

Demetri Kofinas: What's up everybody? Welcome to another episode of Hidden Forces with me, Demetri Kofinas. Today, we speak with Sam Bowles. Dr. Bowles is a research professor at the Santa Fe Institute where he heads the Behavioral Sciences program. He studies on cultural and genetic evolution have challenged the conventional economic assumptions that [00:00:30] people are motivated entirely by self-interest. He is the author of nearly 20 books, such as the Moral Economy and A Cooperative Species. He served as an economic advisor for the governments of Cuba, South Africa, and Greece as well as to the US Presidential candidates Robert F. Kennedy and Jesse Jackson. In this episode we follow the archeological record in pursuit of the footprints of homo economics, the only known rationally expedient [00:01:00] utility maximizing hominid ever to walk the earth. We take the rod from Aristotle, paying heed to his ethics and to his convictions that laws should not be made to restrain evil, but to cultivate good. That this was the test of a good constitution.

But with the collapse of Rome and Europe's descent into darkness, there emerged ideas of life as brutish and man as wicked. Hobbes' Levitation, Machiavelli's prints were driven not by the aspirations [00:01:30] of man's highest ideals, but by appealing to the lowest, most unimpressive motives of his animal nature. Later political economist like Bernard Mandeville and Adam Smith took this further, seeking to harness the industries of average, converting self-interest towards the public good. The invisible hand emerged and with it notions of inseparability. Homos apian existed in one realm and Homo economicus in another. The beneficent, moral being on the one hand and the selfish [00:02:00] utility maximizing agent on the other. Laws were built upon this framework, ideas of the marketplace, incentives and regulations what economists call mechanism design. What have we learned in the years since that have challenged the foundations of these assumptions.

What are some of the insights of behavioral economists, moral philosophers, and evolutionary psychologists that task the fitness of Homo economicus in the 21st century? And what types of habitats can we design that are better [00:02:30] suited to the citizens of Aristotle's legislator than to the aberrations of modern economic man. As always you can gain access to reading lists, put together by me, ahead of every episode by vising the show's website at HiddenForces.io. Lastly if you're listening to this show in iTunes or Android, make sure to subscribe. If you like the show, write us a review and if you want a sneak peek into how the sausage is made or for special story lines, go through pictures [00:03:00] and questions, then like us on Facebook and follow us on Twitter and Instagram at @hiddenforcespod. And now let's get right to this week's conversation.

Sam Bowles, professor Sam Bowles, it's great to be sitting here with you at the Santa Fe Institute library ahead of this conversation on moral psychology, moral economics. Your book is actually called the Moral Economy. I've watched some of your lectures, as you know, we spoke about that. I've read your book and the thing that fascinates [00:03:30] me most about your work and we're gonna cover a number of things, but just on the outset to our audience just to say, what I find most interesting is the way in which you combine your insights and the work of Friedrich Hayek and the information problem in prices with behavioral psychology, behavioral economics. So I'm curious if there's anyone else that

does that? I was not familiar with that. But why don't you sort of start us, I think it would be great if we started along the path of beginning with Aristotle. [00:04:00] The road from Aristotle that takes us down the path of how the economic profession embraced or came to view human beings as Homo economicus, divorced of sort of mortal sentiments and being a self-actualizing agent for utility, utility maximizer.

Sam Bowles: If you start with Aristotle, he was keenly aware of the fact that how we govern our societies has a big effect on what kind of citizens we turn out to be. In fact, he said, the chief task of the legislator [00:04:30] is to design laws that will inculcate good habits in citizens. And he went on to say it is this that is the test of a good constitution, not one test of a good constitution but the test of a good constitution. That is to produce a citizenry that have civic values of commitment to each other, generosity and so on. Now that's a view that persisted over a great many years, up until the middle ages, and basically the idea was that good citizens were the requirement of [00:05:00] a good society. And there's a lot of religious and other moral thinking about that. The first break in that tradition comes with Machiavelli.

Machiavelli is a guy who is despised because he is said to have thought that morals didn't matter. That's not at all the true of Machiavelli. He understood that morals mattered a great deal, but he also understood that in governing we had to think well what do you do about the guys who really don't share the morality of the rest of the population, how do you deal with them? [00:05:30] And in his book, The Discourses, which is actually a much more profound book than his more famous book The Prince, he said, "It is said that all men are wicked. Hunger makes them industrious and laws make them good." Now I want to remind you what he said, "It is said," he didn't say this is true, he said this is an adage which was current in the Italian of the time. And he then went on to say that we should take account of the fact that at least some people [00:06:00] have these, what he would call vices.

He didn't say that we should ignore their morality, but he did say that in designing a constitution we should think of normal people and what he called the natural and ordinary humorous by which he meant just values and preferences that people have. Then if you move on to the early 18th century, this idea was picked up, I don't know if directly or not, by a rather quirky Dutch doctor living in London. [00:06:30] His name was Bernard Mandeville. And he wrote a scandalous book called, The Fable of the Bees. And this was a fable, which was about bees because had he said these things about humans he probably would have been run out of town. And what he was this, Mandeville had this fable of the bees and the bees were really a nasty group of people. They were selfish, lascivious as he said, given to leisure and to over conspicuous consumption.

Demetri Kofinas: Basically nothing like bees.

Sam Bowles: Nothing like ordinary [00:07:00] bees. It's a very funny story because of course he knew nothing about what we now know about bees as a highly cooperative insect. In any case, these were individualistic bees, given to the vices of the time, including avarice and greed and the hive went on very well. So he said in this fable, "The worst of all the multitude of the bees, the worst of all the multitude did something for the common

good." And then he went on to say, "Such were the blessings of that state. Their crimes [00:07:30] conspired to make them great." And so this was a kind of strange situation, which the viceful society was doing well and then just to make the point very clearly at a certain point the bees got religion and they all got to be really nice bees and following the morality of the day and the hive collapsed and it was a disaster for the bees because nobody was consuming and nobody could sell their products or whatever, I forget the story.

