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The royal lie☆

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ABSTRACT

According to the Greek philosopher Plato "[. . .] if anyone at all is to have the privilege of lying the rulers of the State [. . .] may be allowed to lie for the public good" (The Royal Lie). To investigate whether The Royal Lie may foster cooperation in public goods provision we experimentally study centralized manipulations of contribution feedback. We find that a uniform feedback exaggeration does not increase cooperation and is disapproved once it is disclosed. An individual exaggeration, however, that gives nobody the feeling of being a sucker sustains cooperation on a high level.

1. Introduction

In Socrates' dialogue with Adeimantus the Greek philosopher Plato emphasis the great value of truth, however allowing for the exception of *The Royal Lie*:

> "Then if anyone at all is to have the privilege of lying, the rulers of the State should be the persons; and they, in their dealings either with enemies or with their own citizens, may be allowed to lie for the public good."[1]

People seem to be quite accustomed to the feeling that political rulers provide us with false or at least "dressed-up" information to their advantage and most likely to our disadvantage. As an example Crawford (2003) reports George Bush's 1988 campaign promise "*Read my lips: no new taxes*" and guides us to Royko's (1988) satiric dialogue on this promise. Although "the conservative friend" does not believe in Bush's promise ("*He didn't say taxes wouldn't go up. He said no new taxes. . . Sometimes a tax increase isn't really an increase at all, but in economic theory, it is a decrease*"), he strictly refuses to call the promise a lie. In his paper Crawford shows that lying to the own benefit may be in equilibrium when boundedly rational players are present. The fact that people indeed provide false or imperfect information in order to increase their individual profit is also backed by a rich experimental literature (e.g. Croson et al., 2003; Gneezy, 2005; Ackert et al., 2011; Fischbacher and Heusi, 2008; Erat and Gneezy, 2011; Serra-Garcia et al., 2011, 2013; Irlenbusch and Ter Meer, 2013).

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[1] Plato, The Republic, Book III, Socrates and Adeimantus, p. 651, The Royal Lie I; Utilitarianism.

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Yet, this is for sure not what Plato had in mind. In our reading of the *Royal Lie* Plato envisions a lie by a superordinate authority used to increase the public wealth, but without any direct benefits for the authority itself. As intriguing as this idea appears the appropriate implementation of a *Royal Lie* (understood in this way) is far from obvious and raises some fundamental questions. How may a *Royal Lie* be formulated to effectively augment the "public good"? What are the short-term and what are the long-term consequences of a *Royal Lie*? In particular, how do people react after they realized being told a *Royal Lie*? Would people even appreciate being lied to for the public good? The objective of this paper is to address these questions to qualify how a *Royal Lie* may be formulated to be an effective tool for augmenting the public good. Although considerable insights have by now been collected in the conditions under which people lie, only very little is known on the reactions of the people being lied to and the long-term consequences of lying, in particular in repeated interactions. This however is essential in order to assess whether a *Royal Lie* may effectively increase the public good.

In this paper we study the effects of a *Royal Lie* in an experiment on public goods provision with manipulated feedback on the others' contributions. The basic idea is to exaggerate the feedback on the others' contributions in order to make use of the forces of conditional cooperation to increase the overall level of cooperation and thereby the overall payoffs.[2] In our data we fail to find that a feedback manipulation that uniformly exaggerates others' average contribution by 25% leads to significantly higher contributions in the short run. More dramatically, the exaggeration is not appreciated by the subjects once it is revealed and has a significant detrimental effect on contributions in the long term. A closer look shows that the major driving force of this result is the behavior of the players who even by exaggerated feedback contributed more than the others. They drastically reduce contributions, whereas those who contributed more than average but, due to exaggerated feedback, were not aware of this, keep their contribution level. Following up on this we conducted an additional experiment in which we exaggerate the feedback not in a uniform way but individually so that no player receives the feedback of having contributed more than average, i.e. being a sucker. Now contributions not only stabilize on extremely high levels in the short run. They remain on a high level even after the exaggeration mechanism is made public. Moreover, the exaggeration is appreciated when revealed to the subjects. We thus conclude that a *Royal Lie* may indeed be an effective tool to increase the public good if it removes the feeling of being exploited by others.

2. Experimental design

We study a standard linear public goods game. Each of four players receives an endowment of 20 and has to contribute an integer $0 \leq c_i \leq 20$ to the public good. The sum of all contributions is multiplied by 1.6 and evenly distributed among the four players. Tokens kept remain in the player's private account. Thus, player i's payoff is $\Pi_i = 20 - c_i + 0.4 \cdot \sum_{j=1}^{4} c_j$. While individual payoff maximization calls for keeping all tokens, the social optimum is achieved when all players contribute their entire endowment to the public good.

2.1. Procedure

The experiment was run at the *eLab* of the University of Erfurt. 144 subjects who had never participated in a public goods experiment were recruited using ORSEE (Greiner, 2004). Subjects were assigned to groups of four and randomly distributed to the baseline and the two treatments. We collected 12 independent groups of 4 subjects each in the baseline as well as in each of both treatments. These 36 groups constitute our independent observations. The non-parametric statistics uses the averages of the groups and the regressions cluster for the groups. The interaction was anonymous via the computer interface using z-Tree (Fischbacher, 2007). Subjects were paid privately after the end of the experimental session with an exchange rate of 1€ for each 80 tokens. A session lasted about 70 min and average earnings were 11.75€.

2.2. Treatments

As a control to our experimental manipulations we study a *baseline treatment PF* in which subjects repeatedly play the public goods game without any feedback manipulations. After each round of play each subject is informed about the (actual) average contribution of the other three group members. We collected 12 groups as the independent observations in the baseline *PF*.

To investigate the effects of exaggerated feedback we ran another 24 groups. The instructions informed subjects about the possibility that the information on the other group members' average contribution might deviate from the actual value.[3] After subjects had signed in, we randomly allocated the 24 groups to the two treatments *IF0* and *IF25*. The random allocation was balanced such that we had 12 groups in *IF0* and 12 groups in *IF25*. Subjects did not know in which of the two treatments

[2] In our study the experimenter is the superordinate authority which does not directly benefit from the lie. If the lie indeed increases contributions, the experimenter may even have a monetary disadvantage due to the higher subject payments.

[3] The original sentence from the instructions was: "From the beginning of the second period on you will be informed about the average contribution of the other three members of your group in the previous period at the beginning of each period. Please note that this information might deviate from the actual average contribution!" See Appendix A for the complete instructions.