, others could be using them.[240] Because time is finite and moves in one direction, when we hoard the use-time of an object without using it, we permanently destroy that use-time.

Of course, no one can use every object every moment, nor would this be a desirable threshold for retaining ownership rights.[241] But if use (as an aspect of nonwaste) is a value that is embodied in the Lockean imperative, the law of adverse possession is an example of line drawing around that value.[242] Judgments reflected in the various time requirements around adverse possession are also line-drawing judgments around the Lockean imperative.[243] How long until a period of disuse constitutes waste? Is ten years long enough?[244] Is twenty?[245]

With all of this talk of use, it is reasonable to wonder whether the rule of adverse possession is really directed at promoting the efficient use of resources rather than enforcing an imperative against waste.[246] We may wonder whether the rule is designed to place the object into the hands of the adverse possessor who values it more than the neglectful owner.[247] However, a rule that rewards use is a poor proxy for subjective valuation.[248] While it is certainly possible (and maybe probable) that *T* values the object more than *O*, it may also be the case that *O* values the object more than *T*, but *O* is not able to use it (or to exclude others from using it). It may be that a third-party individual *X* values the object more than both the adverse possessor and the neglectful owner but is deterred by the rule against trespass and so does not act to take possession.[249]

---

[240] Professor Steve Daskal has conceived of this harm as denying others the opportunity to make productive use of their own labor. Steve Daskal, *Libertarianism Left and Right, The Lockean Proviso, and the Reformed Welfare State*, 36 SOC. THEORY & PRAC. 21, 35–37 (2010); *see also* McCaffery, *supra* note 194, at 88 (describing the waste of "human capital" as an "especially salient" form of waste through nonuse).

[241] *See, e.g.*, Merrill, *supra* note 225, at 1127 (describing overinvestment in securing property).

[242] To be clear, antiwaste is not the sole value vindicated by adverse possession. *See id.* at 1128–31 (describing other values implicated by adverse possession).

[243] *See id.*

[244] *See, e.g.*, 1 PETER S. TITLE, LOUISIANA PRACTICE REAL ESTATE TRANSACTIONS § 5:15 (2d ed. 2023) (ten-year period for adverse possession).

[245] *See, e.g.*, 28A MICHAEL PILL, MASSACHUSETTS PRACTICE: REAL ESTATE LAW WITH FORMS § 27:5 (4th ed. 2023) ("The period required to acquire title by adverse possession is strictly held to 20 years.").

[246] *See* Merrill, *supra* note 225, at 1126, 1151 (describing ways in which the rule of adverse possession is in accord with efficiency values).

[247] Whether adverse possession in fact succeeds in awarding title to the person who values it more is a matter of dispute. *See* Lee Anne Fennell, *Efficient Trespass: The Case for "Bad Faith" Adverse Possession*, 100 NW. U. L. REV. 1037, 1064 (2006) (expressing skepticism that adverse possession distributes title to the person who values it most and observing "the involuntary nature of the transaction presents problems on grounds both epistemic (an inability to confidently identify the higher valuer) and normative (an interference with autonomy in alienating resources)").

[248] *See id.*

[249] *See id.*

It should also be noted that use is not always utility increasing.[250] There are scenarios in which allowing a field to lay fallow or a house to remain empty is a more efficient or valuable use of the resource.[251] Even in such a scenario, *O*'s title is still imperiled by *T*'s use.[252] In the scenario in which *O* is rationally and intentionally not using the property, *O* is still required to expend resources to identify and expel trespassers for the sole purpose of retaining title.[253]

This aspect of the rule of adverse possession reflects Locke's stewardship model.[254] The rule does not prize use for use's sake. The rule disallows *waste*: that is, intentional or neglectful destruction or spoilage in the absence of use or enjoyment.[255] The absence of use is a necessary but not sufficient condition to lose ownership. In this way, the boundary of ownership is not disuse, but *neglectful* disuse. The rule of adverse possession that allows an owner to retain title even when the owner is not using the property — as long as the owner takes sufficient care to expel others from the property — reflects a judgment about what level of neglect is likely to give rise to destruction or spoilage. If *O* is attentive enough to expel interlopers, then *O* retains title.[256] This potentially small expenditure of time, energy, or money is considered a sufficient down payment on *O*'s intention to use and enjoy the property in the future. Or, perhaps, the expenditure of time, energy, or money is itself evidence that *O* is already using and enjoying the property, as when someone enjoys the vista of an unplowed field or enjoys owning a childhood home that they can neither bear to live in nor bear to part with.[257] These unconventional uses and enjoyments could satisfy the Lockean imperative as long as they do not bleed over into neglect and spoilage.[258]

In this light, we see that the rule of adverse possession makes the most sense as an instantiation of Locke's antiwaste imperative (as a value independent of an efficiency-based value).

2. The Rules of Abandonment as Antiwaste. — The law of abandonment is also best understood as an instantiation of the imperative against

---

[250] *Id.* ("[P]assive uses that might look to the untutored like 'sleeping' may actually increase overall societal value.").

[251] *Id.* at 1064 & n.120.

[252] *See* Nadav Shoked, *Who Needs Adverse Possession?*, 89 FORDHAM L. REV. 2639, 2648 (2021) (describing the basic elements of adverse possession and noting that if the elements "are met, the trespasser becomes the land's owner at the expense of its real, or title, owner").

[253] *Cf.* Merrill, *supra* note 225, at 1130.

[254] *See* Righetti & Schremmer, *supra* note 34, at 618.

[255] LOCKE, *supra* note 120, at 17.

[256] *See* Merrill, *supra* note 225, at 1130 ("The [owner] does not have to develop his land or even occupy it; all he has to do periodically is assert his right to exclude others.").

[257] *See* WALDRON, *supra* note 101, at 161 (discussing Locke's acceptance of less conventional uses of property).

