

The Locke Game

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John Locke's political philosophy is based on certain assumptions about the nature of the world and about the strategies that human beings adopt in the world. One way to understand and evaluate these assumptions is to work through a simulation exercise designed to illustrate Locke's conception of political life. In what follows we describe a game based on "Of Property," Chapter V of Locke's *Second Treatise of Civil Government*.¹ The exercise is designed for a group of fifteen to thirty players who have no previous exposure to Locke's philosophy; it can be played and discussed in seventy-five minutes.

The game is set in terms reminiscent of the interaction between English Colonists and North American Indians in the seventeenth century. The players are divided into two groups, colonists and natives. All players survive by acquiring tokens that represent food. The natives do this by hunting and gathering tokens distributed around the room, but they have no ability to store provisions. The colonists produce their food rather than gathering it, and they also are able to store food. Because they can store food, the colonists are able to devote additional time to cultivating their land and building more efficient tools. In the long run this allows the colonists to produce great quantities of food.

As the colonists bring more land under cultivation, the area no longer produces enough game and uncultivated food to support the hunter-gatherers. Since the land is now much more productive, there is still food "enough and as good" for the natives. But the natives cannot continue to survive as they did before. They must either die or come to work as employees of the colonists. As employees they are able to produce much more food than they were able to obtain as hunters and gatherers. "A king of a large and fruitful territory (in America)," as Locke puts it, "feeds, lodges, and is clad worse than a day-labourer in England" (sec. 41). They improve their material well being, however, only by sacrificing their autonomy.

The object of the game is to create a "state of nature" where players acquire property through labor. The rules of the game are designed to illustrate the principles Locke spells out for acquiring property. That is, that one can ac-

quire property by mixing one's labor with the fruits of nature (sec. 27), so long as the property does not spoil (sec. 31) and there is enough and as good left over for others (sec. 33). The game is designed so that some players will be more "industrious and rational" than others, and thus acquire more property. This raises the question of whether these inequities are just, or whether the players who acquire less have a legitimate ground of complaint against those who have more. Locke believed that those who acquire property through labor create new value in the world and thus do not harm others who are less industrious. The poor, on Locke's view, are the beneficiaries of the labor of the wealthy. The game mirrors this assumption by insuring that the less fortunate players profit from the success of the players who acquire the most wealth. At the same time, Locke is less sensitive to non-material factors such as dignity and freedom. To demonstrate this, the less fortunate players are forced to change their lifestyles and become employees of the wealthy players. The exercise concludes with a discussion of the results of the game and a brief lecture showing how the rules of the game are derived from Locke's philosophy.

In the following sections we describe the materials used and we give a scenario for playing the game. Obviously others will wish to adapt and change this scenario for their own needs and interests, but it serves as a useful explanation of the details of the game.

Materials

The following are required to play the game with approximately twenty players:

1. An administrator and two assistants.
2. A whistle and a watch with a second hand.
3. Several pairs of scissors. As few as four will suffice but it would be helpful to have more. The scissors can vary in quality, with some being sharp and efficient and others barely functional.
4. Mimeographed sheets summarizing the rules of the game, and mimeographed "crude farmland" and "cultivated farmland" sheets (sample sheets are available from us on request).
5. Three or four prizes (books, candy bars).
6. A few sheets of colored paper cut into one inch squares.

Description of the Rules

As the players enter the room, each is given a rule sheet. One third of the players are selected at random to receive a "crude farmland" sheet (See Figure 1). The administrator explains the rules as follows:

"Today we are going to play a game based on the philosophy of John Locke. After I explain the rules we will play the game itself. When we are finished with the game we will talk about what happened and I will ask you whether the rules seem to be fair and realistic, or whether they seem capricious and arbitrary. Finally I will take a few minutes to show what the game has to do with Locke.

