#### **2.5 — Property Acquisition & Use** ECON 315 • Economics of the Law • Spring 2021 Ryan Safner

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# Outline

#### **Exercising Property Rights**

Back to Remedies: Nuisance Law

<u>Establishing Property Rights</u>

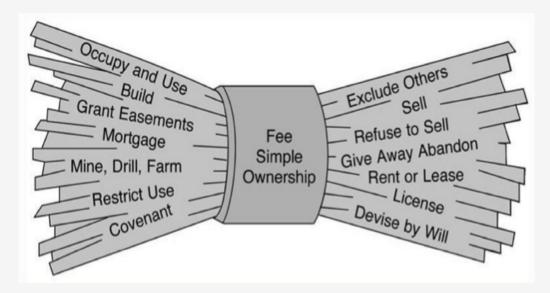
What Can Be Privately Owned?



## What Would an Efficient Property Law Look Like?

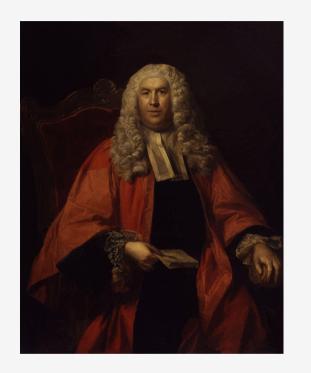


- Recall the 4 questions any property system must answer:
- 1. What can be privately owned?
- 2. What can (and can't) an owner do with her property?
- 3. How are property rights established?
- 4. What remedies are available when property rights are violated?









"There is nothing which so generally strikes the imagination, and engages the affections of mankind, as the right of property; or that sole and despotic dominion which one man claims and exercises over the external things of the world, in total exclusion of the right of any other individual in the universe."

Blackstone, William, Commentaries on the Laws of England (1765-1769) Book II, Chapter 1 - Of Property in General

William Blackstone

(1723-1780)

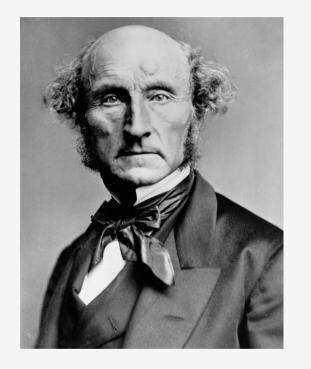
- Efficiency would suggest the maximum liberty principle: owners should be able to do whatever they please with their property
  - whatever creates the most value for the owner (subjective)
- ...provided they do not interfere with others' property or rights





#### **Similar to Millian Harm Principle**





• *On Liberty*: establish proper relationship between government and people

- One of the greatest defenses of freedom of speech ever written
- The "harm principle": people should be free to do anything they please so long as does no harm to others

Mill, John Stuart, On Liberty

John Stuart Mill

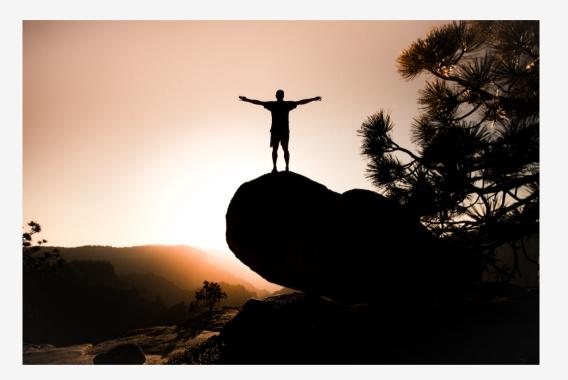
1806-1873

- Put economically: property owners should be at liberty to do as they please, so long as their actions do not impose an externality on others
- In common law, an externality is called a **nuisance**





- Common law appears to approximate the **maximum liberty principle**
- But does it really?
  - legislatures pass laws affecting property
  - $\circ~$  bans on repugnant markets
  - $\circ$  regulation
- Nice theoretical idea, but not necessarily a fundamental legal maxim