[258] *Id.*

waste.[259] Real property cannot be abandoned.[260] If real property were to be abandoned — rather than transferred to a new owner — it could beget a waste, in the Lockean sense.[261] Abandoned real property is likely to be unused or to have its potential value destroyed by neglect.[262] By prohibiting an owner from abandoning even a negative-value parcel of real property, the law encourages the owner to invest in the property or to otherwise assume the necessary transaction costs associated with transfer, rather than continue to incur tax or other liability indefinitely on the negative-value property.[263]

Although there may be instances in which abandoning real property might be utility maximizing, property law disallows it.[264] This again reflects the physicality or "thingness" inherent in Locke's objection to the destruction of corporeal resources.[265] To abandon real property is to allow that specific parcel — which property law correctly understands to be a nonfungible piece of finite earth — to potentially wallow in disuse and neglect.[266] Having undertaken ownership of real property, an owner is obliged to personally steward it or pass it along to someone else.[267] To do otherwise is to violate the Lockean imperative against waste.[268]

Although land cannot be abandoned, nonpossessory interests in land (for example, easements) *can* be abandoned.[269] This, too, is evidence that the law of abandonment is best understood as an instantiation of the imperative against waste. Professor Lior Strahilevitz has observed that, "at common law, corporeal hereditaments like fee simple interests could not be abandoned but incorporeal interests (e.g., easements,

---

[259] *See generally* Lior Jacob Strahilevitz, *The Right to Abandon*, 158 U. PA. L. REV. 355, 358–59 (2010) ("There is very little legal writing on the abandonment of property." *Id.* at 358.).

[260] The case most often cited in support of this statement is *Pocono Springs Civic Ass'n v. MacKenzie*, 667 A.2d 233, 235 (Pa. Super. Ct. 1995), which held that *O* cannot abandon title to real property as long as *O* is title holder of record. *See id.* at 236; *see also* Peñalver, *supra* note 236, at 200 ("[T]he common law flatly prohibits the legal abandonment of the fee simple interest in land."); Strahilevitz, *supra* note 259, at 399–400, 412 ("[T]he abandonment of corporeal interests in real property is flatly prohibited." *Id.* at 412.).

[261] *But see* Strahilevitz, *supra* note 259, at 360 ("[N]ew information technologies mitigate the problems associated with the decay or waste of an abandoned resource during the period in which it remains up for grabs . . . .").

[262] *But see id.* at 412 (arguing that "[r]eal property's indestructibility mitigates the damages associated with resource decay" that might otherwise result from abandonment).

[263] *See id.* at 362–63 (even negative-value properties are subject to the common law prohibition on abandonment).

[264] *See id.* at 355.

[265] *See supra* note 38 and accompanying text; *see also supra* notes 68–69 and accompanying text.

[266] *But see supra* note 261 and accompanying text.

[267] Righetti & Schremmer, *supra* note 34, at 627 (observing that an antiwaste principle involves an aspect of stewardship of resources).

[268] *See* Strahilevitz, *supra* note 259, at 355 (noting that a better rule would take into account "the value of the [property] and the steps that [*O* has taken] to ensure that would-be claimants are alerted to the resource's availability").

[269] *Id.* at 399.

mineral interests, and licenses) could. This account is incorrect if abandonment is to be defined coherently."[270] Yet the dichotomy between corporeal and incorporeal interests *is* coherent if we understand it as an instantiation of the imperative against waste.[271]

Abandoning the right to *use* real property does not destroy or lay waste to the underlying corporeal asset (the land itself or the minerals within it) because the owner of the corresponding possessory interest automatically takes title to the abandoned use.[272] The resource is not stranded without an owner.[273] Instead, abandoning incorporeal interests is just a form of title *transfer*.[274]

Consider, for example, the right to pick apples from *O*'s orchard. Ordinarily, the right to pick apples on *O*'s property belongs to *O*, but *O* can sever that right and sell it to *X*. If at a later point *X* abandons their right to pick apples without transferring it to another owner, the right to pick apples returns to *O*. An abandonment in this context operates as a release — *X* releases the right to enter and pick apples back to *O*.[275] If *O* does not want to pick the apples, *O* is now free to sell or give the right to someone who does.

In contrast, if *O* abandons the corporeal right to use and possess the actual orchard, no one owns the right to pick the apples or the right to enter the orchard to pick the apples. Because property rights are good against the world, anyone who might want to pick the apples will assume that the apples are already owned by someone else.[276] They will assume that to enter the orchard is a trespass and that to take the apples is a theft. So, the apples might remain unpicked and fall to the ground unused, not because they are negative-value objects, but because they are valuable objects that have been abandoned on real property that no one has a specific right to enter. By abandoning the real property, *O* has sequestered the apples and negligently permitted them to spoil, which is a violation of the imperative against waste.

---

[270] *Id*.

[271] Strahilevitz notes that this distinction is commonly explained as a historical leftover of English feudalism, as "the crown could not tolerate the nonownership of land" because of the loss of "feudal incidents." *Id*.

[272] *See, e.g.*, Giannelli Mgmt. & Dev. Corp. v. MPA Granada Highlands, LLC, 27 LCR 211, 216 (Mass. Land Ct. 2019) (stating that an abandoned prescriptive easement is merged with the servient tenement).

[273] *See* City of Austin v. Whittington, 384 S.W.3d 766, 788 (Tex. 2012) ("When an easement is abandoned, the landowner is vested with unencumbered fee simple title, and the presumption of an intent to convey the easement no longer applies.").

[274] *See id.*

[275] Or back to the servient tenement, assuming the *profit à prendre* runs with the land.

[276] This problem might be solved with a sign stating, "Free apples! Please enter and pick the apples." But who has the right to convey this permission if no one owns the orchard? *See* Peñalver, *supra* note 236, at 197 ("Taking affirmative steps to direct the property towards another individual undercuts the claim that the putative abandoner had the requisite unconditional intention to abandon rather than the more conditional intention to convey the object only to a particular person or class of people.").

On the other hand, while abandonment is assumed to cause real property to be wasted, the same is not true for objects.[277] Property law also regulates the disposal of unwanted objects in a manner that is consistent with the imperative against waste. The object of the law of abandonment in this context is twofold: (1) to increase the likelihood that unwanted objects are put into the possession of people who will use them; and, when that is not possible or practicable, (2) to limit the harm that the disposition or disposal of unwanted objects inflicts on other real property or chattel.[278]

To avoid waste, property law allows unilateral abandonment of unwanted objects as an alternative to disposal or destruction of the object, which could result in waste.[279] Objects, unlike land, can be thrown away or destroyed. Abandonment gives unwanted objects a second chance at providing use and enjoyment when the alternative is destruction.[280]

Abandonment in the context of objects is thought to decrease waste by alerting nonowners that unused objects are available.[281] This is primarily because the behaviors that we undertake to manifest our intent to abandon objects — like leaving an unwanted sofa on the sidewalk — signal to other people that the objects are up for grabs.[282] Anyone who has participated in a "freecycling" or "buy nothing" community is familiar with this idea: that much of the waste that attends unwanted objects can be mitigated by lowering the transaction costs associated with connecting people who want to be rid of unwanted objects with people who want those objects.[283] Connecting unwanted objects with people who want to use them both keeps the objects out of landfills and forestalls the demand for newly manufactured objects to be produced.[284]

So, while common law rules such as adverse possession, abandonment, and others might, in various applications, seem to be inconsistent with norms of efficiency, fairness, or distributive justice, the internal

---

277 *See* Strahilevitz, *supra* note 259, at 362 (positive-value objects are sometimes abandoned).

