

Maintaining Authority

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1. Introduction

The authority of a leader is enhanced when her commands or recommendations for action are obeyed. The authority of a leader is also enhanced when her commands are "principled" - based on good reasons - and therefore the leader is seen to be acting in the interests of her followers. But for a leader interested in maintaining her authority, there is often a conflict between these strategies. For example, a U.S. President who regularly proposes legislation to Congress that is defeated rapidly loses authority; but so does a President who must abandon his agenda in order to get legislation passed.¹ In this paper, we use game theory to understand this basic conflict between principle and pragmatism which lies at the heart of the problem of maintaining authority.

A leading and striking case example is the authority of the Supreme Court of the United States. The court exercises considerable authority through its "power" to adjudicate the constitutionality of laws passed by the United States Congress and the actions of the executive branch. But its power is contingent on its behavior. If the court's interpretation of the constitution were sufficiently at odds with public opinion, the court would lose its considerable prestige and the other branches of government would find a way to bypass the court's decisions. To maintain its authority, the court must be obeyed and to maintain obedience, it

¹Neusdadt's (1960) classic "Presidential Power: The Politics of Leadership" highlights this tradeoff.

must not stray too far from public opinion. On the other hand, if the court abandoned legal principle and precedent, and reflected only the personal opinions of its members, it would be seen as too political, and lose its prestige. To maintain its authority, the court must be principled. Unfortunately, there may be a conflict between being popular and obeyed and being principled.² Thus the court of 1930s was going to lose authority however it responded to New Deal legislation. Either it would have to abandon its principled interpretation of the constitution, under which much New Deal legislation violated the constitutional protection of private contracts. Or it could stick by its principles, in which case it would ultimately be disobeyed.³

We study a repeated game where a leader recommends a course of action to a population, who must coordinate their behavior (e.g., play by the rules of a given legal regime). The leader is assumed to have expertise in choosing the appropriate action in each period. The best outcome would be one where a good leader always makes a principled recommendation in every period and is always obeyed by the whole population. In order to capture the principle/pragmatism tradeoff, we must add a number of frictions. First, we would like there to be uncertainty about the motives of the leader (the leader could be "good" or "bad"), to allow for the possibility that protracted unprincipled behavior would undermine the leader's credibility. Second, we would like there to be a segment of the population (the "sophisticates") who can tell if the leader's behavior is principled or not, so that the leader's credibility can be endogenously undermined. Third, we would like there to be a segment of the population (the "zealots") who will sometimes be guaranteed to disobey a principled recommendation; this will ensure that even a principled leader will sometimes have to make unprincipled decisions in order to be obeyed. Finally, we would like there to be a segment of the population (the "naifs") whose do not observe if the leader's behavior is principled and whose only way to evaluate the quality of the leader is to observe if he has been obeyed in the past.

We end up with a model of repeated "cheap talk" and coordination. It has a simple equilibrium that captures the principle/pragmatism tradeoff. The good leader recommends the principled policy except when he knows that he would otherwise be disobeyed. The naifs obey his recommendation if everyone has always obeyed him in the past, but if he has ever been disobeyed, they will always ignore

²Bickel's (1962) classic "The Least Dangerous Branch: The Supreme Court at the Bar of Politics" has argued that this trade-off is crucial to understanding the court.

³See McKenna (2002). We return to this example in section 3.

his recommendation. When the sophisticates observe an unprincipled recommendation from the leader, they lower their belief that the leader is good (as they do not know that he is making the recommendation only because there are zealots out there). If the leader's reputation (i.e., the probability the sophisticates assign to him being good) falls low enough, they will stop obeying his recommendations. Once that happens, the naifs will also stop obeying him.

The model uses many players and actions to capture a simple intuition. In doing so, it highlights the important role that a heterogeneous audience plays in understanding the principle/pragmatism tradeoff. Relatively uninformed players will focus on whether the leader has been obeyed in the past. Relatively informed players will focus on whether the leader has been principled. The combination generates the trade-off. It generates the prediction that a court will maintain its authority only if it tailors its decisions both so that they are obeyed but, consistent with that, so that they are principled as often as possible. If the court suffers bad luck (a string of cases where being obeyed requires them to act in an unprincipled way), then it will lose its authority in equilibrium and there will be nothing it can do about it. We will conclude the paper (in section 3) with a report of a comparative case study explaining how the Argentinian supreme court lost its authority while the US supreme court maintained it while facing similar (but less extreme) challenges to its authority in the 1930s and 1940s.

