

Department of Politics and International Relations

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Module: Introduction to Political Theory

Deadline: 20/05/2024

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Is the institution of sovereignty a necessary condition of cooperation, or can cooperation develop without instituted sovereignty? Answer the question by critically engaging with Hobbes' discussion of the natural condition of man.

INTRODUCTION

Empirically, Graeber and Wengrow (2021) suggests societies were able to form without a state or social hierarchy indicating that sovereignty is not a necessary condition of cooperation. However, this fact alone is limited unless we can explain why this is the case. This is arguably best done by modelling Hobbes' characterisation of the natural condition of man in the state of nature with game theory to explore the possible interactions between agents. Indeed, Andrew (1992, p.2) contends that 'Hobbes's State of Nature would seem to lend itself to representation in game-theoretic terms'. Additionally, Hampton (1986) and Andrews (1992) both give evidence that a sovereign may be a necessary condition for cooperation. However, Dodds and Shoemaker (2002) are sceptical of condensing Hobbes' state of nature to a simplified model. This view is arguably more convincing considering the complexity and various types of interactions which make the state of nature a dynamic system. However, to understand the parameters of our game-theoretic analysis we should first determine how Hobbes comes to the conclusion that a sovereign is a necessary condition of escaping the state of nature and thus enabling cooperation.

THE HOBBIAN ARGUMENT

The foundation of Hobbes' argument is built off the assumption that the single driving force behind man is the desire to preserve oneself. He refers to this as the Right of Nature, in which 'each man hath, to use his own power, as he will himselfe, for the preservation of his own Nature' (Hobbes, 1651 [1996], p.64). Hobbes then states nineteen Laws of Nature, where as rational beings we ought to follow. As Runciman (2022, p.16) points out, the laws 'can be summed up by a simple principle. We should all try 'to seek peace, and to follow it''. At this point, Hobbes' argument is based on relatively healthy assumptions: we desire to preserve ourselves and we seek peace. Accompanying this, Hobbes views all people as equal threats to each other; while there may exist variance in physical or intellectual ability, everyone still has the capacity to oppose others. Thus, Hobbes contends 'From this equality of ability, ariseth equality of hope in the attaining of our Ends.' (Hobbes, 1651 [1996], p.87). This leads Hobbes to further suggest there are 'three principall causes of quarrel. First, Competition; Secondly, Diffidence; Thirdly, Glory' (Hobbes, 1651 [1996], p.88). In other words, we contest each other because either we desire something someone else has, we are fearful they may pose a threat to us in the future or to earn the respect of others. Violence may seem counterintuitive to seeking peace, but as Runciman (2022, p.16) points out 'conflict will continue because the conflict will not look the same, depending on which side you are on' as seeking peace may mean eliminating threat. Naturally then it is obvious why Hobbes believes why the original condition of man in the state of nature is a 'warre of every man against every man' (Hobbes, 1651 [1996], p.90). This notion in particular, highlights the practicality of using a game theoretic analysis considering game theory analyses interdependent interactions between players (Andrew, 1992). Nonetheless it seems then, Hobbes' chain of reasoning makes sense; man is driven by self preservation and acknowledges that so are others, consequently he is distrustful of everyone, because everyone has the capacity to compete for resources with him,

thus he preemptively attacks and so does everyone else. It now becomes apparent that the answer to cooperation is found in solving the issue of mistrust. Hobbes recognises men could collaborate through covenants but this mistrust prevents this. Indeed, Gauthier (1979, p) points out '[a]t the practical level, which is of greatest interest to Hobbes, the problem is to ensure that men actually perform their covenants'. This is certainly Hobbes' concern as he suggests without an authority to enforce these obligations 'Covenants are in vain, and but Empty words' (Hobbes, 1651 [1996], p.100). For this reason, Hobbes argues for the existence of an absolute sovereign. The sovereign must have all the power as the exclusive decision maker for 'Covenants, without the Sword, are but Words, and of no strength to secure a man at all.' (Hobbes, 1651 [1996], p.100). Hence, once a sovereign is conceived they act as an incentive by enforcing obligations and consequently people can have faith in others and enter covenants with security. Therefore, the main concern regarding Hobbes' need for a sovereign to develop cooperation comes from solving the issue of mistrust between people, but if cooperation can arise where no third party is needed we may argue a sovereign is not a necessary condition for developing cooperation.