278 For example, abandonment on private property is not allowed. *See* Lee Anne Fennell, *Forcings*, 114 COLUM. L. REV. 1297, 1309 (2014).

279 *See* Peñalver, *supra* note 236, at 196 ("A chattel will be deemed abandoned when 'the owner intentionally and voluntarily relinquishes all right, title, and interest in it.'" (quoting JOHN G. SPRANKLING, UNDERSTANDING PROPERTY LAW § 4.03[B][1] (2000))).

280 *See* Strahilevitz, *supra* note 259, at 359 ("[O]ne danger of rules that unduly restrict the abandonment of positive-value resources is that owners will be left with little choice but to destroy those resources instead.").

281 *See* Peñalver, *supra* note 236, at 192.

282 *See id.*

283 Strictly speaking, "freecycling" and "buy nothing" communities are gifting communities, rather than abandonment communities, but they serve as more effective versions of leaving an unwanted object on the sidewalk with a sign that says "free."

284 *See* Strahilevitz, *supra* note 259, at 361 ("The most significant advantages of abandonment are that it allows an owner to avoid the transaction costs associated with a consensual transfer . . . .").

consistency of these rules is revealed when we understand them as instantiations of the Lockean imperative against waste.

Although a justice principle, an efficiency principle, and an antiwaste imperative may often point in the same direction, to the extent that these values depart from one another in specific applications, a priority to avoid waste becomes apparent. Thus, Locke's outsized influence in early Anglo-American property law remains manifest in the common law rules that we continue to use today. In this light, it becomes clear that the imperative against waste best explains these and many other common law rules of property, such that it can be said to represent a central commitment of property law.[285]

However, assuming that American property law is committed to the imperative against waste, how does that commitment intersect with the problem of planned obsolescence and the creation of intentionally useless objects?

C. Planned Obsolescence and the Imperative Against Waste

It may be self-evident that the strategy of planned obsolescence violates the imperative against waste, but some points merit particular emphasis.[286] Although there is much potential for interesting line-drawing questions within the Lockean paradigm, applying the imperative against waste to planned obsolescence is not a particularly hard case. When a manufacturer intentionally renders an object useless — intending that it will be discarded by the consumer and the resources it represents thereby wasted — the manufacturer has violated the Lockean imperative against waste. Intentional obsolescence is a form of intentional destruction. Importantly, because the right of ownership excludes the right to destroy,[287] a manufacturer ceases to be an owner at the point of intentional destruction.

To illustrate this point, recall the case of the Phoebus Cartel.[288] Bulbs that were capable of burning for 2,500 hours were intentionally reduced to 1,000 hours of functional life.[289] At hour 1,001, the object of the light bulb not only becomes obsolete, but it also becomes useless. A

---

[285] For an illuminating interrogation of the concept of waste (and antiwaste rules), see generally Pappas, *supra* note 80.

[286] There may, too, be those who are skeptical about the role that property law plays or should play in the resolution of a problem created largely through market forces. However, it is axiomatic to state that the law generally, and property law specifically, creates and enforces the powers and responsibilities of owners. These powers and responsibilities are not a natural kind. They reflect choices about the allocation of resources that have enormous social consequences. As Professors Timothy Mulvaney and Joseph Singer have observed, "Lawmakers are not part of the story of ownership design — they *are* the story of ownership design. Their public decisions about law determine when the exercise of private power is legitimate and when it is not." Timothy M. Mulvaney & Joseph William Singer, *Essential Property*, 107 MINN. L. REV. 605, 630 (2022) (footnote omitted).

[287] *See supra* notes 184–88 and accompanying text.

[288] *See supra* notes 59–63 and accompanying text.

[289] Krajewski, *supra* note 59.

burnt-out light bulb is discarded. The manufacturer intends it to be discarded. There is no use or enjoyment that corresponds to the period of obsolescence. Note that this is not a case of the bulb being destroyed for cultural or entertainment purposes as with an art installation. The bulb is destroyed for the purpose of being destroyed. Destruction is an end in itself. Destruction is the point.

We might say that destroying the light bulbs at hour 1,001 is analogous to letting apples rot to increase their market price.[290] There is a rational reason why the manufacturer destroys the bulbs (or the apples), and it might even be the case that the destruction of these objects is utility-maximizing depending on how we choose to define the reference class. But intentionally destroying the light bulbs at hour 1,001 is a violation of the Lockean imperative against waste.

It could be argued that a manufacturer engaged in planned obsolescence does not violate the Lockean imperative because the imposed obsolescence increases future bulb sales, and that is a kind of use and enjoyment of the obsolete objects. In other words, the bulbs' destruction is in service of something that benefits *O*. But this argument ignores the "thingness" of the bulbs themselves.[291] While this argument might be persuasive from a consequentialist or efficiency perspective that understands the bulbs in terms of their fungible, abstract value within a larger system, it misses the point of the Lockean analysis. If the benefit derived from destruction is simply keeping the objects from being used by others (as is the case with planned obsolescence) then it violates the central prescription of the Lockean imperative.

It is important to recall that Locke's imperative is about the boundaries of ownership itself.[292] The power to intentionally destroy (absent use and enjoyment) is excluded from the right to own because when *O* takes resources from the commons and then intentionally destroys them rather than using them, *O* has deprived others of the beneficial use of those resources.[293] Similarly, in the context of planned obsolescence, when a manufacturer takes scarce resources like cobalt and indium to make smartphones that could potentially remain functional for decades, but then intentionally and artificially cuts short the functional life of those phones, those scarce resources are lost to other users.[294]

The phone too, as the composite of those scarce resources, is also lost as a functional object to the purchaser who bought it from *O*. The point of planned obsolescence is to prevent the purchaser from continuing to

---

290 *See supra* note 107 and accompanying text.

291 *See supra* notes 68–69 and accompanying text.

