The Tragedy of the Commons (transcript)

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Part 1: What the Tragedy Is [Video clip 1]

The Tragedy of the Commons is a foundational case study in business ethics, generating a large amount of discussion among business ethicists, economists, and public policy experts.

The title comes from an article published by Garrett Hardin. Hardin refers to a satellite shot over a portion of North Africa where there was a large expense of green area—a fertile area—but what struck him in the satellite photo was a huge, neighboring brown area. Upon closer investigation, the brown area was unsuitable for agriculture purposes, though it had been used for grazing by a number of herdsmen and for various reasons had become unusable. Hence the title: the resource in question, the brown pasture land, was held as a *commons*, and Hardin´s analysis led him to think that land held as a commons and used by resource users, herdsmen in this case, would necessarily result in *tragedy*. The tragedy is that the commons becomes unusable as a resource, and people will either starve or have to abandon the use of that resource.

I'll put on the whiteboard Hardin´s initial analysis of the situation.

Initially, what we have is a commons. We need to define our terms. A *commons* is a resource—that is to say, it is something that has economic value to human beings; it has intrinsic properties that, in relationship to human needs and human understandings of the resource have value. But a commons is a resource that is *unowned*. As unowned, no one can claim exclusive use to the resource. No one can stop anyone from using the resource if they so choose; that´s the unowned part of it.

Hardin then says that if we have an unowned resource, then a bunch of stuff will occur, and the end result is a *tragedy*—which is that the resource loses all of its economic value. So I´ll put this on the whiteboard: the resource becomes depleted, unusable, worn-out, no longer possessing any value to the users.

Now, the question is, *Why*? Hardin argued that there is a necessary economic logic at work here—that if we start with a resource that has this commons status, then necessarily, by an internal logic, we´ll end up with the tragic result.

The argument proceeds as follows. Obviously, we have the resource, but we need to add another element to the scenario. The resource is just sitting there. No problem yet. But we add people who want to use the resource. And so here [on the whiteboard] what we need to do is add people. And these are people who are *self-interested*—that is to say, they want to use the resource for their purposes. In Hardin's working example, we have herdsmen who have cattle, and they want to put their cattle out on the commons to have the cattle graze, grow fat, produce meat, milk, and so forth. So, we have *resource users* who are *seeking profit* by using this particular *common resource*.

Now, if we add these two together, Hardin says, under that scenario a number of things will happen. I will draw a larger box in the middle for this. One of those things is that the resource users will then have an *incentive to overuse* the resource.

Why will they have an incentive to overuse the resource? Because they will be thinking: If I put a cow out, there is *no cost to me* to using the resource for doing so, but all of the *benefits* to using that resource accrue to me. So I will put out another cow. Again that´s costless to me and again I will accrue all of the profits from the use.

You, of course, if you are another resource user, will make the same calculations and have the same incentives.

Next, I will notice that you are putting more cows out, so I will say to myself, *I´d better put more of my own cows before your cows use it up*. So we´ll have a mutually-reinforcing incentive to overuse the resource.

At the same time, we have an incentive *not* to do any maintenance. If I'm a cattle farmer, I normally would have an incentive to look after the pasture resource so that my cows can continue to graze. If I do not engage in maintenance, then the resources will become depleted more quickly.

Now, though, we have to ask: In a commons, why do I *not* have an incentive to engage in maintenance? Well, suppose the maintenance that we´re considering is weeding. There´s the huge commons, a pastureland with some weeds. So I might say: *Well, I can go out and weed this huge pasture*. And if I weed the pastureland, then there will be benefits that will accrue to me, namely, that more grass will grow, which will be better for my cows. But, at the same time, I recognize that if I do all the weeding myself, *your* cows also will gain the benefit of my weeding; so, I will then incur the cost of doing the weeding and I will get some of benefits—but much of the benefits will go to other people who are using the resources as well. So when I do my personal cost-benefit analysis, the numbers don´t add up, and I have less of an incentive to do so. You will make the same calculation, and so maintenance is less likely to get done by either of us.