THE PRISONER'S DILEMMA

Huemer (2013, p.298) comments 'The Hobbesian argument for government is essentially a game-theoretic one.' Indeed, the classic prisoner's dilemma (PD) reinforces this sentiment by supporting Hobbes' conclusions about the incompatibility of collaboration without the institution of sovereignty. Gauthier (1979) notes Hobbes' issue regarding collaboration is whether or not 'men have sufficient reason to adhere to the covenants which they have sufficient reason to undertake'. In other words, if

men can keep their promises without external interference, collaboration is possible without the institution of sovereignty. The PD finds this not to be true. Gauthier (1979) shows this by reducing Hobbes' state of nature into a variation of the PD. In this PD the following possible actions from each agent are available: Either player can adhere or violate the covenant, but if one player violates and the other adheres the violating player will receive the greatest possible payoff. Alternatively, both players can adhere and receive good payoffs or both players can violate and receive no payoff. Figure 1 (Gauthier 1979) below illustrates the preferences from each player, with player 'A's' preference coming first and where '1' indicates the ideal outcome for the player and '4' represents the least preferred outcome.

		B	
		adheres	violates
A	adheres	2, 2	4, 1
	violates	1, 4	3, 3

FIGURE 1

A feature of Hobbes' natural condition of man and the PD is that players involved are rational and so they can anticipate each other's possible actions and strategies. Thus, both players can conceptualise if they adhere to the covenant, the other player will be better off violating and vice versa. Consequently, non-cooperation is the dominant strategy but leads to a pareto-inefficient outcome. So unless either player can guarantee the adherence of the other player, each player will choose to violate the covenant. Therefore, we may argue this supports Hobbes' claims that an absolute sovereign is a necessary condition for collaboration; a sovereign acts as an enforcer and an incentive towards adhering by changing the violation payoffs to disproportionately hurt violators.

Despite the regular use of the PD to represent Hobbes, as Rawls (1971 p.238) notes 'Hobbes's state of nature is the classical example [of the prisoner's dilemma]' the game still carries plenty of assumptions that may not hold in Hobbes' state of nature. For instance, each player is isolated and does not have the opportunity to communicate with one another. If players could communicate, Andrew (1992, p.9) argues that 'the general presumption of trust between people is typically sufficient to solve the practical problem in real-life two-person cases,' overcoming the issue of isolation. However, Andrew (1992, p.9) does also admit that 'The conditions which make the solution of the practical problem possible in small groups are often lacking in large groups... [and the issues are] typically more difficult to overcome in large groups.' Thus, one could argue a sovereign is a necessary condition for large-scale collaboration but pockets of cooperation could occur without the need of a sovereign. Another fairly obvious point as Andrew (1992) points out is that 'we live in a social world' where our past actions observed by others determine our reputations which consequently affects how others choose to deal with us in the future. Similarly, Huemer (2013, p.200) gives the two examples but in a kill or be killed context: firstly, friends and family of someone you have done wrong may attempt to enact revenge and secondly, if you are seen as a threat people will attack you on account of diffidence. Both these reasons work against the notion that a sovereign is a necessary condition for cooperation by criticising the use of the PD for being a 'one-shot' game since it lacks the capacity to deal with time. While these criticisms are useful, Eggers (2011, p.47) proposes that these evaluations come with their own assumptions. For instance, it is assumed that there is a reasonable chance you may meet again with someone you have done wrong in the future, or that your reputation would be able to spread effectively at all. Instead Eggers (2011, p.18) suggests the greatest issue with characterising Hobbes' man in the state of nature with the PD is that it results in the dominant strategy being violation. Hence,

encouraging players to violate every time since it yields the best outcome even if they knew a player would adhere. This is arguably a misrepresentation of Hobbes' work seeing as though he suggests man attacks only preemptively, whereas the PD recommends violation no matter what. Thus, it seems that the PD may give the conclusion that Hobbes was looking for, but does not actually represent the parameters of his own work (Hampton, 1986, p.69). This is arguably because as MacAdam (1972, p.310) suggests, he was attempting 'to describe the basic drives of human nature and therefrom to provide a basis for political obligation'. Ultimately, while the PD seemed like a potentially viable model for Hobbes' state of nature, it struggles to support the notion that a sovereign is necessary for cooperation to develop.