292 LOCKE, *supra* note 29, at 249 ("But how far has he given it us, to enjoy?" (emphasis omitted)).

293 *Id.*

294 *See generally* Makov & Fitzpatrick, *supra* note 11 (discussing the inclusion of elements in smartphones that "include[e] a variety of precious, critical, and conflict materials," *id.* at 1).

use the phone that they purchased.[295] Nonuse *is* the point.[296] The goal of the strategy is to deprive the purchaser of continued beneficial use and enjoyment of the phone. The goal is to get the purchaser to stop using their current phone and purchase a new phone to replace it.[297] *O intends* that the previously functional object will be discarded by the purchaser.[298] *O* is *trying* to create waste.

Moreover, whatever benefit is derived from the destruction of objects through planned obsolescence does not accrue to the purchaser of the product even though the destruction occurs *after* title transfers. This is akin to *O* selling their orchard to O_2 but leaving behind a hidden timed device that will release poison at a designated time and thereby destroy O_2's apples at a later point in time. If the apples no longer belong to *O* at the time they are destroyed, under what theory of property could they reasonably be within *O*'s power to destroy?[299] How is *O* able to convey fee simple title to objects that *O* has equipped with a self-destruct function?

Importantly, Locke's justification for the limitation on ownership is tied to the *culpable* behavior of *O*.[300] An owner *ceases to be an owner* when their intentional or neglectful behavior causes an object to be destroyed in the absence of corresponding use or enjoyment.[301] Ownership simply does not extend as far as the power to intentionally destroy.[302] In the context of planned obsolescence, this means that the common law rules of property should recognize that the apples (or bulbs, or smartphones) *cease to belong to O* at the point of planned obsolescence. A consideration of this point follows.

III. A Reversionary Interest in Intentionally Useless Things

In property law, the default assumption is that when a title is transferred, it is forever severed from the original owner (*O*).[303] This is true in the context of both real property and chattel.[304] When Blackacre is conveyed to a subsequent owner as in: *O* conveys Blackacre "to *A*," *A*

---

[295] *See* Perzanowski, *supra* note 51, at 2–3.

[296] *See* Bulow, *supra* note 3, at 746.

[297] *See* Perzanowski, *supra* note 51, at 263.

[298] *See* Waldron, *supra* note 101, at 208.

[299] *Cf.* Locke, *supra* note 29, at 47 ("[T]he utmost Property Man is capable of . . . is to have a right to destroy any thing by using it.").

[300] *See* Waldron, *supra* note 101, at 208 (describing Lockean waste in terms of negligence and intent).

[301] Locke, *supra* note 29, at 249.

[302] *See supra* notes 184–88 and accompanying text.

[303] *See* Pill, *supra* note 245, § 1:6 (noting that a fee simple theoretically "could last forever").

[304] *See* Render, *supra* note 29, at 563 ("[I]n real and personal property the principal forms of ownership interest are the fee simple, fee simple defeasible, life estate, and leasehold."); Merrill & Smith, *supra* note 29, at 13 (noting transfer of a fee simple does not create a future interest); *id.* at 17–18, 18 n.67 (making a similar point about chattels).

now has a fee simple absolute and *O* has no interest whatsoever in Blackacre.[305]

However, sometimes *O* retains an interest in Blackacre.[306] When that happens, *O*'s future interest in Blackacre is known as a "reversion[ary] . . . interest."[307] Often, a reversionary interest is explicitly created by the conveyance, as in: *O* conveys Blackacre "to *A* for ten years followed by a reversion in *O*."[308] But reversionary interests are also implicitly created *by operation of law* when *O* has conveyed *less* than a title in perpetuity, as with: *O* conveys Blackacre "to *A* for life."[309] In this example, *O* has conveyed a title that does not go on forever: It will end when *A*'s life ends.[310] Although *O* has not identified an owner to succeed *A*, property law implies a subsequent owner: *O*.[311] Blackacre will revert to *O* when *A* dies.[312] Any time that *O* conveys out Blackacre but fails to provide a chain of title that extends into forever, then *O* has retained a reversionary interest.[313]

Now, how does this apply to the context of intentionally useless objects?

On the account offered here, when a manufacturer conveys title to an object that has a planned obsolescence, the manufacturer/owner (*M*/*O*) is *intentionally*, although implicitly, conveying something less than a title in perpetuity. *M*/*O intends* that the product has a period of limited utility — the product was designed with that purpose in mind. In this way, *M*/*O* has created an object that has a built-in *usefulness terminus*.

M/*O* has designed the product so that it will only remain useful or usable for a limited period of time. The product will cease to be useful (or its usefulness will be radically altered) when the intentional design feature that triggers its planned obsolescence is actuated. We might think of this as a defeasible condition.[314] The product feature that will

---

[305] *Cf. infra* note 316 and accompanying text.

[306] *See* JESSE DUKEMINIER ET AL., PROPERTY 315 (9th ed. 2018) (describing reversionary interests).

[307] Lewis M. Simes, *Reversions*, *in* 1 AMERICAN LAW OF PROPERTY: A TREATISE ON THE LAW OF PROPERTY IN THE UNITED STATES § 4.16 (A. James Casner ed., 1952).

[308] DUKEMINIER ET AL., *supra* note 306, at 315.

[309] Simes, *supra* note 307, § 4.16 ("A reversion is the interest remaining in the grantor, or in the successor in interest of a testator, who transfers a vested estate of a lesser quantum than that of the vested estate which he has.").

[310] *See* DUKEMINIER ET AL., *supra* note 306, at 315.

[311] *See id.* (a reversion is implied in *O*, where *O* fails to identify a future interest holder).

[312] *See id.*

[313] 4 MILLER & STARR, CALIFORNIA REAL ESTATE § 12:4 (Karl E. Geier ed., 4th ed. 2015) ("Every estate in fee simple defeasible is accompanied by a future interest." (citing *id.* §§ 12:25–:33)).

[314] *See id.* (describing defeasible estates (citing Cherokee Valley Farms, Inc. v. Summerville Elementary Sch. Dist., 106 Cal. Rptr. 467 (Ct. App. 1973))); *see also supra* note 28 and accompanying text.

cause its planned obsolescence is a triggering condition — that is a condition that ends (or radically alters) the utility of the object.