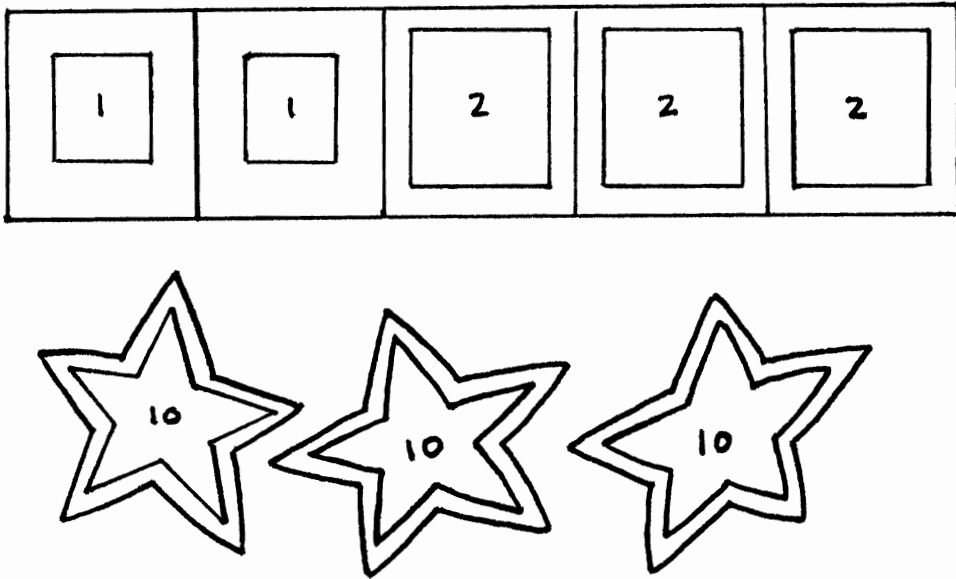


Figure 1. Examples of food credits: squares from “crude farmland” and stars from “cultivated farmland” sheets. (These are not to scale—margins of the one credit squares should be just wide enough that a reasonably careful person could tear between the lines to remove them.)

“Assume that you are living on an uncultivated and uncivilized island. Most of you are natives of this island who have lived there in a primitive lifestyle for many generations. Those of you who received a crude farmland sheet are colonists from a more developed country.

Rules for natives: “Life is simple for you natives. You are hunters and gatherers. Instead of growing crops you live by picking wild berries and killing animals. Your food supply is symbolized by these colored squares of paper that are scattered around the room. Each foodsquare represents a one day supply of food. You cannot store this type of food. Suppose for example that you kill ten deer. The meat will spoil in a few days and you will have to go hunting again anyway, just as if you had only killed one deer. So in the same way you cannot store these foodsquares.

“In this game we go through a series of days. Each day lasts 30 seconds, starting and ending when I blow this whistle. During that period you must find a foodsquare for yourself. At the end of the day my assistants will collect your foodsquare. If you pick up more than one foodsquare you will be dead. If for any reason you do not pick up a food square you will have two choices: you can die or you can go to work for one of the colonists. All you have to do to win this game and get a prize is to survive. If you die you are a loser, and the losers will have to clean up the room at the end of the period. If you choose to go to work for a colonist, your status as a winner or loser is governed by the colonists’ rules, which I will now describe.

Rules for colonists: "Colonists must produce their food rather than gathering it. Take a look at your crude farmland sheet. You will notice that there are squares printed on the sheet within guidelines. In some cases the squares have a '1' inside them, in some cases a '2.' You colonists survive by tearing the squares out of the farmland sheets. You must tear the squares carefully; if you break any of the lines that make up the square it will be worthless; likewise when you tear out a square you must not include any of the guidelines. Notice that the one day squares have wide guidelines and will be easy to tear; the two day squares will be much more difficult to tear. Don't worry about all of the scrap paper—the losers will clean that up for us. These crude farmland sheets are free; any colonist may have as many as he or she needs.

"During each day, the colonists will try to get enough food for themselves by tearing squares out of the farmland sheets. At the end of the day we will collect one day's food from you. If you do not have a square, you will die.

