The Hobbes Game

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Over the past few years I have been interested in using games in one way or another in teaching philosophy. What follows is an account of a recent attempt to use games in teaching the political philosophies of Hobbes and Locke. The idea of using games as an educational tool seems appropriate for philosophy since philosophers so often discuss games and draw examples from them. Political philosophy is especially suited for this approach since games involve human interactions similar to those discussed by political philosophers. If nothing else the approach described below offers a pleasant change from the unending routine of discussions, lectures, and papers.¹

Designing a Hobbes Game

My objective was to design a game which would present some of the central ideas of Hobbes' *Leviathan* to a class of about fifteen students.² The game is intended to be played before the students actually read Hobbes, so that when they turn to the text itself they will have a greater understanding of what they are reading. The game attempts to create a situation analogous to Hobbes 'state of nature' in such a way that the formation of something like a Hobbesian 'commonwealth' emerges as an ideal strategy for the players. The game is based on the familiar game-theoretic model of the 'prisoner's dilemma.'³ In the prisoner's dilemma (see the rules for awarding grades below) mutually self-interested parties who act independently will choose options which are not the most favorable ones available. The most favorable outcome can only be obtained if there is some way to insure co-operation and trust among the parties.

Despite the fact that I dislike competition for grades and am suspicious of the whole practice of grading, the game is cast in the form of a struggle for grades. Competition for grades, after all, is something that all students understand, and a proper Hobbes game ought to bring out the worst in the players rather than the best. Although no one really thought that I would actually give the students the resulting grades, the fact that I did not exclude this possibility added some excitement to the game.
When the students entered the classroom they were handed the set of rules which follows. The rules are somewhat complex and not all of the students understood them completely. There is no difficulty about this since Hobbes never says that everyone will understand the “laws of nature” either. The game requires an administrator who understands the rules thoroughly; the administrator can, of course, be the teacher himself. The students should somehow be encouraged to mill around the classroom and the hallways, rather than sitting in their usual seats. This has the effect of increasing the amount of interaction and making the game more interesting.

MID-TERMS: A Family Game

Object of the Game. The object of this game is to receive a grade for mid-terms. Players can make agreements, deals, and bargains with other players at any time; players may also break these agreements at any time.

Stage I. General Caucus. There will be a period of about 10 minutes in which players can read the rules and discuss the game with each other.

Stage II. Awarding of the Grades. When the administrator of the game decides to end the caucus he will call the players up in groups of two (groups to be made up by the administrator). At this time each player will request a Mid-term grade by writing it on a small slip of paper; he may not show this paper to anyone else. The administrator will announce the requests after both have been submitted. Grades will be awarded as follows:
1. If both players request an A, both receive a D.
2. If both players request a B, both receive a B.
3. If one player requests an A while the other requests a B, the player who requested the A receives an A. The player who requested the B receives an F.

Stage III. Readjustment of Grades: FLUNKYA. Players can voluntarily give any part of their grade to any other player. Fractional grades are possible (2.3, 4, 3.6, etc.). Players may take grades away from other players by playing FLUNKYA. Rules for FLUNKYA are:
1. No one who has an F grade can play FLUNKYA.
2. Any eligible player can challenge any other player to play FLUNKYA by informing the administrator.
3. After a FLUNKYA challenge has been issued, other eligible players (with permission of the original parties) may join either side.
4. The administrator will decide the outcome of the challenge by drawing straws. There will be as many long straws as there are players on the side of the challenger and as many short straws as players on the side of the challenged party. If a long straw is drawn the challengers win and vice versa.
5. The losers of the challenge will all receive an F. The grade points of the losers will be distributed evenly among the winners.

As the game actually turned out, the students adopted a number of different approaches. Several students banded together to form a group. By co-operating
with each other, by tricking other students into trusting them, and by judicious use of \textit{FLUNKYA} challenges, all of the members of the group ended the game with high grades. Most of the students, however, acted as individuals, and adopted the safe strategy of requesting A's. Since their partners also requested A's these students all received D's. They tried to improve their grades by playing \textit{FLUNKYA}, so the final result was that most of these students ended up with F's while a few survivors of the challenges had high grades. Another group of students were tricked into requesting B's, were betrayed by their partners and received F's.