THE ASSURANCE GAME

Alternatively, the assurance game (AG) is perhaps a more accurate representation of Hobbes' state of nature. The AG works in the same way as the PD where either player can adhere or violate the covenant. Figure 2 (Gauthier, 1979) indicates both players adhering yields the greatest outcome, however if one player adheres but the other violates the lone adhere suffers. Additionally, we should note that the main difference from the PD scenario is there are two equilibriums and crucially no dominant strategy.

		B	
		adheres	violates
A	adheres	1, 1	4, 2
	violates	2, 4	3, 3

FIGURE 2

Dodds and Shoemaker (2002, p.352) suggest, for players to progress from this paralysis 'what is needed is some assumption or other about the amount of information each party has about the other.' Ultimately, they argue that either player can rationalise they both would prefer mutual adherence and thus could reach that outcome. However, this assumes either player can work this out given other variables in the state of nature. It is possible to guarantee this, as Andrew (1992, p.14) points out that in this particular situation, '[t]he fundamental role of the sovereign, on the [Assurance Game] reading, will be that of a coordinator.' In practice this would solve any uncertainty between players about each other's preferences allowing for mutual adherence. At this point it seems as though a sovereign is not a necessary condition for cooperation but rather a catalyst and reinforcer instead. However, Dodds and Shoemaker (2002, p.353) argue there should not be any reason why one would not know or be able to conceptualise someone else's preferences. Afterall, one would have no reason to suspect their own preferences to differ from someone else's in the state of nature and thus could certainly conclude mutual adherence. However, through this reasoning it would be hard to imagine how conflict could ever arise. This is a particular issue because as Dodds and Shoemaker (2002, p.353) point out 'it is simply at odds with the text.' Thus, while the AG highlights that sovereignty is not a necessary condition of cooperation it seems that to Dodds and Shoemaker it is not highly relevant to Hobbes. However, we could argue that if the risk or payout of being a unilateral adhering was threatening enough the rational decision would be to avoid adhering for you cannot be realistically certain of anyone else's motivations. Hence, Eggers (2011, p.19) suggests players may adopt a principle of maximin. This is especially the case considering Hobbes' original condition of man is driven by self preservation and would be extremely risk averse to death. The maximin approach entails choosing the 'best worst' outcome i.e choosing to violate for fear of being left as the

lone cooperator. Maximin is a debatable principle to follow since it is a risk averse strategy and thus you lose out on potentially beneficial outcomes. However, as Andrew (1992, p.11) argues it would be the reasonable pathway to follow in Hobbes' state of nature as 'Hobbes emphasises the dire consequences of conforming to the various Laws of Nature in such a situation where others do not.' Arguably then, Andrews' notion of a coordinator sovereign is perhaps required if players are too cautious to risk adhering fearing the consequences of being an individual adherent. Overall, the AG's lack of a dominant strategy leaves either player unknowing whether to cooperate or not. This suggests collaboration could emerge but if an outcome of being a lone adherent is severely detrimental, one may opt in favour of a maximin strategy which in turn means adherence is not only unguaranteed but not likely. Again, like the PD case a third party could solve this issue. But rather than changing the payoffs i.e affecting the preference ranking. This third party needs to 'make the information available to the interest parties which will enable them to achieve mutual cooperation' (Andrew 1992, p.11). Hence even with the AG while the possibility of cooperation without a sovereign exists, notably when a maximin strategy is not applied, it is apparent that a sovereign works as a catalyst to developing cooperation.

CONCLUSION

Therefore, it is clear game theoretic analysis of Hobbes' state of nature and his natural condition of man can make convincing cases towards the necessity of a sovereign. Not least, in the case of the PD where a sovereign is needed to act as an enforcer thus changing payoffs to prevent the violation of covenants. But also in the case of the AG where the presence of a sovereign may be required as a

communicator of preferences. However, we may argue the notion that there are possibilities where cooperation can occur without a sovereign, albeit unlikely, demonstrating the various assumptions make models ineffective in truly representing a dynamic system like Hobbes' the state of nature. Needless to say, a sovereign might still be required on large scale populations and it is certainly a catalyst towards the development of cooperation but arguably not a necessary condition.

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