"You colonists are fortunate in that you can store your food. The grain and vegetables that you harvest can be kept for long periods. This means that if you could get enough food to last you for a few days, you could rest for a while. Alternatively you could use some of the extra time to improve your farm by felling trees and clearing stumps. This would make your land much more productive. In this game we symbolize this possibility by making available these sheets called "cultivated farmland." These sheets have little stars on them, but each square is worth ten days' food. Once your farmland is cultivated you can produce more food with the same amount of work. Once you have acquired six days' worth of food, over and above your daily needs, you can buy one of these farmland sheets.

"Another advantage to storing food is that you can build up enough surplus to take the time to build better tools. Thus if you could store up two weeks' reserve of food you could make a plow. In this game we symbolize this possibility by selling these scissors; each costs ten units of food.

"You may also hire other colonists or natives to work for you. Now that you have employees you must feed them in addition to yourself, so at the end of each day you must turn in one food unit for each employee. In turn the employees give you half of everything they produce while they are working for you. You may want to buy tools and cultivated farmland for them, since the more productive they are, the better off you will be.

"Life is very competitive for the colonists. The winners will be the two who have accumulated the most units at the end of the game. The losers will be the two who have accumulated the fewest. Dead colonists are also losers of course, and all losers have to clean up the room after the game is over. Are there any questions? If not, the first day starts when I blow the whistle."

Playing the Game

During the game the administrator keeps time, blows the whistle and settles disputes or problems. One of the assistants collects squares after each round,

the other sells scissors and farmland sheets.

The number of colored food squares around the room should be carefully calculated so that it is impossible for the natives to survive for more than one or two days. After one or two rounds the administrator should explain to the natives that because the colonists have cultivated so much land, there is no longer enough wilderness land to support the animals and wild berries that have kept them alive in the past.

The administrator must use considerable judgment in timing the space between each day and in deciding how many days to have in the game. There should be enough time between each day to allow players to purchase farmland and tools and to negotiate employment contracts, but it is also important to keep the game moving along at a brisk pace. The number of days should be sufficient so all of the natives are forced off the land. The game should also continue until several of the colonists have acquired large amounts of wealth.

What usually happens is that one or two colonists are very aggressive and quickly see the advantage of hiring and equipping a large labor force. These colonists develop large plantations and monopolize the scissors; others remain as small independent farmers.

Discussion

After the game is over the administrator leads a group discussion of the game. The administrator should solicit reactions from a wide variety of players on two main questions:

- a. Are the rules of the game a realistic model of the way the world actually is?
- b. Were the outcomes just or fair?

Ideally there will be a disagreement between some players who will argue that the winners did not deserve their wealth, and others who will argue that the winners got where they are by cleverness and hard work, and that, in any case, they harmed no one else in their dash to the top.

As much as possible, the administrator should guide the discussion away from the mechanics of the game, towards the substantive issues of realism and fairness. The administrator should point out that, although the farmers were selected arbitrarily, in actuality people do have different abilities and skills. The same inequalities would have arisen with any task involving different levels of skill and industriousness. The issue is not whether this particular division between native and colonist is fair; the real question is whether those who acquire more by choosing a different strategy of production are somehow violating the rights of others who acquire less.

Relating the Game to Locke's Philosophy

The last phase of the game is a brief lecture by the administrator where the rules of the game are mapped on to Locke's political philosophy as described in "Of

Property.” We usually supply a sheet with some selected quotations from Locke as well. Here are some of the points that might be covered:

Locke believed that the most helpful way to think about property was to start from what he called a “state of nature.” This is a semi-mythical condition where people live without any government. Locke imagines a situation where individuals start from a position where no one owns anything at all, but where some people are more intelligent or more hardworking than others. He feels that in this situation, people will soon acquire different amounts of property, and their behavior will give us an insight into the “natural” laws of property which are the basis of political society. In the game we have tried to duplicate this state of nature. Everyone starts out from the same position, but some were arbitrarily selected to have a more productive approach to survival. The colonists represent the cleverer people in the state of nature.