In this light we can understand that *M/O* has intentionally embedded a triggering defeasible condition *into the object itself*. *M/O*'s ownership does not include the power to destroy and so *M/O*'s power to convey likewise ends at the point of destruction: that is, the point at which *M/O* intentionally rendered the object useless. *M/O cannot convey what M/O does not own*.[315]

In this way, the *M/O*'s act of intentional destruction cleaves the legal life of the object into two distinct segments. In the first, the *M/O* deprives itself of the capacity to convey the object beyond the point of obsolescence. The second segment of the legal life of the object then begins at the point of obsolescence and extends indefinitely into the future. The owner retains an inalienable reversionary interest in the object with respect to this second segment.[316]

How does this work with an actual object? Let's assume *M/O* designs a phone with a battery that is designed to fail within two years and could not be replaced without destroying the phone.[317] Then the phone is sold to you. Under these hypothetical circumstances, the phone is conveyed to you *until such a time as the battery fails*, at which point it ceases to be the thing it is now: a functioning phone. What is a phone once it ceases to have the capacity for battery power? It is no longer a phone. It is still an object that occupies space in the world, but it is no longer a *phone*. As a practical matter you have been dispossessed of your phone, which has been replaced with the hull or casing of a phone.

Moreover, this dispossession was not brought about by happenstance or by force majeure, nor was it caused by the inexorably deleterious

---

[315] *See* Donald J. Kochan, *Dealing with Dirty Deeds: Matching* Nemo Dat *Preferences with Property Law Pragmatism*, 64 U. KAN. L. REV. 1, 1 (2015) (discussing *nemo dat*).

[316] The reversionary interest is inalienable even though *M/O* may wish to dispossess itself of it. For an excellent discussion of the many ways that property law "forces" ownership on unwilling owners as a way of correcting externalities, see generally Fennell, *supra* note 278, describing how the remedy of forced ownership responds, in part, to the difference between expected and actual outcomes. Professor Lee Fennell observes:

> [With f]orced ownership . . . [o]ne is made to bear actual outcomes, rather than simply being charged with expected outcomes. It is a different thing to pay damages (even "permanent damages" designed to cover projected future impacts) than it is to be exposed to ongoing liability. The two situations present different risk profiles and incentive structures.

Id. at 1320. In the context of an intentionally useless object, a forced reversionary interest (rather than a monetary penalty) causes the owner to bear the actual cost of the object, not the expected cost. In this way, the reversionary interest forces the *M/O* to own the problems generated by the existence of legions of useless objects — not just the expected cost of those problems.

This is particularly important in the context of intentionally useless objects because their persistent physicality (or "thingness") creates a problem that extends into the future with a complex set of manifestations that are difficult, if not impossible, to accurately assess at the time of manufacture or sale. A forced reversionary interest requires the *M/O* to "own" the risk that the objects' actual toxic and deleterious impacts will exceed the scope of their expected impacts.

[317] *See supra* note 43 and accompanying text.

effect of time itself. Instead, the hand of *M*/*O* intentionally reached across time and space to revoke the utility and the usefulness it had previously conveyed. Like a landlord cutting off the electricity, *M*/*O*'s intentional act renders the thing unsuitable for the purpose for which it was purchased, transforming the thing you once had (a phone) into a different object altogether (a soldered ensemble of semiprecious metals and forever chemicals).

The usefulness of the object conveyed has a time limit that has been imposed by *M*/*O*. Therefore, it is reasonable to characterize the title that *M*/*O* conveys as implicitly limited to that period. This is partially because we do not assume that *M/O* intends a fraud in the conveyance. But more importantly, *M/O* can only convey the estate that *M/O* has (or less). If *M/O* had only a life estate in the phone, then *M/O* could only convey a life estate (or less) to a purchaser. In the example of planned obsolescence, *M/O* has only a defeasible estate in the phone, because a defeasible condition is built into the object itself. Even if *M/O* kept the phone (rather than conveying it to a purchaser), the phone would still become useless by design when the triggering feature is actuated. The phone has an intentionally predetermined period of usefulness, regardless of who owns it.

Because *M/O* has only a defeasible estate in the phone, *M/O* can only convey a defeasible estate to a purchaser. This means that by operation of law, *M/O* has retained a reversionary interest in the phone. Moreover, the reversionary interest is *inalienable* because *M/O* lacks the capacity to convey it (since *M/O*'s ownership rights, including the power to convey, ended at the point of intentional destruction). When the phone becomes useless by virtue of the defeasible condition, *M/O*'s inalienable reversionary interest becomes immediately possessory.[318]

What does it mean for *M/O*'s inalienable reversionary interest to become possessory? It means that the intentionally useless phone is now a trespass. The object itself is owned by *M/O* the instant the defeasible condition occurs — that is, the instant the object became useless by design. The useless object may be sitting in someone's desk drawer or tossed into the garbage, but wherever it lies, it belongs now to the manufacturer. The consumer (who owned the phone when the defeasible condition became actuated) now has a cause of action for trespass against the manufacturer. We cannot just leave our garbage in other people's houses.

---

[318] The reversionary interest following a fee simple defeasible is a possibility of reverter, which becomes automatically possessory when the defeasible condition is met (that is, the triggering event occurs). *See* HOWARD J. ALPERIN ET AL., 14C MASSACHUSETTS PRACTICE: SUMMARY OF BASIC LAW § 14:15 (5th ed. 2017) ("A chief distinguishing characteristic of the possibility of reverter is that it automatically becomes a present estate in fee simple in the transferor (or his successors in interest) when the stated event occurs — the transferor is not required to make an election or take any action to regain possession.").

As a practical matter, this means that the manufacturer is legally obliged to remove the object (thus ending the trespass) and retake possession. The manufacturer, rather than the consumer, becomes responsible for disposing of the useless object. In this liability paradigm, the cost of intentional uselessness — this violation of the Lockean imperative against waste — is at least partially borne by the entity that is profiting from it. By recognizing that planned obsolescence necessarily creates a defeasible estate of inherent limitation, we place pressure on the party responsible for the malfeasance.

It is reasonable to wonder: If *M/O* lacked the power to convey title past the point of planned obsolescence (because *M/O*'s ownership does not extend to the act of destruction for its own sake), how can *M/O* create a future interest in itself following the defeasible estate? In other words, how can *M/O* both *not be an owner* (hence the defeasible title to purchaser) and also simultaneously *be an owner* of a reversionary interest in the same object? The key is in understanding that *M/O*'s act of intentional destruction cleaves the legal life of the object into two distinct segments. The first segment is the functional lifespan of the object — as a phone, for example — which *M/O*'s intentional sabotage has restricted to a set number of years. The second segment is the potentially infinite amount of time that the object will spend as an intentionally useless thing *after* its functional life ends.

