

Quarrelling and the Origin of Property

25 February 2008

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Abstract

A new explanation for not defining property rights is that it induces outrage when people violate them. This is different from the Demsetz idea of the origin of property.

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Keywords: Property.

A big problem: In his model, Hart only uses one-sided uncertainty, and he uses a surplus-splitting reduced form in the second stage, both of which substantially simplify the model. If I follow that, I'll just have his model exactly.

See Henry Smith's articles that I have on hand.

There's some durable goods in a village (or a family). Who should be able to use them? Should the villagers divide up the uses contractually, using their bargaining power?

Then, circumstances will change. Some people will be tempted to "steal". That will cause ill feeling, and end cooperation.

Or, property rights can be left vague. That can cause squabbling too, when two people want to use a good at the same time.

Think of children and toys.

Why are there property rights? So people can capture the benefits of improvements. So they won't fight.

I argue for something simpler: coordination. But that is very much like common pool problems.

What insights do I get? 1. You won't use all your bargaining power at the start.

This idea is really too close to Hart's paper. A contract is like the setting up of property rights.

I don't have renegotiation; I have taking.

How is this different from the Demsetz theory in its implications? – it says that property rights will arise when cooperation is important.

I am so dissatisfied with this idea that I should put it aside. The modelling has problems too.

The Model

One acre of land is available for the use of players 1 and 2. The utility of land use is concave, and the marginal utility reaches zero at some level. It also depends on uncertain parameters \tilde{N}_1 and \tilde{N}_2 .

If the players help each other farm, which they will do if neither has ill feeling towards the other, then each gets amount G in utility.

The order of play is as follows:

1. The players may bargain to divide up the land by creating property rights, If they bargain they choose $X_1 = \theta$ and $X_2 = 1 - \theta$, but otherwise property rights are not created. If they bargain, with probability β they create ill feeling.

2. Player 1 learns the value of \tilde{N}_1 and Player 2 learns the value of \tilde{N}_2 . Each is distributed independently according to the same density $f(\tilde{N})$ with support $[0, 2]$.

3. Each player decides how much land to try to use. They simultaneously pick \hat{C}_1 and \hat{C}_2 from $[0,1]$.

(a) If property rights have been defined, then if $\hat{C}_1 > X_1$ or $\hat{C}_2 > X_2$ ill feeling results.

(b) If property rights have not been defined, then ill feeling results with probability $q(\hat{C}_1, \hat{C}_2) > 0$, increasing in both arguments convexly. Thus, $q_1 > 0, q_2 > 0, q_{11} > 0, q_{22} > 0, q_{12} > 0$.

4. Consumption levels are $C_1 = \hat{C}_1$ and $C_2 = \hat{C}_2$.

(a) If there is no ill feeling then $H = 1$ and the two players help each other, and they add G to each other's utility.

(b) If there is ill feeling then $H = 0$ and the two players do not help each other.

The utility functions are:

$$U(\tilde{N}_i C_i) + HG \tag{1}$$

The utility function is such that $U' \geq 0$, $U'' \leq 0$, and $U'(z) = 0$ for some interval $[\bar{z}, \infty]$, where $\bar{z} > .5$ but less than 1, and $U'(z) > 0$ on $[0, \bar{z}]$.

Interpretation

In this setting, it may turn out that land is a free good at the margin because both players are satiated.

It may also happen that the efficient outcome is for their combined consumption to exceed 1— that is, they can both use the same land without conflict.

Or, they may come into conflict even if they each only try to use a little of the land, if boundaries are not defined by property rights.

For example, they may both be hunting deer in the same forest, but as long as they are not in the same acre in the same hour, they do not disturb each others' hunting.

Setting up property rights helps with coordination and avoiding disputes, but prevents the property from being as fully used as it would be otherwise.

Also, setting up property rights can cause quarrelling in itself.

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