# **Back to Remedies: Nuisance Law**

#### **Nuisance Law**

- Law distinguishes between different scales of externalities (nuisances):
- Affecting only a few people, a **private nuisance** or a **private bad** 
  - low transaction costs ⇒
     injunctions are preferable
- Affecting a large number of people, a **public nuisance**, a **public bad** 
  - high transaction costs  $\implies$  damages are preferable





#### **Types of Damages**

- Compensatory damages intended to "make the victim whole" by compensating for actual harm done
- **Temporary**: compensate for past harms that have already occurred
  - parties must return to court if harm continues
  - court must keep calculating the amount of damages each instance
  - $\circ~$  higher transaction costs





#### **Types of Damages**

- Compensatory damages intended to "make the victim whole" by compensating for actual harm done
- **Permanent**: cover (present value of) anticipated **future** harm
  - $\circ~$  a one-time, permanent fix
  - less costly for court to implement, but harder to estimate accurate value
  - but no incentive to reduce harm (have already "purchased the right to harm") with new technology





#### **Efficient Nuisance Remedies**

- For a private nuisance affecting small number of people, **injunction** is more efficient remedy
- For a public nuisance affecting large number of people, **damages** are more efficient remedy
  - If damages easy to measure & innovation occurs rapidly, temporary damages more efficient
  - If damages hard to measure & innovation occurs slowly, permanent damages more efficient
- What is done in practice for public nuisances?





*Boomer v. Atlantic Cement Co.* 26 N.Y.2d 219, 309 N.Y.S.2d 312 (N.Y. 1970)

- Atlantic owned large cement plant near Albany NY (worth \$45 million, 300 employees)
  - production resulted in dirt, smoke, vibration
  - neighbors sued for an injunction to close the plant
  - court found plant to be a nuisance, awarded \$183,000 in damages
  - neighbors appealed, requesting an injunction





- NY Appeals Court ruled:
  - $\circ\;$  this was a valid nuisance case
  - nuisances are generally remedied with injunctions
  - but harm of closing the plant > amount of damages done
  - $\circ~$  so refused to issue an injunction
  - ordered permanent damages, paid
    "as servitude to the land"
  - $\circ~$  effectively priced into adjoining land





- Harm to neighbors (\$183,000) much less than the value of the investment in the factory (\$45 million), would be inefficient to close the factory
- If transaction costs were low, neighbors could bargain with plant to mitigate harm (pay it to reduce dirt, smoke, vibrations, etc)
- But high transactions costs here (a public nuisance), so court imposed a liability rule to compensate the injured parties
  - keeps plant in operation, property right kept in hands of the more-valued use
- First recognition that sometimes a liability rule is more efficient in some property cases









"[Ordinarily in property law], where a nuisance has been found and where there has been any substantial damage shown by the party complaining, an injunction will be granted."

"To grant the injunction unless defendant pays plaintiffs such permanent damages as may be fixed by the court seems to do justice between the contending parties. All of the attributions of economic loss to the properties on which plaintiffs' complaints are based will have been redressed ... [and i]t seems reasonable to think that the risk of being required to pay permanent damages to injured property owners by cement plant owners would itself be a reasonably effective spur to research for improved techniques to minimize nuisance."

"[The initial trial court is ordered] to grant an injunction which shall be vacated upon payment by defendant of.. .permanent damage[s] to the respective plaintiffs."