Anyway it was scandalous because what he was suggesting is [00:08:00] that good outcomes could result from ordinary motives. And that was the same idea that Machiavelli had was that in governing well the human capacity is not that we're saints, our capacity, which distinguishes us from most other animals, is not our goodness but it's our capacity to design laws that can harness ordinary people to do good for the society as a whole and that's what Mandeville, Bernard Mandeville, early 18th century in London, that's what he was trying to do. Well it was just a short [00:08:30] step between that and Adam Smith later in the same century, in which Adam Smith then got the idea, oh self-interest can actually have very good effects in society.

And so Smith famously said, "It is not the self-interest of the brewer, the baker, and the butcher who puts your dinner on the table. It's their regard for their own interest." And then he amplified and he went on and he said, "And it's even better that it's their self-interest that's doing this. Sometimes society works better [00:09:00] when people are simply trying to watch out for themselves instead of trying to do good for the public." Well now that's a radical shift, because now essentially Smith is saying, and along with Machiavelli, we can do pretty well with ordinary citizens, we don't ask them to have special morality. Now Smith of course was very concerned about human morality and wrote a very good book about it, in which he said, of course that humans are acutely moral and our societies work well because of it. But there are some [00:09:30] realms in which it works tolerably well even if people are self-interested.

Demetri Kofinas: And of course there's also inherent in that, and Mandeville touches on it and then of course Adam Smith gets to it explicitly, which is this notion that the good emerges from the cumulative sum of the amoral parts of the system. It's sort of emergent, which is what the invisible hand would be, correct?

Sam Bowles: Right. In the passage in which Smith talks about the invisible hand, the famous [00:10:00] idea that society would be guided as if by an invisible hand, one imagines he may have been thinking or thinking that his readers would think the invisible hand of God. An invisible hand will guide the society towards a good outcome even though no individual in that society cares about it. So that's the basic idea of the invisible hand. Now Smith never thought that that should be applied throughout society, but he did identify some conditions under which it might work reasonably well. Now the only reason [00:10:30] why this was tolerable in 1776 when Adam Smith published his great book, *The Wealth of Nations*, the only reason why this was tolerated by his readers, was over the previous two centuries the idea of greed or avarice as it was called, had been converted

from what had before been considered to be one of the seven deadly sins. It had gradually been converted to a normal human motive among others and not particularly culpable.

Demetri Kofinas: Was that an outgrowth of Calvin and [00:11:00] Calvinism?

Sam Bowles: I think it was not. I think the primary driving force in this whole process was the previous century, which in Europe was a century of war. Much more so than the 20th century. The number of deaths in the 17th century as a fraction of the population exceeded by far the number of deaths during what we now call the century of total war, namely the 20th century, the first and second world war. It was a period of religious wars, of zealotry, of intolerance, and [00:11:30] of course of all the hardships that was caused. And so when Dr. Samuel Johnson said, just the year before Smith published his book, he said, "I can hardly think of any way, more harmless for a person to go about his business than to be making money." That is making money is something, which is a harmless activity and we should encourage making money. And what was he thinking?

He was thinking that the alternative to self-interest was zealotry. That's what his concern was [00:12:00] and so throughout the 17th century and the 18th century, the thinkers were not concerned that people might be too selfish, too concerned about themselves, they were worried about the other kinds of concerns, as I say religious zealotry and tolerance and so on. And so for them, self-interest was kind of antidote to that and that's what I don't think Smith thought that self-interest was actually an admirable motive, but I think it became tolerable. It became accepted in polite company that self-interest would be an okay motive. [00:12:30] So that's, I think the kind of domestication of avarice took place long before economics had a powerful hold on people's minds and it took place in the environment, which I said, in which the fear was not greed and the kind of repetitious avarice that you now see in the world today, but rather it was that there are a number of motives that need to be tamed and self-interest would be one of them.

Demetri Kofinas: That's interesting when you talk about that transition and the fear of war and revolution [00:13:00] and other forms of insurrection against the established order, it reminds me in many ways of something actually we recently covered on the show. I did an episode very recently on the Chinese banking system and we sort of traced the evolution of Chinese society and the Chinese economy after the revolts at the Tiananmen Square and the crackdown by the Chinese government and the subsequent way in which the Chinese government proceeded to sort of attempt to appease the citizenry or the population or the workers by promising them material [00:13:30] gains in return for obedience. And I think there's something similar there in what you're saying and it also reminds me of course of Hobbes and Rousseau. Where do they fall in this transition because the work that they did in this regard was very significant?

Sam Bowles: Well both Hobbs and Rousseau in different ways posed the problem of how do we live in a society of relatively free people, no longer bound by tradition or by obligation to a patriarchal family or to other forms of tradition. [00:14:00] How do we organize such a society in a way that can achieve a rather remarkable result, which is that people should be free to carry out their activities according to their own values, but the

result should be an outcome, which people would prefer. That is they would like that outcome, so they have to take actions that they prefer, but the outcome has to also be an action, which when we look at it retrospectively is one, which we find acceptable.

Now we know that that's not the way the world works. [00:14:30] There are many situations, the prisoners dilemma being the most famous of them, in which taking care of your own interests, acting in a self-interested way will lead you to a result that neither you nor the other player would prefer.

Demetri Kofinas: Could you please explain what the prisoners dilemma is for our audience?

Sam Bowles: The prisoners dilemma is a game, the story behind it and the reason, which gives it its name is two individuals are walking in a neighborhood and they happen to be carrying breaking and entering tools and they're apprehended [00:15:00] by the police who have no evidence that they've committed a crime. They separate the two prisoners and they interrogate them. And they're told, each individually that if you confess and essentially implicate the other person, you'll get a light sentence. If you confess and the other person also confesses then you'll get a heavy sentence, if you both hold out, you may go free. Well it turns out in the situation the best thing to do is to confess, no matter what you do, so both [00:15:30] prisoners will confess and they both go to prison, whereas if both had held out, they would actually walked. Now that's a classic game in which, when people cooperate they can do better than when they act self-interestedly.

That game and the idea of the game has been applied to environmental problems and to many problems in society, for example obeying norms in traffic and being generous towards others, these are situations in which if everybody does it it's definitely a good thing to do, but you would do better yourself [00:16:00] if you just defected.