\textbf{Questions for Discussion}

After the game the class was called together to discuss several questions intended to bring out the features of the game which are closest to Hobbes' philosophy:

1. What is the motivation of the players and is it analogous to man's "natural behavior"? The students were all agreed that their behavior in the game had been totally self-interested. There was considerable disagreement, however, as to whether men are generally self-interested. The important point is, of course, that the behavior of the students in playing the game is nicely parallel to the kind of motivation which Hobbes posits for human behavior generally.

2. What situation do the players find themselves in, and is that situation analogous to man's "natural state"? Hobbes assumes that man's natural condition is something like what Rawls has called a condition of "moderate scarcity" where "resources are not so abundant that schemes of cooperation become superfluous, nor are conditions so harsh that fruitful ventures must inevitably break down." The game is designed to create this kind of situation in that it is impossible for everyone to have the grade he wants, but with co-operation everyone can achieve a satisfactory grade. In discussion the students were quick to agree that the situation of the game was indeed parallel to "real life."

3. What is the ideal strategy for the players to adopt? In discussion the students immediately saw the need for making agreements and the difficulty enforcing them. In their own words a number of students expressed Hobbes view that "before the names of Just, and Unjust can have place, there must be some coercive Power, to compel men equally to the performance of their Covenants, by the terror of some punishment, greater than the benefit they expect by the breach of their Covenant." The students also commented on the success of those players who had formed a group and the failure of those who had acted as individuals. At this point I presented the Hobbesian solution to the problem which is, I take it, that the whole group unite together so that each player requests a B in the initial round of grade requests. This agreement is to be enforced by the threat of \textit{FLUNKYA} challenges, where the understanding is that if any member does not cooperate the entire class will challenge him to play \textit{FLUNKYA}. A number of the students accepted this as a workable strategy, although others were more intrigued with the idea of forming smaller groups.
which would compete with each other. I took these to be really only two different applications of the Hobbesian solution. The point that was agreed upon by everyone is that properly acting in one’s own self interest dictates that one should cooperate with others, and this, it seems to me, is the ultimate message of Hobbes’ philosophy.

I concluded the discussion by giving a short talk on Hobbes himself. I indicated that in the assignments to follow Hobbes would use a theory of psychological egoism together with the assumption of initial moderate scarcity, to explain the formation of the political commonwealth.

**Student-Designed Games**

In presenting Locke’s political philosophy I used the concept of game construction in a different way. As one of several possible paper topics on Locke I invited the students to construct their own games which would illustrate some aspect of Locke’s philosophy. Several students attempted this project, with varying degrees of success. My feeling was that the skill with which they constructed these games was a reasonably good indicator of their understanding of Locke. They reported that they had learned a good deal about Locke from designing the games.

The best of these games was based on Locke’s theory of property, with the basic idea being taken from the game, Monopoly. In evaluating the game I assumed that an ideal property game should illustrate the three main conditions that Locke gives for the acquisition of property. Property, in such a game should be acquired by something like labor, and there should always be “enough and as good” left for the other players. Locke also says that one can only acquire as much property as one can keep without spoilage, so presumably such a game would involve different types of property, some more perishable than others, with a mechanism to trade perishable for more durable items (plums for nuts is Locke’s example).

I also invited students to attempt to construct a Rousseau game, but I was hardly surprised when no one tried it. My own feeling is that Rousseau does not lend himself so easily to this kind of approach. On other occasions I have suggested that students might try their hand at constructing a game to illustrate Rawls’ theory of “justice as fairness.” Although none of my students attempted this project I believe that it would be a useful one.

**A Subjective Evaluation**

The great problem with education experiments, it has been remarked, is that they never fail. I am not in a position to present any objective evidence for the advantages of this approach. My subjective evaluation, however, is that the approach was quite successful. The students responded enthusiastically to the game itself, and they referred to it frequently at later points in the course. They seemed to approach Hobbes and the social contract tradition generally with more sensitivity and interest than have similar classes in the past. One added
benefit that I had not anticipated was that playing the game provided a source of
examples for numerous discussions throughout the rest of the semester.

Notes

1. For a useful bibliography of materials about education games, and a summary of
some of the possibilities and problems of this approach, see Wm. Ray Heitzmann,
Educational Games and Simulations (Washington: National Education Association,
1974).

2. Larger classes should probably play the game by subdividing into smaller groups.

3. Attributed to A. W. Tucker. See John Rawls, A Theory of Justice (Cambridge:
“the classical example” of the prisoner’s dilemma.

4. Ibid., p. 127.

5. Leviathan, I, xv.