When *M/O* sells the phone, it can only convey a title that will extend to the time the object will actually be a phone. *M/O* cannot convey title to the segment of time after the phone will transform into the intentionally useless object (since *M/O*'s right as owner does not extend to the destructive act). So *M/O* can convey title for the first segment, but lacks capacity (as owner) to convey title for the second segment.

Yet, when title less than a fee simple absolute is created, a corresponding future interest is always necessarily created by operation of law. Property law does not permit a gap in ownership,[319] so *M/O*'s defeasible conveyance necessarily leaves a reversionary interest.[320] The reversionary interest is inalienable because *M/O* lacks the capacity to convey it. However, the reversionary interest is vested in *M/O* and when it becomes possessory, a new estate in *M/O* begins. Now *M/O* has the responsibility that attends the right of present possession, as well as other ordinary incidents of ownership. *M/O* lacked the power to convey the future interest (that is, the reversionary interest) but when *M/O*'s reversionary interest becomes possessory, *M/O* becomes the present owner of the intentionally useless thing, with the usual incidents of ownership (including the right to convey).[321] At the point of obsolescence, *M/O* immediately has the right of present possession including the right

---

[319] *See* Fennell, *supra* note 278, at 1311–12, 1324.
[320] *See* ALPERIN ET AL., *supra* note 318, § 14:15.
[321] *See id.*

to convey. But until that moment, *M/O* holds an inalienable reversionary interest.[322]

The fact that the reversionary interest is inalienable is not without precedent.[323] Although the modern trend has been toward greater alienability,[324] both statutory and common law property rules have long recognized many species of inalienable future interests,[325] which are necessary to correct the negative externalities caused by *M*/*O*'s intentional destruction of the object.[326]

So a reversionary interest in intentionally useless objects is compelled by a consistent application of the existing rules of property in light of the Lockean antiwaste imperative. But of what consequence is the reversionary interest? The supposition offered here is that if courts and legislatures were to recognize this reversionary interest, they could potentially influence the practice of planned obsolescence by increasing the cost (and/or decreasing the profitability) while increasing transparency around the practice.

A. Contracting Around the Reversionary Interest

Could *M*/*O* solve the problem of an implied reversionary interest by simply contracting around it with a consumer (*C*)? For example, buried deep within the contract of adhesion that is a smartphone purchasing agreement, could *M*/*O* simply state that upon the point of disutility when the reversionary interest becomes possessory, *C* agrees to take title thereby eliminating the unwanted future interest in *M*/*O*?

On the account offered here, the answer is no, but the reasons are complex. As an initial matter, a central argument of this piece is that *O* cannot convey title to an object that *O* has intentionally rendered useless. *O* can convey a present interest in the functional object, but not a future interest in the obsolete object. That is the reason that *M*/*O* can only convey a defeasible title (as opposed to a fee simple) in the first

---

322 *Cf.* Merrill I. Schnebly, *Restraints upon the Alienation of Legal Interests* (pt. 2), 44 YALE L.J. 1186, 1212 (1935) ("Restraints upon the alienation of future interests . . . [are] operative only so long as the future interest remains non-possessory; or, the restraint may be limited to continue for some possible period of time after the future interest has come into actual possession.").

323 4 JOHN A. BORRON, JR. & LEWIS M. SIMES, SIMES AND SMITH — THE LAW OF FUTURE INTERESTS § 1852 (3d ed. 2002).

324 *See id.* ("[T]here is a general policy of the law in favor of removing clogs on alienability.").

325 *See, e.g.*, Mahrenholz v. Cnty. Bd. of Sch. Trs., 417 N.E.2d 138, 141 (Ill. App. Ct. 1981) ("We emphasize here that [Illinois law as it existed at the time] provides that rights of re-entry for condition broken and possibilities of reverter are neither alienable or devisable . . . ." (citing Deverick v. Bline, 89 N.E.2d 43 (Ill. 1949))). It is worth noting, again, that the interest held by *M*/*O* would be the possibility of a reverter following a fee simple defeasible.

326 However, that rationale has less purchase here given that *M*/*O*'s culpable behavior has already intentionally undermined the marketability of the object itself. A future interest in an obsolete object has a negligible market value to begin with. If the intentionally obsolete objects at issue here were sufficiently marketable, the problem of e-waste would be significantly reduced. Requiring *M*/*O* to wait until the moment of intentional obsolescence for their reversionary interest to become transferable is an appropriate corrective to *M*/*O*'s culpable behavior.

place.[327] If *O* had the power to convey both the defeasible estate and the corresponding future interest to *C*, then *O* would have the power to convey a fee simple. *O* lacks the capacity to convey title to an object that does not yet exist at the time of the sale: the intentionally obsolete object.[328]

But conveying title to the reversionary interest is not the only way that *M*/*O* might try to contract around the problem presented by the unwanted reversionary interest. *M*/*O* might write a clause in the sales contract to the effect that *C* agrees to dispose of the product when it reaches its point of planned obsolescence. In this scenario, *M*/*O* still has a possessory reversionary interest, but (assuming an enforceable contract) *C* has agreed to dispose of the object on behalf of *M*/*O*. In essence, *C* becomes an agent of *M*/*O*. At the time that *O*'s reversionary interest becomes possessory, *M*/*O* has contracted with *C* to undertake the responsibility of disposing of the intentionally useless thing.

Of course, to engage in this contract, *M*/*O* and *C* must have a meeting of the minds such that *M*/*O* makes clear to *C* that: (1) *M*/*O* has a reversionary interest in the object because of planned obsolescence and (2) *M*/*O* is contracting with *C* (and compensating *C*) for disposing of the object on behalf of *M*/*O*. Even this small step might increase transparency around *M*/*O*'s strategy of planned obsolescence and thereby increase pressure on the practice. This extra step of a secondary disposal contract might also increase the cost to *M*/*O* to the extent that *M*/*O* has to reasonably compensate *C* for the service of disposing of the object. If the cost per unit were sufficiently increased, the disposal contract might potentially depress demand (presumably *M*/*O* is already charging the maximum amount that it reckons the market will bear without depressing demand).

However, compliance is the biggest problem for *M*/*O* in contracting with *C* to dispose of the intentionally useless object.[329] Regardless of what the contract for sale may say, most intentionally useless objects will still likely end up in landfills. Most consumers are likely to be bad agents.[330] Consumers are likely to disregard the specific terms of the disposal contract such that the objects (through whatever circuitous path) will likely end up in conventional garbage collection facilities. This would not be a problem for *M*/*O* if consumers were dumping their own products in garbage collection facilities, but when the objects are dumped they are no longer owned by the consumer. The dumped objects still belong to *M*/*O*.