Also, I don´t have much incentive to make improvements. For example, maybe the pastureland gets drier late summer, so I think: *Maybe I should dig a well so that my cows have water available to them in the dry season*. Well, if I put the well in the commons, then, of course, my cows will get the benefit of that, but also *your* cows will get the benefit of the well, as I won´t be able to stop you from using the well in the commons. I will incur the costs of digging the well, and the benefits of the well will be dispersed among any number of people who are using it.

Let's put some numbers to it. Suppose that the pastureland is 10,000 acres and 50 herdsmen using it. If I think about doing the maintenance for 10,000 acres, that´s a big cost to me; but the benefit is going to be spread among 50 people, which means I am going to get only one-fiftieth of the benefit. That is, I will bear 100% of the cost and get 2% of the benefit. The same thing holds for any improvements. Maybe I consider planting some shade trees to protect my cows from the summer heat. I would bear the costs, but the benefits would be dispersed.

So the first point is that, under this commons scenario, people have an incentive to *overuse* the resource and incentives *not* to engage in maintenance or improvement.

These are only incentives along a spectrum, depending on the particulars of the resource in question, the number of people who are using it, and the costs involved in doing these things. The incentives may be more or less, but nonetheless there is a general principle about the incentives and disincentives in place.

Now, consider a second iteration of this cycle. Suppose that in the first year we put our cows out. Nobody engages in maintenance and nobody makes improvements. What will happen in the second year—if we continue to do the same sorts of things—is that things will get worse. Since we´ve overused the resource and not engaged in maintenance, then, at the beginning of the next grazing season the grass grows less thickly, less fully, less in quantity overall. There are more weeds and so forth. And we´re still putting our cows out.

But we notice partway through the season that our cows are underweight. My cows are supposed to be, say, 1,000 pounds, but they are only 800 pounds. My cows are skinnier.

What does this then give me an incentive to do? Well, if my profit margins or the gains that I need depend on my cows being over 1,000 pounds, but my cows are underweight, then, say, I need to put my cows out to pasture earlier. My practice might have been to take my cows out at 7 o´clock in the morning and leave them out until 4 o'clock in the afternoon and then bring them in for the evening. Well, if my cows are underweight, then I need to get them out at 6 o'clock in the morning and leave them out until 5 o'clock in the evening. That´s an incentive to overuse the resource.

Of course, the same thing is happening to you and the other 49 herdsmen. All of us, then, have an increased incentive to overuse the resource. We certainly are not going to engage in maintenance or improvement in that circumstance. We are poorer because our skinnier cows or the lesser amount of milk is not bringing in the income.

Also, when we see the resource declining, that forces more short-term thinking upon us. Maintenance and improvements are for the longer term, so we have less of an incentive to do so. So the relative amount of overuse increases.

Also, the relationship between the herdsmen themselves starts to go downward in a vicious cycle direction. If I put my cows at 6 o'clock in the morning, and you notice that I am putting my cows out earlier, then you´ll start to say, *Oh, maybe I need to get my cows out at 5:30 in the morning and leave them out even longer*.

And then tit-for-tat types of competition come along. If I see you putting your cows out earlier or even putting more cows out there, then I might start to see you as an enemy—your cows are using up resources that are important to my cows. Maybe I will start doing things like sneaking into your barn at midnight and killing a couple of your cows. *Oh, sorry, look what happened, that´s so sad that you lost some cows last night.* But, really, your having fewer cows is to my benefit, so what we then have is explicitly zero-sum competition. You will likely have your suspicions about who killed your cows—or it might not matter to you who killed your cows—you will have an incentive to do the same thing to other people´s cows.

