

University of Western Ontario

Law and Economics

Lecture 3



Property – example 1

Example 1: "This morning in a remote meadow in Wyoming, a mule was born. To whom does that mule belong?"¹ Does the mule belong to (1) the owner of the mule's mother, (2) the lumber company that has leased the land on which the mule was grazing, or (3) the federal government because the property is a national forest?



Property – example 2

Example 2: Orbitcom, Inc., spent \$125 million designing, launching, and maintaining a satellite for the transmission of business data between Europe and the United States. The satellite is positioned in a geosynchronous orbit 25 miles above the Atlantic Ocean.² Recently a natural resource-monitoring satellite belonging to the Windsong Corporation has strayed so close to Orbitcom's satellite that the company's transmissions between Europe and the United States have become unreliable. As a result, Orbitcom has lost customers and has sued Windsong for trespassing on Orbitcom's right to its geosynchronous satellite orbit.



Property – example 3

Example 3: Foster inspects a house under construction in a new subdivision on the north side of town and decides to buy it. The day after she moves in, the wind shifts and begins to blow from the north. She smells a powerful stench. On inquiring, she learns that a large cattle feedlot is located north of the subdivision, just over the ridge, and, to make matters worse, the owner of this old business plans to expand it. Foster joins other property owners in an action to shut down the feedlot.



Property – example 4

Example 4: Bloggs inherits the remnant of a farm from his father, most of which has already been sold for a housing development. The remaining acreage, which his father called "The Swamp," is currently used for fishing and duck hunting, but Bloggs decides to drain and develop it as a residential area. However, scientists at the local community college have determined that Bloggs' property is part of the wetlands that nourish local streams, as well as the fish in the town's river. The town council, hearing of Bloggs' plans, passes an ordinance forbidding the draining of wetlands. Bloggs sues for the right to develop his property, or, failing that, for an order compelling the town to buy the property from him at the price that would prevail if development were allowed.



Property – example 5

Example 5: A county ordinance requires houses to be set back five feet from the property line. Joe Potatoes buys some heavily wooded land in an undeveloped area and builds a house on it. Ten years later Fred Parsley, who owns the adjoining lot, has his land surveyed and discovers that Potatoes' house extends two feet over the property line onto Parsley's property. Potatoes offers to compensate Parsley for the trespass, but Parsley rejects the offer and sues to have Potatoes relocate the house in conformity with the ordinance.



1. Property: Introduction

- *Property*
is a bundle of rights over resources that the owner is free to exercise and whose exercise is protected from interference by others.



Main issues in property

- What may owners do with their property?
- How is a property right protected from interference by others?

The economic analysis of property allows us to analyze when and how others, including the government, can interfere with an owner's property rights and the remedies available to the owner.



Bargaining example

- Adam, who lives in a small town, has a 1957 Chevy convertible in good repair. The pleasure of owning and driving the car is worth \$3,000 to Adam. Blair, who has been coveting the car for years, inherits \$5,000 and decides to buy the car from Adam. After inspecting the car, Blair decides that the pleasure of owning and driving the car is worth \$4,000 to her.



Bargaining theory

- The bargaining process has three steps:
 1. set the threat values
 2. determine the cooperative surplus
 3. set terms for splitting the surplus.
- Nash Bargaining solution
 - reasonable bargaining outcome



Bargaining experiment

- Each team of two students has assigned a buyer and a seller.
- Each buyer's value for the used car is between \$1,000 and \$5,000.
- Each seller's cost of the used car is between \$1,000 and \$5,000.
- True value or cost is your private information.
- You have to bargain with your partner to decide whether you will trade the used car, and if so, the trading price.



Example - property

- A corn **farmer** and a cattle **rancher** live beside one another. In isolation, each business would have \$200k (thousand) in profits.
- But if nothing is done, the cattle will walk on the **farmer's** land and cause \$100k worth of damage to her corn.
- The **farmer** could prevent the damage by building a fence around her field at a cost of \$50k.
- The **rancher** could prevent the damage by building a fence around his land at a cost of \$75k.



The Coase Theorem

- Theorem 1.
When transaction costs are zero, an efficient use of resources results from private bargaining, regardless of the legal assignment of property rights.
- Theorem 2.
When transaction costs are high, the initial assignment of property rights will determine how efficiently resources are used.



Transaction costs

- These are three types of transaction costs.
 1. Search (communication) costs.
 2. Bargaining cost.
 3. Enforcement cost.
- Multiple parties
 - Hold-out problem
- Asymmetric information
- Strategic bargaining



Utility Buys Town It Choked

- American Electric Power operates a plant in Cheshire, where residents have long complained of raspy throats, burning eyes, sore lips, mouth blisters, and grime everywhere.
- Faced with the considerable expense and public relations mess of individual lawsuits, American Electric Power solved the problem by buying the town for \$20 million. Homeowners are to receive about \$150,000 apiece, roughly three times the value of their houses -- according to the New York Times -- that they probably could not have sold anyway. In return, they have signed pledges never to sue the power company for property damage or health problems. [05/19/2002]



The normative Coase theorem

Normative Coase Theorem: *structure the law so as to minimize private transaction costs*

The law can actually help to lower transaction costs and facilitate bargaining



For example:

- establish clear and simple rules of ownership such as 'first in time, first in right'
- registration of land ownership
- registration of patents and copyright
- monitoring of odometer readings over the life of an automobile



Normative Hobbes Theorem

The normative Hobbes theorem: *structure the law so as to minimize the risk, and resulting harm, of failures in private agreements*

The normative Hobbes Theorem implies that the law should allocate property rights to the party that values them most.