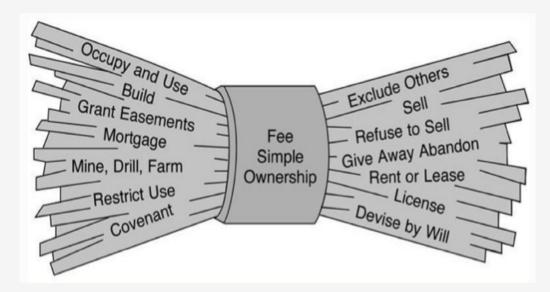


# **Establishing Property Rights**

## What Would an Efficient Property Law Look Like?



- Recall the 4 questions any property system must answer:
- 1. What can be privately owned?
- 2. What can (and can't) an owner do with her property?
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#### Lockean Political Philosophy of Property





John Locke

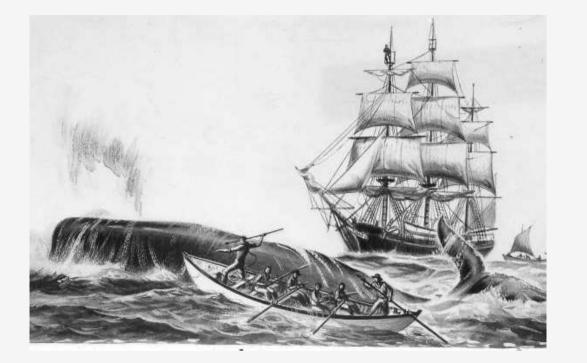
1632-1704

"Though the earth, and all inferior creatures, be common to all men, yet every man has a property in his own person: this no body has any right to but himself. The labour of his body, and the work of his hands, we may say, are properly his. Whatsoever then he removes out of the state that nature hath provided, and left it in, he hath mixed his labour with, and joined to it something that is his own, and thereby makes it his property...that excludes the **common right of other men**: for this labour being the unquestionable property of the labourer, no man but he can have a right to what that is once joined to, at least where there is enough, and as good, left in common for others," (Ch. V).

Locke, John, 1689, Second Treatise on Government

## **Who Owns Fugitive Property?**

- Fugitive property: property that moves around or has indefinite boundaries (the harder cases)
- Examples: oil & gas deposits, whales, foxes



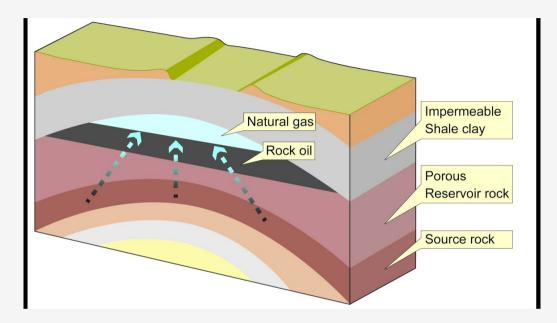


# **Who Owns Fugitive Property?**



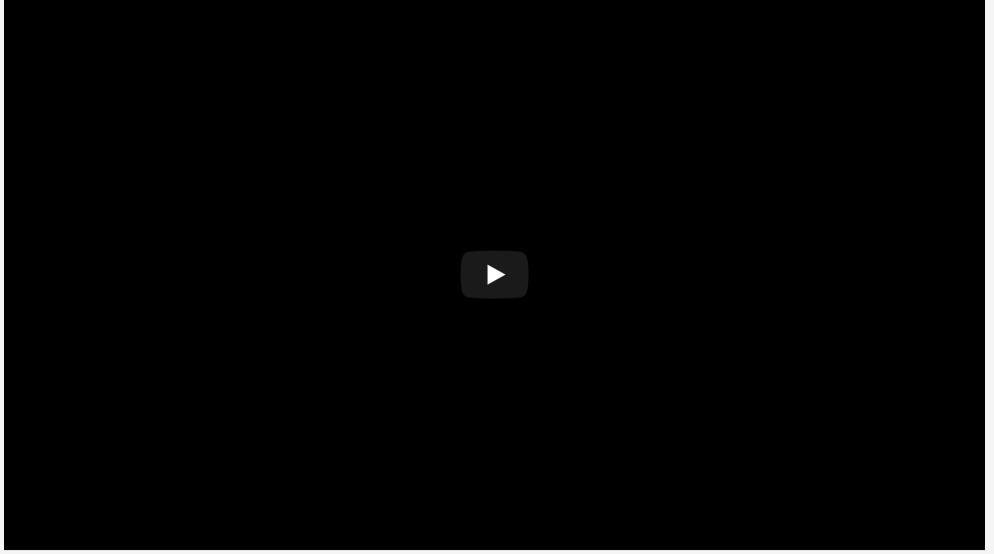
*Hammonds v. Central Kentucky Natural Gas Co.* 75 S.W.2d 204 (Ky. Ct. App. 1934)