Demetri Kofinas: In other words the rational action, if we were to assume that each actor is selfish is to just simply look out for one's self, because no matter what, whether the other person reciprocates or not, you will be better off. But what you're saying is if both parties participate together, collectively, they'll be better off of course.

Sam Bowles: Right and this poses the problem of cooperation obviously. In those situations in which cooperation is mutually beneficial, will yield a result in which we both [00:16:30] prefer to the result we would get if we each pursued our self-interest, how do we make sure that people will cooperate then instead of competing in a self-interested way? Well the genius of Adam Smith was that he figured out also, let's ask the other problem. There are many situations in which it's better if people compete and he posed the market as a good case of that. When he talked about businessmen in a particular field, he said, "Whenever they get together the conversation turns to how we can collaborate in some way to raise the prices," [00:17:00] that is to form a cartel and to defraud the public. So Smith's ideas in the Wealth of Nations were a great example of how making it difficult to cooperate by eliminating monopolies and cartel's in markets would be socially beneficial.

But we also know, Aristotle knew, Machiavelli knew, all the philosophers knew, that sometimes we have to cooperate to achieve the ends, which each of us would like to see, but neither of us will contribute to personally unless we're somehow [00:17:30] bound by some cooperative norm or agreement. And those are the problems we're facing today with climate change and many others. The spread of epidemics for example addressing the problem of political violence, these are all problems, which require very large scale cooperation and therefore we have to be concerned like Aristotle was with the kinds of norms and the kinds of values that people have. So we have to go back to Aristotle and then think about, well how are we doing on that score.

[00:18:00] Now let me add one additional piece of information because it could well be that Adam Smith is our guide here. Adam Smith wrote one book about morality, which he thought was very important and he wrote another book, *The Wealth of Nations*, about incentives and about markets and so on. Two brilliant books. Most people have not seen the books as very connected and I think neither did Adam Smith and the reason is a simple one. He was thinking that when we respond to economic incentive, to [00:18:30] prices and profits and so on, we're behaving in some way, which you might call self-interested, but of course that doesn't diminish our morality. In other situations we'll be responding to our norms. So there may be spheres in life and as a citizen we'll be civic minded and generous and law abiding and as family members we'll be loving and kind and responsible and as shoppers we can be as selfish as we want.

So the basic Smithian idea and the idea that comes across in most of the writers at the [00:19:00] time is that we have these separate spheres and I've used the work separability to describe this. That is they assume that the moral motives, what Smith called the moral sentiments, can be separated from what Smith would call the material interest. So our economic incentives can be pursued in a way, which have no effect on our moral outlook. Now that turns out to be radically false. It simply can't be done. If we live in a society, which is entirely [00:19:30] based on appealing to people's self-interest, when they shop, it shouldn't be very surprising that's going to spill over into other aspects of life. We now have very good evidence that, for example, treating people as if they're selfish through the use of incentives can actually make them act very selfishly when they wouldn't have in the absence of the incentives.

Demetri Kofinas: So you have a bunch of great examples, empirical evidence in your work that actually shows that. And I actually found those very instrumental and quite convincing and [00:20:00] very interesting actually. Could you go through some of those? For example the firefighters in Boston, I particularly like that. I like the one about the Irish and the plastic bags as well as the Hypha case with the school children. Could you give us some of the empirical foundation for this proposition?

Sam Bowles: Well I was just starting working on this book ... I have to tell you a story about myself. My kids were getting a little older and they wanted to have a little more money for buying clothes and they had an allowance, but I had this great idea that they could top up their allowance by [00:20:30] doing household chores. Now I have to say, my

kids were great, they did household chores very willingly and I never had a problem with them about that, but I thought this was a really great idea.

Demetri Kofinas: What processed you to come up with this idea when everything was going so well?

Sam Bowles: I think I have to admit that I'm an economist and only an economist would think of this. In any case as you might suspect it didn't turn out entirely well. We talked about the price list, mowing the lawn and doing dishes and so on and I thought we had a pretty good agreement. [00:21:00] It was posted on the fridge and after that they didn't do a thing. They didn't do anything, which they had done before.

Demetri Kofinas: This is the beginning of your disillusionment with economics?

Sam Bowles: No I was not at all disillusioned with economics at the time, I was fascinated by it as I have always been, but I think the joke was on me that I thought this was a way they could top up their allowances and avoid fights with their dad about clothing and things like that and it turned out to be a very good lesson in the fact that as you appeal to people's self-interests sometimes [00:21:30] it brings out the self-interest. Now there are many examples going beyond my particular experiment in home economics. The one you mentioned, the Boston firemen, is very instructive. The fire commissioner just before Christmas a few years ago, he noticed that there were a lot of sick call ins, it happened to be occurring more on Mondays and Fridays than during the rest of the week. Of course thinking that was a little odd, he said that he was going to revoke the fire departments policy of unlimited sick days and he put a limit [00:22:00] on the sick days and anybody claiming more days than that would have their pay docked.

The firemen were not impressed. On Christmas and New Years the number of people calling in sick doubled. They were furious and in the next year the amount of people calling in sick increased tremendously. Eventually the fire commissioner had to give it up. What was the problem here? Well it turns out that the firemen typically went to work even if they were injured, even if they weren't feeling well, they felt obligated as professionals to defend the city and the citizens. [00:22:30] Of course there were some who were abusing the practice otherwise there wouldn't have been all the call ins on Mondays and Fridays, but what the commissioner did is he said I don't trust you, I don't trust your professionalism as a public servant, as a firefighter and basically what they said to him was, I won't repeat it on the air, they said you're not trusting us.

Demetri Kofinas: It's okay, this isn't public radio. This is a podcast, you're allowed to curse.

Sam Bowles: I don't wanna quote it cause I'm not sure the firemen would like everybody to hear what they actually said, but they were furious and understandably so [00:23:00] because they were proud men and women and they had been diminished by this. But here's another case, maybe not as exciting but also very meaningful. In the city of Hypha in Israel there was a group of daycare centers, a large number of them actually, 16 of

them, all under the same management and is often the case at daycare centers the parents were coming late to pick up the kids. So they decided they would put a fine on lateness and just as they were about ready to do this a couple of economists who were aware of this came along and said, no wait a second [00:23:30] let's turn this thing into an experiment.