Locke believes that there are three conditions under which people can acquire property in the state of nature:

1) *Labor*: People acquire property by mixing their labor with the things in nature (sec. 27). Locke believes that the things in nature are common to us all. In themselves they are of little value, but when we put work into them we give them value. Since the value was created by the work, it is only reasonable that the now valuable things should belong to the individuals who created them.

A fish swimming in a stream, for example, is of no value as food to any human being. If someone works hard enough to catch the fish, the fish becomes his or her personal property. In our game, when the natives gathered the foodsquares, they acquired them as their own by mixing their labor with them.

But the natives do not own the land itself, only the animals and wild berries. The colonists, on the other hand, mix their labor directly with the land. Instead of being common to all, the land now belongs to the colonists who have cleared and cultivated it.

2) *Spoilage*: There are also natural limitations on how much property one can acquire; specifically, he believes that it is only legitimate to accumulate as much property as one can use before it spoils (sec. 31). If I catch one fish, the fish becomes my property. But if I catch a hundred fish (assuming I have no way to store them) I cannot possibly use all of them before they spoil, and I would therefore have no right of property in the excess fish. This rule was included in our game in that the natives could only gather one day’s food at a time.

Locke does not say, however, that one can only acquire as much food as one can use. Locke has no objection to the unlimited acquisition of property as long as it does not spoil. For example, I could accumulate unlimited quantities of a durable good such as firewood or coal, even though I could not use it all. In the same way, we assumed that the colonists could store their grains and livestock, and we allowed them to acquire unlimited quantities.

3) *“Enough and as good.”* A third limitation is that I may only acquire property if there is enough and as good left for others (sec. 33). Suppose, for

example, that I gather all of the available firewood on our imaginary island. In doing so I have mixed my labor with a durable good, but at the same time I have made it impossible for others to obtain firewood. Presumably their standard of living will deteriorate. Since my taking the firewood harmed the others, I have, according to Locke, no right to own all of the wood.

But Locke does not mean that I must leave others exactly the same type of thing that I have taken. It would be legitimate for me to gather all of the firewood in order to *sell* it to the others. By doing so I have not decreased their standard of living; if anything I have made it easier for them to get firewood. Instead of having to gather it themselves (they may not be as good at this as I am) they can obtain wood by trading it for something they have made, perhaps bread or cheese. When Locke insists that we leave enough and as good, what he seems to mean is that we may not take something out of nature if by doing so we lower others' standard of living.

In this way the colonists did not lower the standard of living of the natives. Although there was no longer enough land for the natives to live by hunting and gathering, there was more than enough food to maintain and even increase their standard of living. As you noticed, most of the natives made more working for the colonists than they did in their natural lifestyle.

In addition to these three conditions, Locke makes an important assumption about the nature of wealth and property. He believes that the world is not a "zero-sum" game. That is, he does not believe that one person can only become wealthy at the expense of someone else. On the contrary Locke believes that there is an infinite amount of potential wealth and property. Human labor creates property, rather than using it up. Land is a good example. While a given quantity of uncultivated land can only support a few hunters and gatherers, the same land, if cultivated can support hundreds of farmers and townspeople (sec. 37). Rather than depriving others of wealth, those who cultivated the land created a vast amount of property that had not previously existed.

Locke believes that as long as this assumption is true, and as long as I follow the three rules, I can legitimately acquire as much property as I wish. No one can object to my wealth, because I have not harmed anyone else. Indeed, I have benefitted the world by becoming wealthy. Thus the natives have no legitimate grounds of complaint against the colonists for taking their hunting grounds. The natives, in Locke's terms, were wasting the land. As Locke puts it:

God gave the world to men in common; but since he gave it to them for their benefit and the greatest conveniences of life they were capable to draw from it, it cannot be supposed he meant it should always remain common and uncultivated. He gave it to the use of the industrious and rational—and labor was to be his title to it—not to the fancy and covetousness of the quarrelsome and contentious. (sec. 34)

We have conducted the game described above on a number of different occasions. Our experience is that it has been enjoyable and provoked lively discus-

sions of substantive issues in political philosophy. Many of the players resent the rules of the game and the outcomes, but these resentments are usually channeled into productive objections to Locke's system.