- Central KY leased land lying above natural gas deposits
- Geological dome lay partly under Hammonds' land
- Central KY drilled down and extracted the gas
- Hammonds sued, claiming (some of) the gas was his



# Drainage





## **Two Principles for Establishing Ownership**

#### 1) First possession

- nobody owns fugitive property until someone possesses it
- first to "capture" a resource owns it
- Example: Central KY would own all the gas

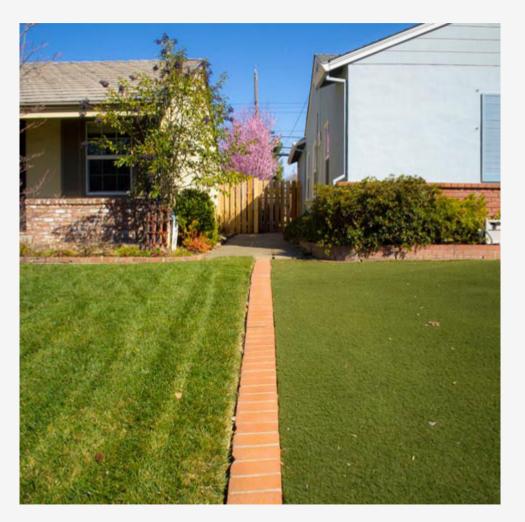




# **Two Principles for Establishing Ownership**

#### 2) Tied ownership

- ownership of fugitive property tied to (possession of) something else (e.g. surface)
  - ownership determined *before* resource is extracted
- Example: Hammonds would own some of the gas (under his land)
- Tied using principles of accession: new thing owned by owner of the proximate or prominent property





## **First Possession and Rent-Seeking**

• First possession is simpler rule to apply (easy to determine who possessed property first)

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"Possession is nine-tenths of the
law"
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 But incentive for rent-seeking! Invest too many (offsetting) resources into getting there first





## **First Possession and Rent-Seeking**



**Example: Firm 1** and Firm 2 can drill on an area of unowned land.

Suppose:

- Gas is worth 100
- Drilling **slow** costs 5, drilling **fast** costs 25
- If one drills faster than the other, gets 75%/25% of the gas
- If both same speed, split the gas 50%/50%
- Principle of first possession



#### **First Possession and Rent-Seeking**



**Example: Firm 1** and Firm 2 can drill on an area of unowned land.

- Nash Equilibrium: (Fast, Fast)
- A prisoners' dilemma
  - Pareto-improving change to (Slow, Slow), but not a Nash Equilibrium
- Equally viewed as tragedy of the commons



# **Tied Ownership**



Firm 2 Slow Fast **Slow** 45 45 45 25 **Fast** 25 25 45 25

Example: Firm 1 and Firm 2 can drill on an area of unowned land.

- Suppose instead, principle of tied ownership
  - Firms have clear rights to surface, know that however quickly they drill, they have rights to the gas based on their surface ownership
  - No reason not to drill slowly (carefully, efficiently)!