So what they did was they took half the daycare centers and they imposed the fine there and the other half of the centers they didn't do anything. So for a couple of weeks they recorded exactly how many people were coming late at the control centers and at the treatment centers, the treatment centers being where the fine would be imposed. And then in the treatment centers they put on the door, as of next week anybody coming more than ten minutes late to pick up their kids at the end of the day will be fined ten Israeli shekels. There was no explanation about why this [00:24:00] was being done because the economists, who are very good experimental economists, they said, we don't wanna frame this as anything, just say there's a fine. So let's see what the fine does.

Okay they waited and they counted and saw who was coming late and so on at both the control schools and treatment schools. Now I bet you can guess what happened. What happened is at the places where the fine was imposed the number of parents coming late doubled, it doubled. The fined parents came later. Nothing happened [00:24:30] in the control schools. Obviously after 17 weeks they decided to can the experiment cause it wasn't working very well, but they were distressed to find out well now the late parents kept on coming late even though they weren't being fined anymore. Now what's going on here? Well one possible interpretation is that the parents thought that the fine was how expensive it was to the school for them coming late so they just got that information.

In that case the price would have been conveying information [00:25:00] about how costly it was. I don't think that's a very reasonable explanation, it could be. Far more likely is the explanation offered by the authors of this study, which was that prior to the fine coming on time was an obligation. It's something you felt morally obliged to do if you could and it was an obligation to the teachers or to your own kids who might be anxious about you not showing up. You did the best you could, but sometimes you get stuck in traffic or sometimes you got into a conversation and you forgot to pick up your kid [00:25:30] on time. But you should have done it. You knew you should have done it.

Once they put a price on it became a commodity. Like a shirt, you want the shirt, step right up, you just have to pay for it. Lateness became a commodity which you could buy and they were happy to buy lateness for ten Israeli shekels. So what that says is incentives can sometimes backfire.

Demetri Kofinas: What I think is also really interesting there with what you're saying is, implied in that, is that the mothers, the parents were motivated to act in a particular way [00:26:00] that could not be or perhaps could be compensated financially but at a much higher price. And so perhaps if you put the fine at ten million shekels then no one would have been late, but what that also speaks to is the challenge of pricing and also of course what pricing does in terms of conveying information and what it says. Which I think is

really interesting cause that gets into some other things of your work. Go ahead, I didn't mean to interrupt you, I just wanted to throw that in there.

Sam Bowles: This is exactly, the price is a piece of information and here it was the information about the situation [00:26:30] that we're in. Economists don't think very much about the situations about the situation a person is in. We think about people having some tastes or preferences and we act according to those. Psychologists say how we act depends a lot on the situation. For example, it's much easier for us to be selfish when we're shopping than it is for us to be selfish when we're dealing with family members. Well this was a case in which the presence of the incentive, the price said oh this is like shopping, this isn't like dealing with a family member. So that essentially [00:27:00] turned the switch, shopping, when it used to be something like, oh family or friends.

But let's not be down on incentives. Incentives absolutely are essential to how the economy works and they don't always backfire at all. Lots and lots of examples in which incentives are absolutely necessary. Huge number of jobs in a modern economy are jobs that nobody would do unless they were well paid to do them, so we can't forget that. But here's an example in which incentives, just like at the Hypha daycare centers were imposed [00:27:30] with a surprising result. Ireland passed a law imposing a small price or tax on the use of plastic bags. The consumer had to pay and within two weeks plastic bags disappeared from use in Ireland. Virtually they fell 92%. You couldn't find people carrying a plastic bag. Having a plastic bag was like having a fur coat in the closet. The closet of bad social practices.

Well now what's the difference? [00:28:00] There was a fine and people responded to the fine avidly. Now what's the difference? No I think we should look at the details. The difference was that in Ireland as a part of the legislative deal, which would have been impossible to get this thing through, it was agreed upon that this should be a long public information campaign prior to the imposition of the tax. And this included some very clever advertising about what a beautiful place Ireland was and plastic bags are ugly and don't trash the Emerald Isle and so on. [00:28:30] So there was an idea of the moral purpose of this fine. And remember in Hypha there was just a little sign on the door saying that you come late you get fined because they wanted this to be an experiment without any framing.

Well the framing, the moral framing in Ireland apparently did the trick. So let's go back to the day of Aristotle. Okay we're gonna be in Athens and we're 23 years BC and they're mounting a big Naval expedition in the Adriatic. It's huge, hundreds of ships [00:29:00] and the ships are gonna be carrying Calvary and so there's horses and soldiers and so on and they have to mobilize the ships. At the time they didn't have a substantial Navy so they had to recruit a very large number of ships from a private practice. So they decided they would do this, the council decided they would do it essentially by required rich people to produce these ships, that it's presumably their own ships or rent them fully equipped and brought to the port at Piraeus near Athens. Now what was interesting about this, is that this was all [00:29:30] managed by a system of prizes. People who got there first got a huge prize and the prize would be announced at some ceremony and many prizes on down the line, so the incentives were framed as prizes, not as compensation.

And moreover there was very severe costs to not doing it on time. Now a further aspect of this was that essentially the council appointed a rich person to get a ship, so it was called his liturgy. If he had [00:30:00] a liturgy and there was some other rich guy who he thought should have got it instead of him, the obligation to bring the ship, he could just go to the other rich man and say, "You take my obligation." And if the other guy refused then the second person had to exchange his property with the person who had the liturgy. In other words I have the obligation to bring the ship, I think you're richer than me, so I go to you and say, hey it's yours and if you say no, I get your property.

Now [00:30:30] if I was wrong and actually you were poor than I just made a bad mistake, right. So in other words it's a marvelous example of what in economics is called mechanism design. It uses the information that I have about you and you have that the government doesn't have at all and they actually implemented that. So they actually allowed people to impose this obligation on somebody else at the risk of actually having to exchange property. Now what did that accomplish? Altogether it made extraordinarily [00:31:00] clear why this was important. They explained over and over again that there were pirates and they had to set up a Naval base and all kinds of other stuff, so the purpose was well explained.