This starts a vicious cycle: the incentives get worse and worse in a downward spiral, until finally we end up with a depleted resource—the grass is all weedy, it´s not growing plentifully, our cows are skinny or dying, which means that we farmers are becoming skinny or dying—so what we must do is abandon the resource altogether.

Part 2: The Free-Market Solution to the Tragedy [Video clip 2]

We have reached a tragedy, and it´s a bad thing. So the next question is: *What is the solution to the problem?* How do we avoid the tragedy resulting from resource depletion? We have to break this vicious cycle somehow. That means we need to change the incentive structure, and that points us back to the initial two cells in the flowchart. We have (1) the *common resource*, and we have (2) *people who want to use the resource*.

Now, everything is business ethics and political economy is controversial. While most people will agree with Hardin that he has identified something correctly—there is an iron-clad logic to what has been presented here so far—but what it is disagreed upon very fundamentally is what the proper solution to the problem is. And the proper solution to the problem depends on a proper analysis of what gives rise to the problem in the first place.

So: what we have are two initial factors at work. And the problem is that jointly they send us down a certain developmental or lack-of-developmental path. And the difference is going to be whether we say *this* factor [the commons] is the problematic factor or *that* factor [the resource users] is the problematic factor.

Solution 1**:** One side of the debate says that the problem is that we have a resource held in common. So what we need to do is change the incentive structure, that is, the bad incentive structure that is built into resources being held in common. So we need to abandon the commons, so to speak.

So, Solution One is going to say that the problem is the commons. It´s fine that people are self-interested: people are farmers, and naturally and healthily they want to put cows out to use the resource, because they want to feed themselves, feed their families, become prosperous, and so forth. That´s fine, but the commons is the thing that needs to be changed. The solution, then, is going to be to *privatize* the resource. We need to institute property rights in the resource.

Now, what will then mean in our working example? We imagined 10,000 acres of pastureland, and we´ve got 50 people who are resource users. So to do the math crudely: take the 10,000 acres and divide equally among the 50 resource users, the 50 farmers. Each person gets 200 acres. That becomes their private property. We have then instituted private property.

How does privatization change the incentives? Under a commons, I can´t stop you from doing what you want with the resource and you can´t stop me from doing what I wish with the resource. But under a private property regime, my property becomes mine: I can do what I want with it and I can also prevent you. There are legal protections in place stopping you from using my resource. And the same holds for you. You can use your resource how you wish and you can prevent other people from using or abusing your resource.

So, how will self-interested people act under the institution of private property? The argument on this side is to say that this changes the incentives quite dramatically. This is now my 200 acres and I can then look at it in terms of the problems. Do I have an incentive to overuse the resource? Will I just put as many cows out there as I possibly can to maximize my short-term gain?

No: I have then an incentive to respect the capacity of the land. I have my 200 acres and I know that each cow needs, say, two acres of pastureland to support it during the course of the year. I can then do the math and see that I can at most have 100 cattle in this particular place. If I don´t respect that limit, then I am just setting myself up for long-term failure. So I then have a respect for the limits of the resource.

I might then also think about improvements. Is there a way that I can increase the carrying capacity of the land or increase the value of my resource in this particular place? I have an incentive to do so if the cost-benefit calculation works out.

For example, will I dig a well on my land? Well, I´ll do my research to figure out that it will cost me some amount of money to put the well in. Since it´s on my private property, I will bear 100% of that cost. But at the same time, I am going to get 100% of the benefits, because only my cows can use that well. I do my cost-benefit calculation and, if it works out—if I am going to be profitable in doing so—I am more likely to do so.

Or, I might also say: If I put a well in and the well produces a great amount of water, then I´ve got more than enough for my cows to use. I can, in turn, sell some of that water to my neighbors and therefore make more profit. So my incentive to make improvements increases.

