Ronald H. Coase
*The Problem of Social Cost*
Perspectives, p. 200

- The problem is *reciprocal* in nature.
  - Wrongly framed as A harms B. How should we restrain A?
  - But to avoid harm to B, we would harm A.

Coase, *The Problem of Social Cost* Cont’d

- Instead we should ask, should A be allowed to harm B or should B be allowed to harm A.
- How do we avoid the more serious harm?
- Implications for decision-makers?
**Coase Hypothetical**

Annual Cost of Fencing = $9  
Price of Crop per Ton = $1

<table>
<thead>
<tr>
<th>Number in Herd (Steers)</th>
<th>Annual Crop Loss (Tons)</th>
<th>Crop Loss Per Additional Steer (Tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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<tr>
<td>2</td>
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<td>3</td>
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<td>3</td>
</tr>
<tr>
<td>4</td>
<td>10</td>
<td>4</td>
</tr>
</tbody>
</table>

**Transaction Costs**

- Finding the parties with which to deal.
- Informing the parties that you wish to deal.
- Conducting negotiations.
- Drafting the agreement.
- Inspecting or policing compliance with the agreement.
The Coase Theorem

- Outcome without transaction costs.
  - Ultimate result, which maximizes production, is the same, no matter what the initial delimitation of rights.
- Outcome with transaction costs.
  - Rearrangement of rights will only occur if increase in value of production exceeds transaction costs.

Strong and Weak Versions of the Coase Theorem

- The Invariance Proposition (strong)
  - In a world of zero transaction costs, a change in legal rules will have no effect on the allocation of resources.
- The Efficiency Proposition (weak)
  - Regardless of initial entitlements in a world of zero transaction costs, individuals will bargain to garner all possible gains from trade.
Another Hypo

- Ms. Jones owns and operates a hog farm.
- Her revenues are $1000 per month.
- The damage to the neighbors (odor) is valued at $1500 per month.
- There are no transaction costs.

Scenario No. 1
Ms. Jones has the **RIGHT** to operate the hog farm.

- How much would the neighbors be willing to pay Ms. Jones not to operate the hog farm and stop causing damages?
- How much would Ms. Jones demand to forego operating the hog farm and stop making revenues?
- What would the end result be?
Scenario No. 2
Ms. Jones DOES NOT have the RIGHT to operate the hog farm.

- How much would it cost Ms. Jones to operate the hog farm if she had to pay the neighbors off for their damages?
- How much would Ms. Jones’ net revenue be after paying off the neighbors?
- What would the end result be?

Moral of the Story
No matter what the rule is/the initial entitlement, Ms. Jones will not operate the hog farm.
Wealth Effects of Not Operating the Hog Farm

• Already had the hogs.
• Land particularly suited for hog farming - pig sties already in place.
• The only thing Ms. Jones knows how to do is hog farm.

Another Example on Coase

• Factory emits soot.
• Five neighbors hang clothes outside to dry because they don’t have dryers.
• Soot damages neighbors’ clothes.
• Damages are $75 for each neighbor, $375 total ($75 x 5).
Potential Solutions

- Screen that catches the soot = $150.
- Everyone gets an electric dryer = $50 each, $250 total.
- Everyone gets new clothes = $75 each, $375 total.

**Strong Version:** Either way, the screen will be chosen.

Transaction Costs Taken Into Account

- Factory emits soot.
- Five neighbors hang clothes outside to dry because they don’t have dryers.
- Soot damages neighbors’ clothes ($75 each, $375 total).
- **Transaction costs** are $60 for each neighbor, $300 total ($60 x 5).
Transaction Costs Taken Into Account

If the factory is assigned the entitlement initially, and the residents must pay for the solution:

- Screen that catches the soot = $150/5 = $30 + $60 in transaction costs = $90 each, $450 total.
- Everyone gets an electric dryer = $50 each, $250 total.
- Everyone gets new clothes = $75 each, $375 total.

The residents would buy dryers, but the factory would buy the screen.

Robert C. Ellickson
Order Without Law: How Neighbors Settle Disputes
Perspectives, p. 210

Ellickson’s Restatement of the Coase Theorem

- What is the formal law?
- Parties settle disputes “in the shadow of” the formal law.
Ellickson, *Order Without Law* cont’d

Ellickson’s Restatement of the Coase Theorem Cont’d

- No transaction costs leads to “complete enforcement.” No violation of an entitlement will be ignored.
- The Invariance or Strong Proposition.

Ellickson, *Order Without Law* cont’d

The Efficiency or Weak Proposition

- Regardless of the content of the law, people will structure their affairs to their mutual advantage.
- Parties resolve disputes “beyond” the shadow of law.
- In Shasta County, that means “incomplete enforcement” or the “live-and-let live” philosophy.
- Neighbors override formal law with their informal norm of cooperation.
Norm of Cooperation

- Everyone agrees that rancher is responsible for the acts of his animals.
- But rural residents should put up with minor damages stemming from the occasional trespass.
- Norm does not depend upon whether the range is open or closed.

Avoidance of Litigation

- Restraint in seeking monetary relief is a virtue.
- Mutual restraint saves parties in long-term relationships the costs of a formal claims process.
Ellickson, *Order Without Law* cont’d

**Controlling Deviants**

- Self-help: informal control of deviants
- Formal control of deviants