Things were presented in way, which enhanced the social and civic standing of the individual and if you didn't do it, you got penalized and it was fair. Okay now let's imagine this, let's go back to Hypha and suppose that the Hypha daycare centers are getting worried about parents coming late [00:31:30] and instead of two economists showing up to advise them about how to do it, some Athenians in a time machine show up. So they show up from the third century BC or fourth century BC and they're gonna advise this daycare center and let's think what would have been on the door of the Hypha daycare center. What it said was this very bland thing, under the authority, blah, you're gonna get fined.

Instead, the Athenian side would say, the council of parents and teachers would like to thank all parents [00:32:00] who come on time, which virtually all of you do. And those with a perfect record of on time picking up your kids will be awarded with a prize at the next celebration of teachers and parents. There are a few of you who occasionally have not come on time and we understand this is sometimes because of circumstances beyond your control. If this should occur, you'll meet with a group of teachers and other parents to determine whether the cause of lateness was permitted or not. If it was not permitted or not excusable [00:32:30] you'll pay a fine and that wouldn't be ten shekels it would be a 1000 shekels or some other amount and this fine will be announced also at the celebration of teachers and parents next year.

Now suppose that had been the sign on the door or something like it, what do you think would have happened? I think it would have been like the plastic bag situation in Ireland. I don't think any parents would have come late. And I think there's a way of formulating incentives so that they work, but notice what's crucial. The incentives have to [00:33:00] be fair, they have to be in the public interest and they cannot be serving the greed of the person who's designing the incentive. That's the problem. When you see a person whose self-interested designing incentives so as to manipulate somebody else to capture a lot of

profits for the first person, those are the examples, which we see in experiments in which the subjects who are subject to these fine or subsidies or whatever they are, they just basically say go to hell and they do the opposite thing. They do it again and again.

Demetri Kofinas: In that case it's like an incentive [00:33:30] vice. You've got the prize on the one hand, which is a reframing of the penalty and on the other hand you have the shaming component, which is very powerful and in fact much of what you're describing is stuff that we have seen organically grow up in online communities and in fact when you were talking as well, one of the other sort of things that came to my mind, was how poorly mercenary armies perform to democratically sort of community organized armies. In fact the Athenians, who you mentioned, were a very effective fighting force in particular some could say specifically because, [00:34:00] in large part because they were a democratic society fighting against other sort of authoritarian regimes like the Persian empire.

But I was also thinking the counter to that, which is that in fact crowd funding very much works in the way you're describing it. It's a reframing of price and value so that you're able to raise a tremendous amount of money by not providing a near fraction of what you would otherwise if you were to frame it in traditional economic terms. The one thing that I had thought about before our interview, [00:34:30] all these sort of experiments and also anecdotes of the Athenians and other sort of cases are smaller societies. Is there something to be said about the fact that we have scaled a much larger society and so it's much more difficult to implement these types of rules and these types of incentive structures? Is that part of the challenge that we face?

Sam Bowles: Well there is of course a face to face element in some of the small scale societies that work in a cooperative way. We see that among hunters and gatherers with whom we've done lots of experiments about cooperation [00:35:00] and they indeed are very cooperative people on the whole. Although not uniformly, there are some quite selfish hunter gatherer people too. But we have a capacity to communicate over a very large scale through obviously communications that are now available by digital and other means and so we can have the equivalent of face to face in a lot of respects. Now if you're doing things in a local community, in a village, and you cross somebody, you're likely to be in trouble with them, maybe even physically, they'll be [00:35:30] around. And it isn't the same online.

But we do have lots of examples of people devoting a huge amount of time to help a common project and to make it succeed. These go from non-commercial things or largely non-commercial things like Wikipedia to which people devote huge number of hours and it's a very good piece of work to more quasi private or more public things like Open Source Software, which is produced in cooperative teams. Obviously, people [00:36:00] competing for reputation but hardly ever for ownership and so you think of an Open Source software group of engineers working, they're a lot like hunter gatherers. There are some people who are good knowledge hunters and some people who aren't very good at it and you get a big kick out of solving problems and you get a lot of admiration for it and you probably get some side benefits, but you're doing it because you love being good at stuff.

It's not entirely generous cause part of this is just wanting to be the best hunter. [00:36:30] I think we would help understand ourselves a lot better if we looked in the research areas of our societies now and just we call ourselves knowledge hunters and then thought back about why hunter gatherers hunt the males. Now think about it. In many societies if you capture a large animal, if you kill a large animal, you bring it back and then it'll be divided up equally and distributed to everyone. And I mean equally cause we've actually measured, who killed it and who ate it and we know who ate it and [00:37:00] it gets distributed. Now that's one thing that people do. I've actually hunted with people who divide things up in this way.

For example one day we discovered a huge amount of honey, this is in Tanzania with the Hotza people, a huge amount of honey, we brought the thing back, there were only four, well there were three of them and I was tagging along, happy by the way that we didn't get to kill any animals, which would have upset me considerably, but we got the honey, that was good. We brought the honey back and the first thing that happened ... By the way honey, they could have just conserved it and [00:37:30] they could have eaten it over some period of time, but now a bunch teenagers went running and found some other groups of similar tribes and similar language group and by the end of the day there must have been 60 or 70 people having a big honey party. So that's a kind of process, which we are capable of doing and we also do in the modern world a lot.

Now I think economics doesn't understand these processes very well and one of the reasons why we don't is that as economists we think about, well we do this in order to get stuff, to get stuff or [00:38:00] to have it. We save, invest, work, shop and so on, it's all about getting stuff. A lot of what we do is not only about getting stuff, it's getting to be someone. It's affirming our identity, affirming who we are or actually constructing who we are. So if you ask me, why am I honest? You could say, I'm honest because every time I do something honest where I might have been tempted not to be, I'm affirming myself as an honest person. And there are many things that we [00:38:30] do that have more to do with producing ourselves if you can just see what I mean, producing ourselves as a human being and not getting stuff.