The same thing holds with respect to maintenance. If we go back to the example of weeding: I´ve got my 200 acres—should I do the weeding? I could say Yes, because if I do the weeding then there´s going to be more grass for my cows. Weeding costs a certain amount, costs time or, if I use herbicides, it costs certain amount to purchase the herbicides. I will bear all of those costs, but I will also get all of the benefits. So I do the cost-benefit analysis, and my incentive to do maintenance increases.

Also, since this is private property, I have an incentive to do all of these things over the long term. Long-term improvements and long-term maintenance mean the long-term value of the resource goes up. For example, maybe I am a younger farmer right now, but at some point, I want to retire and get out of the farming business. When I retire, though, I want to sell my farm and make sure that I´ve got enough money saved up in order to be able to support myself in my old age. So, I think ahead, what is going to put me in a position to sell my farm for the most amount of money? Well, what will put me in that position is if I´ve looked after the resource, done proper maintenance, and made improvements. The more that I do those things, the more in the long term my farm will have higher property values, so I can sell it for more money. So my self-interest will lead me to pay attention to the long-term value of the resource.

Another self-interested consideration: Maybe when I retire I will want to turn the farm over to my kids. As a parent, I love my children and want them to have the best possible advantages in life. That will mean, if I am going to turn the farmer over to them, that I want the farm to be in as good as possible condition for my children—this is something about their long-term futures. So I have an incentive to look after things as well.

Now, under privatization, the long-term value is going to be maximized for me, but this is also going to be socially win-win. Over here [in the initial tragedy scenario], we had *zero-sum* competition. The privatization argument also says that this property-rights regime increases the *win-win* nature of competition.

For example, a maintenance issue might arise. Suppose you are my neighbor, and I want to put a fence up to stop my cows from wandering off or to stop your cows from wandering onto my property. Under a commons scenario, I can´t put a fence up unless I get other people´s permission. Or maybe I can put the fence up but then I can't stop them from tearing the fence down or otherwise ignoring the fence's being there. But under a circumstance of private property, we have an incentive to work together with respect to the fence issue. I might then say: I think it´s a good idea to have a fence, and I do my cost calculations—but it would make sense for me to go to you, my neighbor, and say, *We share this joint boundary, and it will be to your advantage if there is a fence there. It´s also to my advantage if there´s a fence there. So, why don´t we cooperate and split the cost of the fence?* We´re then more likely to work with each other to engage in a particular improvement in that case. Socially, that´s an increase in win-win relationships.

Also, if I improve and maintain my property, that increases the long-term value of my property, but there are also network effects. If you are the neighbor of someone who has well-maintained, attractive farm, then that increases the property value of *your* farm. That´s the network effect with respect to real estate prices. Also, it gives you an incentive, perhaps, in a keeping-up-with-the-Joneses social dynamic. Or maybe you see that I did something on my farm and you say: *Ah, that´s really cool. I never thought of that*. You learn from me, and you go ahead and do the same improvement on your farm. Or maybe there´s something that you do on your farm that I think is a good idea. I learn from you and do that on my farm as well. Once again, we have socially win-win benefits.

Now, to summarize, the argument here is, if we start putting labels to it, that the best way to solve the problem of the commons is to institute free-market capitalism. The features of free-market capitalism that are being tapped into here are: (1) self-interested profit-seeking, which is seen a healthy, positive, motivational force; and (2) the institution of privatization and so private-property protections for various kinds of resources. The argument then is that private property combined with self-interest leads people to (3) maximize in a healthy, long-term respect the economic value of resources. And that free-market capitalism is (4) social dynamic is socially win-win. This is what we will call the free-market capitalist solution, and that´s the first of two proposed solutions to the problem.

Part 3: The Socialist Solution to the Tragedy [Video clip 3]

***Solution 2*:** The other side of the debate differs with the free-market capitalist solution by arguing that the problem is *not* the commons. In fact, this side of the argument is going to argue that it´s important that we have commonly held resources—that important resources be available to all people. That we should all share collectively in the bounty of the Earth, and so forth.