---

[327] *See supra* note 28.

[328] *See supra* note 326 and accompanying text.

[329] *See* Gilal et al., *supra* note 8, at 1785 ("Research has shown that the vast majority of consumers are unwilling to dispose of e-waste, preferring to keep obsolete products at home rather than returning them to manufacturers for recycling.").

[330] *See id.*

Here's an analogy: Imagine that I sell my house and move out but leave a large ugly sofa behind. Assuming the terms of my conveyance to the buyer provide that the house will be surrendered empty, the sofa is a trespass.[331] Now assume that I contract with business *X* to come pick up the sofa and take it to another location — but the people I contract with never arrive. The new owner of my house wants the sofa gone. Am I liable for the cost of getting rid of it even though I contracted with *X* to move the sofa? Of course, assuming my contract with *X* did not transfer title of the sofa to *X*.[332] While I could have a cause of action for breach of contract against *X*, I am still responsible for remedying the trespass against the new owners of my old house.[333]

The same holds true for *M*/*O* and its intentionally useless objects. To the extent those objects still belong to *M*/*O*, the fact that *M*/*O* contracted with a third party to arrange for their disposal does not change the status of the trespass.[334] If a large number of intentionally useless objects end up in a municipal landfill, for example, and if *M*/*O* has not contracted with the owner of the landfill to allow those objects to take up space there, then the owner of the landfill has a cause of action against *M*/*O* for the trespass.[335] We cannot leave our garbage on other people's property.[336]

There is also a commendable degree of epistemic simplicity to this liability paradigm. In property law, tracing title can present a substantial evidentiary hurdle.[337] This is especially so in the case of objects (chattel) in which title can quickly pass through many hands without a recording requirement or a written document.[338] Tracing title to a discarded object for the purpose of imposing trespass liability would ordinarily be cost prohibitive, but in the context of planned obsolescence, the serial number on the object itself reveals the owner. In the paradigm offered here, we can *always* identify the owner of the trespassing object

---

[331] *See* RESTATEMENT (SECOND) OF TORTS § 160 (AM. L. INST. 1965).

[332] *See id.* In fact, even if the contract did transfer title of the sofa to *X*, I would still be liable to the new owners, having specifically promised to deliver the house empty, but this point is not significant in terms of the analogy at work here.

[333] *See id.* § 901. Pursuing contract remedies against customers is unlikely to be a successful strategy for *M*/*O*.

[334] Presumably, *M*/*O* could try to immunize itself from liability stemming from noncompliance by *C*, but it is not especially practical for a company to try to chase down individual customers who fail to properly dispose of its products.

[335] *See* Strahilevitz, *supra* note 259, at 363 ("Various laws at the state and local level prohibit the nonconsensual dumping of waste on public and private property.").

[336] *See* Fennell, *supra* note 278, at 1311–12 ("[L]aws prohibit people from discarding chattels on the property of others without permission.").

[337] *See, e.g.*, 23 NEW YORK JURISPRUDENCE 2D § 108 (2d ed. 2017) (describing chain of title issues related to chattel in the context of New York law).

[338] *See* DUKEMINIER ET AL., *supra* note 25, at 116 (explaining that abandoning an item of personal property (that is, chattel) is sufficient to transfer title, in contrast to real property, which requires a written document (that is, a deed)).

because *M/O* lacks the capacity to convey the reversionary interest away.[339]

B. Abandonment as a Strategy to Dislodge the Reversionary Interest

While signaling behaviors can connect unwanted objects with would-be owners, waste calculus changes when it comes to objects that no one wants, like broken refrigerators or intentionally obsolete smartphones.[340] Most unwanted objects end up in landfills.[341] For the most part, jurisdictions impose residency-based requirements that permit individual residents and businesses within their jurisdiction to dump their unwanted objects while prohibiting residents and businesses outside the jurisdiction from dumping garbage within the jurisdiction.[342]

However, in the context of intentionally useless objects, it is important to remember that the consumer who is saddled with the useless object is not the owner of that object. While the consumer is a resident of their jurisdiction, the *M/O*, generally speaking, is not. Most jurisdictions disallow the transportation of residential or commercial garbage from other jurisdictions for the purpose of dumping at the local landfill.[343] In other words, most jurisdictions would prohibit Apple or Samsung from driving truckloads of e-waste into their jurisdiction for the purpose of abandoning them in the jurisdiction's landfill.[344]

Yet, in the context of intentionally useless items, manufacturers are abandoning their objects in the homes and hands of local consumers,

---

[339] If *M/O* is unable to divest itself of its reversionary interest, *M/O* might seek a strategy of simply abandoning the object. Abandonment, after all, is the primary means by which most people rid themselves of unwanted objects. However, for reasons discussed *infra* section III.C, pp. 1313–14, a strategy of abandonment would also be unsuccessful.

[340] There may, of course, be individuals or entities who do want to own intentionally useless objects — perhaps to use the raw material, or for historical or collection purposes, and so forth. But the transactional costs associated with identifying those would-be owners and transporting the objects to them are often prohibitively high. Moreover, for the most part obsolete objects are negative-value property. *See generally* Bruce R. Huber, *Negative-Value Property*, 98 WASH. U. L. REV. 1461, 1464 (2021) ("Negative-value property is property which not only has no positive market value, but which cannot practically be alienated or discarded without improving it, bundling it with other property, or making an additional side payment. As to personal property, the category is enormous. Within your place of residence — if not within your immediate reach — there are almost certainly items which you would rather not own; which would attract no willing buyer; and the disposal of which will require your time, your money, or both. Such property is likely only a minor annoyance to you, but in the aggregate, it represents a problem that is far from trivial: great effort is invested into creating and enforcing policies that divert such property from, say, roadsides and open spaces ('No Dumping!') and towards landfills, recycling facilities, or other users." (footnote omitted)).

[341] *See* Gilal et al., *supra* note 8, at 1785 (describing the growing amount of e-waste being discarded).

[342] *See, e.g.*, *Transfer Stations*, D.C. DEP'T OF PUB. WORKS, https://dpw.dc.gov/service/transfer-stations [https://perma.cc/493H-A43C] (describing a residency requirement and other rules for dumping).