What you wear and how you talk and the kind of job you do, of course it's part of keeping warm and getting income and so on, but it's also part of being who you are. Now leaving out that part of humanity, something very well understood obviously in the other social sciences, not to mention other human beings understand this very well, it has a problem [00:39:00] because the incentives that sometimes backfire, they should work economically if all we care is about getting stuff. But sometimes to respond to an incentive would make me feel undignified, it would make me feel like I'm selfish. It would deprive me of the pride that I would have that I'm doing something public spirited just because it's public spirited.

So it's ignoring the side of humanity, which would like to be a good person, ignoring that aspect. Now that's not always operative and there's no reason it [00:39:30] should be. As I say shopping is mostly a place where being pretty selfish is alright. Although you certainly wanna expect that people might have some misgivings about buying goods that were cheap because they were produced by child labor or produced in countries where labor unions

don't have rights or produced in countries that are trashing the environment. But by in large when you're choosing between a couple bottles of milk, why not go for the lowest price.

Demetri Kofinas: So a few things. There are actually three things that you're saying I wanna follow separate threads on. One is, [00:40:00] in fact I don't know anyone who consumes sort of like a robot, the ones that do are actually doing it for reasons that have nothing to do with consumption, it's filling some emotional gap. So in fact I find that anecdotally speaking it's the most common sense assertion what you're making. The other thing that your sort of touching on there is the crowding out effect. Which is by framing something in a particular way, you're crowding out a huge section of the people who would engage in a positive, socially positive behavior if it were not sort [00:40:30] of incentivized in a particularly perverse manner.

Can you talk a little bit about the crowding out effect and then also the opposite of that which is crowding in and how would you go about, and then this would be a kind of good segue to talk about how these sort of ideas and outcomes and research and conclusions you have here could go into formulating better regulatory structures, laws, incentive structures for society, et cetera. And I would say also, bringing it back to something I mentioned in the beginning, which is Hayek and the problem [00:41:00] of information and creating distributed systems that aren't centrally organized, which I would think are more complimentary for the type of society we live in today. Thinking about how to combine all of these into that type of a system so that people can act more in a free society that is more compatible with where we are today.

Sam Bowles: Well the basic idea that a price is a piece of information, which is of course basic economics from Haik, is part of the way I look at the problem of experiments [00:41:30] and what we can learn from just observing economic activity and experiments. Let me tell you one experiment, which I think is very indicative of how people act. There was a game, which is called the Trust Game. It's very simple, there are two parties. The first party, sometimes called the investor, is given by the experimentalist a sum of money. And the investor can invest in the second person sometimes called the trustee that means transfer say \$50 or some amount of money from the amount, which the [00:42:00] investor has received. Then the trustee gets the money, but the amount transferred, if investors transferred \$100, the amount that shows up there in the trustee's kitty is \$300. So it's tripled.

So this investment pays off and then the trustee has the option of giving some back to the investor. And of course they can give back half, they can give back nothing and both parties know the rules, both parties know how much the guy had to start with. So [00:42:30] suppose the guy had \$100 and he gave \$100, wow then the trustee would say, I guess he trusts me. And then, of course, if he's selfish, he'll say well that was his mistake and wouldn't give him back anything because he had \$300 and then there you go. Well that's not what people do. The investors who give generously to the trustees are very rewarded by the trustees. They give back a lot. Now think about ...

First an economist looking at this would say, well that's crazy, because obviously the game can't be the way [00:43:00] any human being would play because a selfish human being, which is the human beings that economists tend to think about. A selfish human being would reason the following way. Okay I'm the investor, what should I do? The trustee, he's selfish just like me, so I give him \$100, he gets \$300 and he walks, that's it and I get nothing. So what should I give him? Obviously, I should give him nothing. So I should give him nothing, I get nothing, he gets nothing. That's the solution of the game by an economist.

Demetri Kofinas: And you all starve.

Sam Bowles: Yes [00:43:30] everybody goes home with their pockets empty. That's not what happens. What happens is investors are pretty generous, the trustees are pretty generous and because they're reciprocating, and the key result here is that the more the investor gives, the more the second party gives back. It's just reciprocity.

Demetri Kofinas: And it's also interesting because I've seen this game, and it has some sort of superficial qualities in a way to the prisoners dilemma and in fact what's really interesting about it when I think about it in relation to the prisoners dilemma is that in this case the big [00:44:00] differentiator is the access to information and communication. That you are able to communicate, actively, dynamically with the other party as supposed to being siloed, which is a much more natural way that human beings interact.

Sam Bowles: That's right. This is a game that's played sequentially. The investor moves first and then the trustee moves. In the prisoners dilemma game we ask people to make choices separately. The two prisoners are separated and make a separate choice not knowing what the other one did. By the way, this is a small digression, but in a prisoners dilemma game, if you play it [00:44:30] sequentially, so that the first person to choose chose, I'm not gonna confess, a very large number of the second movers will then say, I'm not gonna confess either.

Demetri Kofinas: If they knew.

Sam Bowles: If they knew the first person had done that, because people essentially just don't wanna be exploded by the other person. So that's the way the trust game works and it works that way wherever you do it in the world. It's been done lots and lots of times. But here's an ingenious experiment. Suppose that [00:45:00] I'm the trustee and I'm gonna offer you \$100. So I offer you \$100 but I also send you a message that if you give me back less than say \$250, I'm gonna punish you and I have a fine I can impose on you. So notice, if I require you to give back \$250, I'm gonna end up with \$250 and you're gonna end up with \$50 cause the total that you've got when my \$100 was tripled is \$300. So you're gonna look at that and you're gonna say, wow [00:45:30] I just go heavily incentivized to at least give back \$250 otherwise I'm gonna get fined.

What do people do then? They reciprocate less when they're gonna get fined then if they don't reciprocate. Well I mean if you're an economist this is wow how could that happen, if you're a psychologist it's pretty natural because you've just been insulted. You've been

insulted by the guy who says I don't trust you to reciprocate so I'm gonna fine you if you don't, but now here's the ingenious in this experiment. In the third [00:46:00] treatment they gave the investor the opportunity to find the other guy, but they also gave the investor the opportunity to not make use of the fine. So in other words I could say to you, I'm giving you \$100, I have the right to fine you if I'd like, but I'm not gonna use it. But what happens then?