The problem from this perspective is this motivation of the resource-users. The problem is that most people as individuals are self-interested profit-seekers, and that´s what leads to the dysfunctional tragedy of the commons scenario. So, to put the cells in place, this side is going to say that the problem is self-interest. The way it´s sometimes put is to say that people are *greedy* or they are *profit-seeking* in a pejorative sense.

So, I will highlight this cell [on the whiteboard] here. And what that motivation leads them to do is to think about their own personal advantages and *not* the effect of their actions on other people. Or to maximize their *short-term benefits to themselves* and to ignore the longer term effects of that on *the community as a whole*. So, self-interest is a bad thing or least the dysfunctional element in the scenario. And this side is in favor of commonly held, shared, mutually accessible resources—it is more likely to think that private property is not a fundamentally valuable institution, socially speaking.

So, what we then need to do is *not* privatize the resource—but the solution rather will be *to limit or override the effects of private self-seeking behavior*. Override the profit motive. Override the self-interest. Stop the tendency of greedy behavior from manifesting itself in socially-destructive results. What we then need is, rather than instituting private property that is then protected by the government, the proper solution is going to be *government management of the resource*.

So we say that the resource is a *public* property, is a *community* property, it´s a *socially-valuable* resource. The government is the institution that makes decisions on behalf of the community or society as a whole. And so, if we have an important, valuable resource that we want to be held in common, it makes sense that the government as our agent or representative assumes the management of that resource.

What the government then will do is put in place a variety of policies that will change people´s incentives with respect to how they use the resource. Rather than just leaving it up to individuals freely to decide for themselves how many cows they´re going to put out, how long they´re going to leave them out, and so forth, we will have the government say: Here is how much of the resource we have, say, here is how much land we have, here is how many people we have, and we´ll decide in a central fashion how many cows you may put out, for how much time you can put them out, and so forth. That is *rationing*.

In order to engage in maintenance and improvement, we´re saying that in the initial tragic scenario people were not voluntarily putting up the resources that were necessary. And so, since these things do need to be done—but people are not voluntarily willing to do so—we need to *tax* people. So we the government will send people a tax bill: here is how much we need for improvements, here is how much we need to engage in maintenance, and so forth. And it´s for the good of the community, so we have the rationale for imposing taxation.

We might next say: In addition, out of a sense of community spirit, since this is something that we are all doing, if there´s a certain amount of maintenance that´s necessary for the good of the resource, we need people to do weeding, we need people to dig wells, we need people to put out fences, plant trees, and so forth. Under the initial tragedy-of-the-commons scenario, people were not voluntarily doing that labor. So what we might say is—we the government can mandate that people engage in that behavior, so we´ll draft or conscript people, or what is now is *conscription*. It´s not a draft necessarily for military purposes, but for broader social purposes. And so, people are assigned to tasks: You have to do two hours of weeding, or three hours of fence-building, and so forth.

Of course, the government can pass all of these pieces of legislation and regulation, but we need to make sure the people are doing what they´re supposing to be doing. That people aren´t sneaking extra cows out when they´re not allowed to. That they´re in fact playing their tax bill. That they´re showing up for their public duty when they´re assigned to do so. So we´re going to need a significant amount of *policing* in order to so. And this policing must have some teeth in it. There have to be various *penalties* in place: if you don´t pay your taxes or if you violate the rationing orders, then you´re subject to various sanctions.
All right, so what we then have is array of regulations that the government can put in place. The argument on this side of the debate is that with the right, judicious mix of rationing, taxation, conscription, policing, and penalties, in place, the government will then will maximize the long-term value of the resource.

We´ll end up with a socially win-win result. The resource is managed appropriately in a way that preserves its common value. The self-interested motivation and its socially-destructive results are contained, thereby leading to this result as well.

What we then have obviously not a free-market capitalist solution, if we again start putting labels on here. In its strongest form, if we assume and we generalize this point at all the significant resources of a society belong to the community as a whole and that it is the job of the government to manage them, then the best label for that is a kind of *socialism*.