The Locke Game: Rule Sheet

Players:

1. *Colonists*: If you received a "crude farmland sheet" in addition to this rule sheet, you are a colonist. Your objective is to produce and store as much food as possible. The two colonists with the most at the end of the game will receive prizes. The two colonists with the least amount of food will be losers and will join the "dead" players.

a) Colonists produce food by tearing or cutting shapes from the "farmland sheets." A shape torn out of the farmland sheets will only be acceptable if all of the inner guidelines are intact, and if none of the outer guidelines are present. The different shapes have different values, which are indicated on the farmland sheets.

b) Colonists may only produce shapes by tearing them from farmland sheets or by using scissors purchased during the game. No other tools or implements may be used.

c) Each colonist must turn in one unit worth of food for each "day" of the game. A colonist who fails to do this is "dead." Food can be stored from one day to the next.

d) Colonists may hire other colonists or natives to work for them as employees. Each employee must surrender half of what he or she produces to his or her employer. Each colonist who has employees must turn in one unit of food for each employee for each day of the game. The employees do not have to turn in food units for their own survival. Once someone becomes an employee, he or she remains an employee for the duration of the game.

e) Colonists may purchase tools and additional farmland at the prices stated below. Employers may, of course, purchase tools for their employees. The cost of the scissors will be included in tabulating total scores at the end of the game—the cost of the farmland sheets will not be included.

scissors — 10 units

cultivated farmland — 6 units

crude farmland — free (to colonists)

2. *Natives*: If you did not receive a "crude farmland sheet" you are a native. Natives survive by hunting and gathering and living off the land on a day-to-day basis. All natives who survive to the end of the game will receive a prize.

a) Natives gather food by picking up the small colored squares of paper that are scattered around the room. Natives may gather only one square for each day of the game.

b) Any native who fails to gather a colored food square will be dead, unless he or she can find a colonist to pay one food unit to insure the survival of the native. Once a native has accepted a food unit from a colonist, the native becomes an employee of the colonist and is covered by the colonist's rules.

3. *Dead People*: Natives or colonists who fail to find or produce sufficient food will be classified as dead. Dead players will clean up the room at the end of the game. There will be a lot to clean up.

4. *Administration*: The administrator will explain and conduct the game, and en-

force the rules. The penalty for violating the rules is to join the ranks of the "dead" players. The administrator may declare any player "dead" at any time for any reason. All decisions of the administrator are final.

Notes

This game was originally prepared for the Conference of the Northeast Region of the National College Honors Council, at the University of Delaware, March 21, 1981, and has also been used for a number of classes at Villanova University. We appreciate the patience and helpfulness of those who worked through earlier versions of the game. We are also grateful to Dr. Elaine Bosowski for comments and suggestions.

1. John Locke, in *Two Treatises of Government* (New York: Hafner, 1947). All quotations and references to Locke will be given in the body of the text by section number. Our interpretation of Locke generally follows that of C. B. Macpherson in *The Political Theory of Possessive Individualism* (Oxford: Oxford University Press, 1964). After developing the Locke game we discovered a somewhat similar concept in Robert Tressell's "The Great Money Trick" in *The Ragged Trousered Philanthropists* reprinted in T. M. Norton and B. Ollman, *Studies in Socialist Pedagogy* (New York: Monthly Review, 1978), pp. 254-60. For an earlier experiment in using games to teach political philosophy, see John Immerwahr, "The Hobbes Game," *Teaching Philosophy*, 1:4 Fall, 1976, pp. 435-39.

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