Then they really reciprocate. Much more than at first and why is that? They reciprocate because now they have two pieces of information about the investor. The first one is he's [00:46:30] generous and trusting because he gave me \$100, but then he actually had the opportunity to safeguard himself and he didn't do it. So he was really generous and trusted me and so the fact that conveying that I could have fined you, but I don't do it, is much more powerful than just not finding you at all.

Demetri Kofinas: Well look another great contemporary example of this at work is in the ongoing sort of crisis or however you wanna call it with North Korea, the North Koreans and Americans. If [00:47:00] this were a prisoners dilemma paradigm, it's very simple, the United States simply bomb North Korea. But that's not the case, we care about who's going to die, we care about the South Koreans, we care about a huge number of things. It's not simply a matter of clear cut brutal self-interest and in fact before the mutually shared destruction policy mad in the 1970's or late 60's, we went through a whole period of building up our arms here in the US and in the Soviet Union without having a nuclear war. [00:47:30] So in fact reality bears out what you're describing.

I don't think it's a controversial view at all, I think what's really interesting, and I want to say this to our audience because we've talked about this quite a bit now where we've described these neo-classical models, that modeled reality that is convenient for the mathematics, but in fact loses sight of so much of the reality and it's sort of the lazy process. And I think that is the best explanation for why such a common sense idea, which is the take human beings as they are, is beneficial. I think, also I should mention something [00:48:00] else we didn't talk about Hume in our earlier discussion, but Hume makes a sort of similar point when he says something along the lines of, it's ... I think it's Hume that says this, but you'll correct me if I'm wrong, that it's interesting that these particular set of ideas operate so well in politics when in fact they do not exist in fact in the real world.

Sam Bowles: It's good you brought up Hume because what he wrote in 1742 was, "Political writers have established it as a maxim that in contriving any system of government, any man ought to be [00:48:30] supposed to be a naïve and to have no other end in his actions than his private interests. By this interest we must govern him and by means of it make him, notwithstanding his insatiable avarice and ambition, cooperate to the public good." Now that's a statement just like Machiavelli, he said, we should act like everybody is as selfish as a naïve in designing a constitution, but immediately after this he says but it's not true, that's not what people [00:49:00] are like. Hume was a great moral philosopher who understood that humans were often given to moral behavior, as was Machiavelli.

So why are these guys saying that we should design a constitution for navies when there's only a minority of people who are navies. It's only because they think that you can separate the self-interest of the naïve. You can manipulate the knave's self-interest and get them to act less knavishly without undermining the moral behavior of the rest of society and that's I think where [00:49:30] Hume got it wrong and where Smith got it wrong and where Machiavelli got it wrong. Not understanding that if you organize society based entirely on incentives you're going to run the risk of diminishing people's moral commitments and then you're really in a mess because then you have a society, which is less morally committed and then what's your choice? You have to use more and more material incentives.

But the material incentives can then corrode even further the moral fabric of the society. It's a slippery slope and [00:50:00] fortunately I don't think we're on it, but we have to beware of it.

Demetri Kofinas: So that's really cool that you brought up that quote and you did it justice. Obviously, I was mangling it, but in the road from Aristotle what I see, especially sort of clarified through that quotation and through this conversation is that we begin in this place where philosophers are attempting to create a system of laws that takes into account human beings as they are or closer to what they are and then we move more towards this model, but of course people like Hume and Machiavelli [00:50:30] are saying, okay it is a model. It is a model it is not reality and so eventually we've come to a place where it's become more of reality. In other words the map has become the territory, the territory the map and I think that's something that we see across society. And of course culturally we see that, that aspect of selfishness and that embrace of selfishness today in a way that we would not have.

I also think, and I wonder about this, because some other people have done some really great work, I had read this other book by Jonathan Height about behavioral psychology [00:51:00] and moral psychology about what makes good people act badly, I don't remember what it was exactly, but we see the consumerism where people embrace selfish motives and self-interest. So I guess just to kind of close it off, I would like to ask you, how would you implement these insights today in the economy that we have and that we're going into, which is a much more knowledge based, technological society? And to that point, do you think at all or have you considered at all the technology of block chain in this context because of its decentralized [00:51:30] nature?

Sam Bowles: I think there are a bunch of lessons that come across from the experimental literature and also the economic theory. Perhaps the first one is that incentives work perfectly well in many settings and this is not an argument against incentives, this is an argument against the use of incentives to aggrandize or to enhance the wealth and status of a person already well-endowed against a weaker person. That's what always can be counted on to get a reaction or [00:52:00] if it's used to control another person. We know that from experiments going back to the 70's that paying people to do things that they might have liked to do, leads them to drop off doing those things because they don't wanna be controlled. It's called over determination. That is I like painting this

picture, but if, this is with kids, if you pay kids for painting pictures when they come in to the playroom the next day, they don't pick up the paints because they really like the idea that they were doing what they wanted to do and now they suspect that somehow [00:52:30] they may have been responding to the money.

So I think that the problem with incentives is not intrinsic to incentives, it's intrinsic to greed and control as aspects of social relations between principals and agents in relationships like employment and banking and in other aspects of society. But we've learned a lot also that, for example, making clear what the social or moral or collective objective of incentives is, for example about environmental [00:53:00] protection and so on. Appealing to rather than ignoring people's better selves should be part of the incentives structure. It's also important in designing constitutions and legal frameworks, we have to find ways of protecting the civic minded and the generous from the selfish. Because the quickest way to unravel a kind of cooperative situation is if there's a few jerks involved who are essentially exploiting that situation and that's why essentially some kind of enforcement against [00:53:30] ranked self-interest is absolutely necessary. You can't trust people to be good.