Part 4: Comparing the Two Solutions [Video clip 4]

Now to summarize and point out some fundamental contrasts between these two analyses of the situation.

Both sides will agree that the central part, here in black [on the whiteboard], is good economic logic. These two initial institutional factors [commons plus self-interest] do jointly lead to this negative result [depleted resource]. And then we have two competing solutions with different analysis of the root of the problem, which lead to different solutions.

I next want to point up what are the fundamental differences that are driving the different analyses of the problem and the corresponding solutions.

One has to do with the status of self-interest. One thing that typically happens prior to getting to economic management, political economy, or public policy issues is that people bring to the table a pre-set commitment to an ethical position. One side is more likely to say that self-interest is a healthy, moral phenomenon, that people are competent and capable of figuring out what their self-interest is and that they are able to think long-term. They are able to work out in a voluntary fashion, mutually beneficial, self-interested behaviors and so forth.

The other side is more likely to bring to the table an analysis of self-interest that sees it as zero-sum, as potentially predatory, as irrational, and as not only in the long term destructive to my own interest but also to the interest of others.

So, do we see self-interest as a good, moral, healthy phenomenon or do we see self-interest as a bad self-socially destructive phenomenon? We see that right off the bat when we look at the scenario here. One side is immediately focusing on self-interest as the problem and playing up the negative results of self-interest. The other side over here sees self-interest as fine and as having positive energies that can be channeled in a healthy direction with the right institutional framework.

The second thing that is contrasting in these two positions is the status of private property as an institution. One side argues that private property is healthy, normal, and moral, and that as much as possible we should respect what is yours and you, in turn, should respect what is mine or ours, and so forth. And so, we see here that private property and individual control of private property as a good phenomenon.

The other side is more likely to see private property as something that alienates people from the community, or, positively, to have a vision of a moral community as one in which we share, we hold things in common, and we do things for the good of the community as our primary focus. And so, naturally, that side wants to preserve or increase the stock of things that are commonly done.

So this side [privatization] is more likely to say that the commons is a problem and to be very comfortable and to moves smoothly to the idea of *Let´s privatize the commons as much as we possibly can*. This side over here [government-management] resists that move: it wants to keep things in the commons as much as possible. So the logic of its position then leads it to try to develop institutions that will preserve and protect things in the commons.

A third point of difference than has to do with the scope of government. One side will bring to the table the idea that there is properly a fairly limited function for government. The government´s job might be initially to institute private property rights—e.g., to take the 10,000 acres and divide it up among the 50 people—to assign title and then to develop the legal mechanisms that will protect people´s property from thieves, from contract disputes and so forth. The idea is that government has a fairly limited role: the way the economy is going to work, and the way that most of human life is going to work, is going to be a matter of people managing for themselves.

The other side, by contrast, is going to call for an expansive role of the government in most areas of human life. In this case, in the economy as well.

So: do we see the government as *limited* in its focus or very *broad*? That abstract political-philosophy point is broad to bear.

Fourth point of difference: This side [privatization] is more likely to see free markets as socially win-win. So, if we look at free markets on the flowchart here, what happens in a free market is that people use their property to their advantage and that has network effects that benefit other people.

But free markets also have socially win-win mechanisms in place to deal with people who abuse their property. So, for example, if we do this initial institution private property, everybody gets their farm, so we now have 50 farmers, each of whom has 200 acres. The majority of us are going to do this [good farming practices] here. But some of us are not going to be very good farmers.

Take me, for example. Maybe I am really lazy and when I am supposed to be working on my farm, too often I just stay home and watch baseball on TV and drink beer. Or, I make really bad decisions, and so forth. And so I just run my farm into the ground.

Now, of course, my neighbors are upset with me because my farm looks terrible and that reflects badly on them. Maybe there are pests and diseases that are starting to infect my cows, and there is the danger that they will spread over to other people's farms.