# **Tied Ownership**



**Example: Firm 1** and Firm 2 can drill on an area of unowned land.

- Nash Equilibrium: (Slow, Slow)
- Incentivizes efficient use of resource
- No need to race to get it first
- But perhaps difficult to establish and verify ownership rights



#### The Tradeoff Again

- Rules that link ownership to **possession** 
  - $\circ~$  Pro: easy to administer
  - Con: incentivize uneconomic investment in possessory acts (rentseeking)
- Rules that allow ownership without possession (like tied ownership)
  - Pro: avoids rent-seeking, incentivizes efficient stewardship of resource
  - Con: costly to administer & clarify ownership



#### **The Tradeoff Again**



- Rules that link ownership to **possession** 
  - **"Fast-fish, loose-fish"** from whaling
  - Post (the saucy intruder) claiming the fox
- Rules that allow ownership without possession (like tied ownership)
  - **"Iron holds the whale"** from whaling
  - **Pierson** (the original hunter) keeping the fox



#### **Example: The Homestead Act of 1862**

- Intended to settle the Western U.S. after Civil War
- Citizens could acquire 160 acres of land for free:
  - $\circ~$  as head of a family, or 21 years old
  - "for the benefit of actual cultivation, and not...for the use or benefit of someone else"
  - must live on claim for 6 months and make "suitable" improvements



#### **Example: The Homestead Act of 1862**

- Essentially a **first possession** rule for land
- Friedman: caused people spend inefficiently much to gain ownership of the land





#### **Example: The Homestead Act of 1862**





David D. Friedman

(1945—)

"The year is 1862; the piece of land we are considering is... too far from railroads, feed stores, and other people to be cultivated at a profit...The efficient rule would be to start farming the land the first year that doing so becomes profitable, say 1890. But if you set out to homestead the land in 1890, you will get an unpleasant surprise: someone else is already there...If you want to get the land you will have to come early. By farming it at a loss for a few years you can acquire the right to farm it thereafter at a profit."

Friedman, David D, 2000, Law's Order: What Economics Has to do with Law and Why it Matters

#### **Example: The Homestead Act of 1862**





David D. Friedman

(1945—)

"How early will you have to come? Assume the value of the land in 1890 is going to be \$20,000, representing the present value of the profit that can be made by farming it from then on.Further assume that the loss from farming it earlier than that is \$1,000 a year. If you try to homestead it in 1880, you again find the land already taken. Someone who homesteads in 1880 pays \$10,000 in losses for \$20,000 in real estate – not as good as getting it for free, but still an attractive deal...The land will be claimed about 1870, just early enough so that the losses in the early years balance the later gains. It follows that the effect of the Homestead Act was to wipe out, in costs of premature farming, a large part of the land value of the United States."

Friedman, David D, 2000, *Law's Order: What Economics Has to do with Law and Why it Matters* 

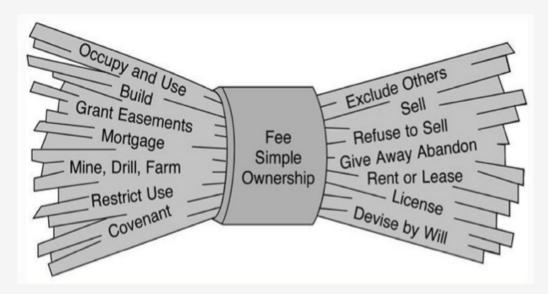


# What Can Be Privately Owned?

### What Would an Efficient Property Law Look Like?



- Recall the 4 questions any property system must answer:
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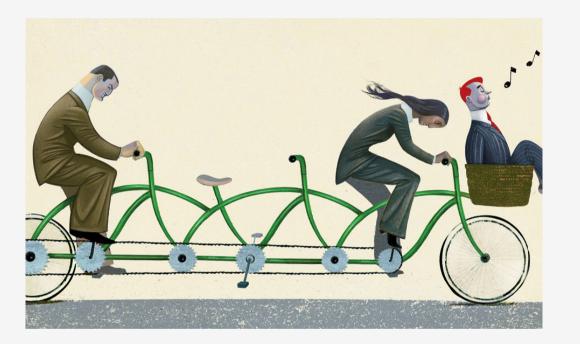