[343] *See, e.g.*, *id.*

[344] *See, e.g.*, CAL. PENAL CODE § 374.3(h)(1) (West 2009) (fine up to $10,000 for commercial dumping).

who then either store the objects (which, again, is a trespass), or send them to the local landfill — which is also a trespass because the object belongs to a nonresident business.[345] At no point in the chain of possession and abandonment does title to the object transfer to the consumer or to the jurisdiction. Even when the resident consumer voluntarily sends the object to the landfill, it still belongs to *M/O*. At that point, the resident consumer may be acting on behalf of *M/O* (as when a valet takes your car to the parking garage) but *M/O* is still the owner of the object. When the object ends up in the landfill, it still belongs to *M/O*.

At some point along the way, *M/O* might claim that it has abandoned the object, thus severing its title. But the challenge for *M/O* is that it cannot abandon its object where it lies. It cannot abandon its object in another person's home or in another jurisdiction's waste collection facility.[346] If a valet takes my car to the parking garage and then I abandon it there, it is I (not the valet) who is responsible for the resulting trespass.[347] Similarly, if a consumer sends an intentionally useless object to a landfill and *M/O* abandons it there, it is *M/O* (not the consumer) that is responsible for the trespass.[348]

Thus, while *M/O* may try to sever its title through the mechanism of abandonment, *M/O* is still responsible for assuming the costs associated with disposing of its objects in a manner that accords with the law of each local jurisdiction where the objects are located at the time they become intentionally obsolete.

If we accept that *M/O* retains a reversionary interest when it creates and conveys an intentionally useless object, we may begin to wonder if a reversionary interest is created in every object that a *M/O* creates and conveys. After all, no object retains its utility forever. Every object has a projected disutility date simply based on the expected lifespan of the materials that comprise it. This fact might raise concerns about a slippery slope: Would internal consistency demand that the account offered here assign a reversionary interest in every object? Or perhaps in every object that is manufactured with inferior materials when superior materials are available? A consideration of these line-drawing concerns follows.

C. Slippery Slope: A Reversionary Interest in Every Object?

It is reasonable to question whether, within the account advanced here, a reversionary interest would exist in every object. Nothing remains useful forever. Is there a defeasible condition built into every

---

345 *See* Gilal et al., *supra* note 8, at 1785.

346 *See* Peñalver, *supra* note 236, at 208–09 (chattel cannot be abandoned on private property).

347 *Id.*

348 *See* 75 AM. JUR. 2D *Trespass* § 50 (2d ed. 1991) (listing examples of chattels encroaching on private property and being classified as trespass); RESTATEMENT (SECOND) OF TORTS § 160 (AM. L. INST. 1965).

product?[349] After all, every product has a limited period of utility and every *M*/*O* knows this at the time of manufacture and sale. Does every product convey as a fee simple determinable with the determinable condition being the point of disutility? Do *M*/*O*s have a reversionary interest in every object currently cluttering our garbage dumps and landfills?

The quality that distinguishes the subset of products identified here as "intentionally useless things"[350] from all objects (which we know will eventually reach a point of uselessness or disutility) rests entirely with *M*/*O*'s intentional or negligent behavior. If *M*/*O* intends the disutility — if the obsolescence is planned — then *M*/*O* has created and conveyed an intentionally useless object, and the liability paradigm described here applies.

To return to Locke's moral paradigm, the culpability distinction drawn here is analogous to murdering someone whom you know will one day die anyway. Yes, the victim would have died at some unknown point anyway, but by engineering an early end to their life, the murderer has: (1) engaged in uniquely culpable behavior that justifies a liability rule and (2) engaged in behavior that we want our liability rule to discourage in the future.

Similarly, all objects will eventually fall into disutility, but to intentionally end the utility of an object — knowing that action will result in needless waste of raw materials and physical space — is to be uniquely culpable. To waste raw materials and space purposefully is to violate the Lockean imperative against waste, which is a central commitment of American property law.[351] Ownership simply does not extend to the right to spoil or destroy corporeal objects that occupy space on our finite planet.

Inevitably, line-drawing questions will follow: How culpable does *M*/*O* need to be? Is the choice to use inferior materials (for example, plastic when metal would last longer) sufficient to rise to the requisite level of culpability? Similarly, how will we know *M*/*O*'s intention with respect to planned obsolescence, particularly as intention is often multifaceted (with a single choice satisfying several independent preferences) and given the challenge of identifying intention among multiple actors? But fortunately, these problems of articulating liability standards and epistemic norms are not unique to the problem of intentionally useless objects. Assuming that the liability paradigm described here is recognized and applied, courts can resolve these questions just as they do in other areas of law.

---

[349] *See supra* notes 28–32 and accompanying text.
[350] *See supra* note 41.
[351] *See supra* note 183 and accompanying text.

CONCLUSION

In sum, the tsunami of intentionally useless things that is generated each year by the strategy of planned obsolescence presents an urgent environmental and humanitarian crisis that property law is uniquely equipped to address. This Article demonstrates that the practice of intentional destruction that lies at the heart of planned obsolescence is inconsistent with existing normative commitments in property law. Property law's existing commitment to an antiwaste imperative means that the right to destroy is excluded from rights that attend ownership. In the context of planned obsolescence, this means that a manufacturer's right of ownership simply does not extend to the act of intentional obsolescence. When a manufacturer intentionally and artificially limits the lifespan of an object, the manufacturer has embedded a defeasible condition into the object itself. Because the manufacturer has intentionally destroyed the utility of the object, it cannot later convey title that extends beyond the point of intentional disutility. As a consequence, the manufacturer can only convey a defeasible interest in the object to a purchaser, with a reversionary interest in the manufacturer that becomes possessory at the point of planned obsolescence.

This inalienable, "forced" reversionary interest could serve to correct some of the negative externalities caused by planned obsolescence by requiring the manufacturer to bear some of the actual (rather than expected) costs of dealing with the object after the point of obsolescence. Rather than saddling the consumer with the responsibility of finding a repository for their obsolete electronics (or taxing domestic or distant localities with the burden of absorbing this mass of toxic garbage), the paradigm offered here suggests that the manufacturer should be tethered to the obsolescence it creates. Under the paradigm offered here, individuals or jurisdictions that find themselves in possession of an unwanted and intentionally useless object would have some recourse against the manufacturer that chose to render it obsolete.

At base, the problem of intentional obsolescence is the proliferation of the useless objects that it produces. As long as the social costs of planned obsolescence are not felt by the manufacturers who engage in the practice, the proliferation of useless, toxic objects will continue. Shifting ownership of the intentionally useless object from the consumer to the manufacturer can begin to alter the unilateral direction of incentives in this context, and potentially impact the profitability of the strategy going forward.