But the point here is: If I am one of those individuals who is not maximizing the long-term value of my farm, what is going to happen to me in a free market? Well, what's going to happen is that my farm will no longer be able to support me. My cows will get skinny, they will get disease-ridden, and pretty soon I won´t be able to make a living from my farm and I will be out of business. What that then means is that if I am going to stay alive, I am going to have to sell my farm. That farm has some latent economic value, so I will have to sell the farm, take the funds from that, and do something else.

To whom will I sell the farm? Who is going to be in a position to be able to purchase the farm? Well, it has to be one of the other 49 farmers, one who did a good job with his or her farm, who was very profitable and has saved up a certain amount of money, so that he or she is in a position to buy my farm.

What that means is that in the medium-to-long term, if I am a bad farmer, I am not going to be able to retain control of my resource. Instead, the control over that resource is going to shift to somebody who *does* maximize the long-term value of that resource. And so, in the longer term, we´ll weed out to people who are abusers or misusers of resources, and the control of those resources will go to those who do well by that.

What happens to me in that scenario? Well, chances are good that I will have to work for you. If you are the person who purchased the farm from me, you now have, say, 400 acres, and that´s a lot for one person to manage. So you´ll hire me. But at least I will be working now for someone who is a good farmer. My working for someone who is a good farmer—who knows what he or she is doing with the resources—that is better for me than being a dysfunctional farmer on my own. That´s the argument that free markets typically are win-win.

The other side [on this fourth point of difference] is more likely to say that free markets are going to be win-lose. What they will say is that the problem is that we *had* a kind of free market: [In the initial tragedy scenario] we had these resources and we left people free to do whatever they want with those resources. But free market led to a kind of anarchy, a negative anarchy in which nobody can trust anybody. The resource was misused, and so forth. And we know that caused a negative effect, the tragedy. So the argument here is that free markets are inherently negative—they set people against each other in competitive ways, and that is a problem.

Another, fifth, element of difference is over the status of the various kinds of incentives that the two solutions put in place. This point is a combination of the role of government-versus-free-markets, because these two institutions incentivize people in very different ways.

You notice that common incentivizing point here on this [government-management] side of the debate is to say that we need to have rationing, we need to have taxation, we need to have conscription, we need to have policing, and we need to have penalties. All of those involve *compulsion*. We´re saying: If you don´t follow these regulations, then bad things will happen to you. The police will come after you. They will make you pay your taxes. They will make show up for work when you´re supposed to. They will physically remove your cows from the resource if they´re inappropriate. And so this side is arguing that we need a great deal of compulsion in order to get people to do the right sorts of things.

This side [privatization], by contrast, is saying that we really don´t need very much compulsion at all. Instead, if we have people in a free market, if they own their own resources, then their self-interest will motivate them *voluntarily* to do things that are good for them, good for the resource, and so forth. For example I don´t want to be sued and you don´t want to be sued, so we will voluntarily respect the boundary limits between our property here. I want to make a lot of money, so I will voluntarily engage in improvements that are going to make me money, and the same thing holds with respect to maintenance. So this side then is more likely to argue that voluntary mechanisms are best to get the proper kinds of results.

Okay, in conclusion, these are five points of contrast: (1) the status of self-interest as good or bad, (2) the institution of private property or commons, (3) the narrow or broad scope of government, (4) whether we are friendly or unfriendly toward free markets, and (5) what we see as the proper incentivizing structure in order to achieve good results.

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Supplements

* Garrett Hardin, "The Tragedy of the Commons", *The Concise Encyclopedia of Economics*.
* Transcript of the above video lecture online [html].
* Summary flowchart of the arguments [jpg] or [pdf].
* Elinor Ostrom, "Ending the Tragedy of the Commons."
* The Business Ethics Cases series. Full playlists at YouTube.

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