- Public Good: a good that is non-rival and non-excludable
- **Rivalry**: one use of a resource removes it from other uses
- Excludability: ability or right to prevent others from using it (ownership)

- Individual bears a private cost to contribute, but only gets a small fraction of the (dispersed) benefit of a good
- If individuals can gain access to the good (nonexcludable) without paying, may lead to...
- Free riding: individuals consume the good without paying for it





- When private goods are owned publicly, they tend to be overused, congested, and depleted (tragedy of the commons)
- When **public goods** are owned **privately**, they tend to be *under*produced
- Implications for efficiency:
  - Private goods should be privately owned
  - Public goods should be publicly provided/regulated



- This is consistent with the normative framework we have been developing:
- Low transaction costs  $\rightarrow$  facilitate exchange
  - Private goods low transaction costs
    Private ownership facilitates exchange
- High transaction costs → allocate rights efficiently
  - Public goods high transaction costs
  - Public provision/regulation to get efficient amount





#### **Alternative Approach: Transaction Costs**



- Example: Consider clean air
- But still two options:
  - 1. give property owners a right to clean air, protected by **damages**
  - 2. public **regulation**



#### **Alternative Approach: Transaction Costs**



- Example: Consider clean air
- Compare the relative costs of each option
  - 1. **Damages**: legal costs of lawsuits
  - 2. **Regulation**: administrative costs, politics



#### **When To Privatize a Resource**

- We've seen two doctrines for how ownership rights are determined
- When should a resource become privately owned?
  - Cost of private ownership: owners must take steps to make the resource excludable: boundary maintenance
  - Cost of public ownership: congestion and overuse (tragedy of the commons)
- Efficient to privatize a resource where boundary maintenance costs are less than the waste from overuse of the resource



#### Remember the lesson & example in Demsetz (1967)!



# How to Give Up (Or Lose) Property Rights



- Adverse possession ("squatter's rights"): if you occupy someone else's property for long enough, you become the legal owner, provided:
  - occupation was adverse to the owner's interests
  - owner did not object or take legal action
- Benefit: reduces uncertainty over time; allows (otherwise idle) land to be put to use
  - Again, "possession is nine-tenths of the law"
- Cost: owners must incur monitoring costs to protect property



# How to Give Up (Or Lose) Property Rights

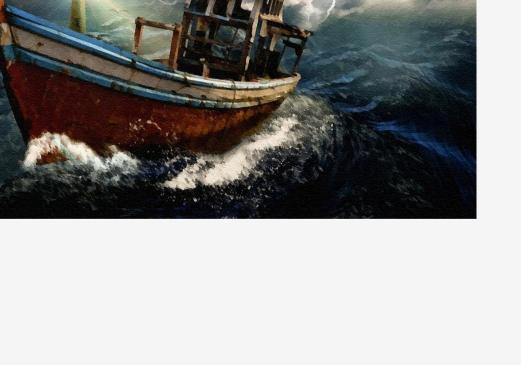


- Estray statutes laws governing lost and found property
  - procedures for finder to establish ownership of lost or abandoned property
  - often if original owner is not located within a period of time, ownership belongs to the finder
- Discourages theft (thief can't just say "I found it"), increases information spread about lost property
- Assuming owners value the property the highest, ensures it gets back to them



# **Limitations to Property Rights**

- Property rights generally are protected by injunctive relief (property rules), BUT
- *Ploof v. Putnam* 81 Vt. 471, 71 A. 188 (1908)
  - Ploof sailing with family on Lake Champlain, storm erupted
  - Tied up boat to pier on island owned by Putnam
  - Putnam's employee cut the boat loose, Ploof sued
  - Court found for Ploof: private necessity is a valid defense for trespass





## **Limitations to Property Rights**

- Property rights are not absolute!
- Example: in an emergency, it is lawful to violate another's property rights, but must still compensate them for damages
  - more efficient to use a liability rule here (high transaction costs, no time for bargaining in an emergency)