Let me give you an example. In Bogota Columbia a decade ago, there was a terrible problem of traffic fatalities and the fatalities had tended to take place at the crosswalks, there's white and black crosswalks called locally zebras because of their striping. And among the worst offenders were the taxi drivers. And this had been a problem for a long time. The then mayor of the city of Bogota Columbia, what did he [00:54:00] do? He hired 140 clowns, that's right clowns and the clowns went out into the major crosswalks in town, dressed up like clowns and they just ridiculed the violations and they were hugely, they were cheered on by the pedestrians and the taxi drivers were humiliated and shamed. And the mayor was great. He asked the pedestrians would they please nominate a very polite and pedestrian friendly taxi drivers, which they did, and the first 140 who were nominated [00:54:30] formed what was then called the Knights of the Zebra, named after the crosswalks and they had little plastic zebras, which they could have in their cars and there was also one lady of the zebra, one lady taxi driver.

Demetri Kofinas: Were they bobble head zebras?

Sam Bowles: I don't know what kind of zebras they were, but in any case, traffic fatalities fell off dramatically. I actually studied this. I didn't believe the statistics at first. It fell off dramatically and it didn't happen in other parts of the country, but an important part of this was, the ones who continued [00:55:00] to violate the crosswalks were really hammered by the cops. So it was a combination of mobilizing public sentiment for good behavior to which almost all the taxi drivers responded and then also combining that with some tough penalties with those who didn't. So I think that's another thing we can take on board.

I think there's some other things that we might wanna think about. For example, the simple example you gave about if you play a game sequentially sometimes you can signal your intention of being generous and people [00:55:30] can respond to that. There are a bunch

of other fancier things we can think of, but I think there's no shortage of policy measures that could be undertaken. The main thing is, that when we see incentives being advocated for things like losing weight, reading books, or voting, monetary incentives, we have to think carefully about this because these are things that people wanna do anyway.

They wanna lose weight, they wanna read the book, they wanna be a good citizen, offering money for things [00:56:00] like that can be a double edged sword and then maybe this is one of the reasons why in many areas of education, for example, incentivizing things like grades and so on hasn't worked very well because people just like the Hypha daycare center you can substitute your economic interest for your moral interest and maybe the second one isn't strong enough to get you to go and read the book after you've figured out oh I'd feel pretty good after I read a book.

Demetri Kofinas: Okay so in fact before we go there is one more thing that I did forget that I did wanna ask you about. [00:56:30] Because I came across something that you're involved in and I don't know exactly how you're involved and I wanna ask you about it. But it's this thing called core initiative and I think it's interesting because it's very similar to some of the stuff that I've been working on with Hidden Forces, which is really, from my perspective, I don't know exactly, this seems like more a straight up educational initiative, but in any case it looks like you're dealing in the area of helping to scale educational material for people, specifically in economics, but why don't you tell me a little bit about core [00:57:00] initiative, cause I find that sort of stuff fascinating and I think it's the future of so much learning and also the future of news is really that synergy of unscripted content and ed tech.

Sam Bowles: Core, C-O-R-E, is a project, which I helped to found. It's a global collaboration of economists, researchers primarily and we contributed, volunteered our time and hard work to produce an e-text, it's online, it's free and just in case you hadn't noticed, free compares to [00:57:30] maybe \$300 for an intro textbook in economics today. So this thing is online, it's a new course, it's not a much. It's a very good book. It's interactive, the graphs all move, you can manipulate things, lots of data exercises and activities. Remarkably this has already been adopted as the standard economics course replacing the traditional economics course at some of the top universities in Europe. So it's been very well received. And the reason why [00:58:00] it's been well received is something about which I think we should be optimistic and that's because economics has changed tremendously in the last 30 years.

We used to go with the byline, economics as if the last 30 years had happened, and we wanted what the undergraduates were getting to catch up with what we do as economists. Now think about it, in the last 30 years a lot of big changes have taken place and I think putting it very roughly, Homo economicus is now a little bit in disrepute and [00:58:30] so is laissez-faire after the financial crisis. So these basic elements of the introductory textbook, they look a little odd, not to the students, the students perhaps don't know, but to the professors, because we know that behavioral economics has changed the face of economics about what we think about economics psychology and human beings. We know

that the financial crisis and many other things including climate change have let economists, even quite conservative ones worry a lot about unregulated markets.

So [00:59:00] a lots been going on and moreover, today the people who come to study economics, what do they want to know about? They want to know about inequality, they want to know about climate change. You may say how do I know that? I know that because around the world the first day of class before one word has been uttered about what this class is gonna be about, we ask a question. Write down on a piece of paper please what are the main issues that economics should be addressing today. We've done this all over the world, we've done it with central bankers, we've done it with treasury [00:59:30] officials, we've done it with students and then we make a word cloud. In a word cloud the size of the word is how many times that word or that phrase is mentioned.

So we have these word clouds, a very large number of them, and what's the dominant theme, what's the thing in the largest font, almost always? Inequality and what's second? Climate change. Prominently displayed is things like robots or job displacement or instability. Now ask yourself, in how [01:00:00] many introductory classes are you gonna get those topics as the main topics that we have to address? In how many courses are you gonna get that stuff at the front of the book not at the end of the book where you can maybe read it or not read it at the beach it will never be covered in the course. Certainly won't be on the exam. So what we've done is we've taken what contemporary economics really is, what we do as economists and we've taken what the students care about and we've put them right at the front of the book and it really works. Students get highly motivated [01:00:30] and they do extremely well in their second and third year courses even if those courses are the same overly abstract, not very real world grounded.

So this is core economics, C-O-R-E, it stands for curriculum open access resources for economics. You can see it online anywhere in the world. If you have a telephone you can take this course.

Demetri Kofinas: Professor it was great having you on. Thank you so much. I would have loved to get into some more of this stuff on inequality. It's something I've been covering on Hidden Forces from a number [01:01:00] of different perspectives, but maybe I can have you on another day and we can do that.

Sam Bowles: That would be great. I enjoyed it very much Demetri.

Demetri Kofinas: Okay thanks again. And that was my episode with Sam Bowles. I wanna thank Dr. Bowles for being on my program. Today's episode was produced by me and edited by Stylianos Nicolaou. For more episodes, you can check out our website at HiddenForces.io. Join the conversation at Facebook, Twitter and Instagram at @hiddenforcespod or send [01:01:30] me an email. Thanks for listening. We'll see you next week.