We identify "authority" with the ability to make "cheap talk" statements that coordinate peoples' behavior (and nothing more). In this paper, we take this view of authority as given. We have argued in Mailath, Morris and Postlewaite (2001) that this is a useful and sensible definition. When a judge sentences a prisoner to ten years in prison, his recommendation does not automatically get carried out. Instead, a large number of police officers, prison warders and others collaborate in implementing the "sentence" (or "recommendation") of the judge. They do so because they expect everyone else in society to do so. Their compliance relies on their shared understanding that everyone else will be complying. In this sense, it is a coordination game. More generally, there is a now large tradition of understanding institutions - including legal institutions such as constitutions - as simply self-enforcing patterns of behavior or - equivalently - equilibria of coordination games; see, for example, Calvert (1995), Hardin (1999), Basu (2000), Dixit (2004), Myerson (2004) and Grief (2006). The distinctive element in our analysis of authority (as outlined in Mailath, Morris and Postlewaite (2001)) is that we want to understand judicial, legislative and executive actions as "cheap talk" in the game theoretic sense. The purpose of this paper is to put this perspective to

work in a particular application.

2. Model

The story we described is based on a leader trying to coordinate a heterogeneous population. Some individuals may not obey the leader independent of whether they think others will obey him. Some will be relatively uninformed about the nature of the leader's recommendations and will infer his future credibility from whether he has been obeyed in the past. Other more informed individuals will infer his future credibility from the nature of the recommendations he makes. While the same individual may all play this different roles at different histories, heterogeneity is probably important in practise and we highlight it by modelling distinct classes of individuals playing these three roles. We call them zealots, naifs and sophisticates respectively.

2.1. The Game: An Informal Description

We consider a repeated game with four players, a leader and three followers (a zealot, a naif and a sophisticate). There are two policies that might be followed in each period. One of them is the "principled" policy and one of them is the unprincipled policy. The leader publicly recommends one of the policies. The followers then decide whether to follow the leader's recommended policy or choose a safe default action. Each policy is ex ante equally likely to be the principled one. A leader may be the good type or the bad type. The leader knows his own type, the sophisticate has a belief λ that the leader is good (updated each period), the naif has very limited information and only knows if the leader was obeyed in the previous period. The naif and the sophisticate get a payoff of 1 if all the followers (the sophisticate, the naif and the zealot) accept the leader's principled recommendation. If they choose to opt out, they get a payoff of 0. Otherwise (for example, if there is miscoordination or coordination on the unprincipled policy) they get a payoff of $-c$. Similarly the good leader gets a payoff of 1 if he coordinates on the followers on the principled policy, 0 otherwise. The good leader and the sophisticate both discount the future at rate δ . The bad leader has the same preferences as the good leader, except that with probability β , he prefers the unprincipled policy to the principled policy; and he is myopic. Finally, we assume that the zealot has a dominant strategy to choose an action in each period. With probability α , it is different from the principled policy. The leader knows the

zealot's preferred policy, but the other players do not. We assume

$$\beta(1+c) > 1 > \alpha(1+c)$$

and thus

$$\beta > \alpha.$$

This assumption ensures that the sophisticate would like to follow the good leader's recommendation, if he recommends the principled policy whenever it is consistent with what the zealot will do. But the sophisticate would not like to follow the bad leader's recommendation.

The following is an equilibrium of this game.

1. The good leader always announces the principled action, unless he knows the zealot will not obey it. In this case, he announces the unprincipled policy.
2. The bad leader always announces his preferred policy.
3. The naif obeys the recommendation if and only if the leader was obeyed in the previous period.
4. The sophisticate obeys the recommendation if and only if the leader was obeyed in the previous period *and* his reputation is at least λ^* .
5. The zealot chooses his most preferred action.

The critical λ^* is the largest value of λ where the unique solution to the Bellman equation,

$$v(\lambda) = \max \left[0, \left\{ \begin{array}{l} (1-\delta) \left[\begin{array}{l} \lambda((1-\alpha) - c\alpha) \\ + (1-\lambda)((1-\beta) - c\beta) \end{array} \right] \\ + \delta \left[\begin{array}{l} (\lambda(1-\alpha) + (1-\lambda)(1-\beta)) v \left(\frac{\lambda(1-\alpha)}{\lambda(1-\alpha) + (1-\lambda)(1-\beta)} \right) \\ (\lambda\alpha + (1-\lambda)\beta) v \left(\frac{\lambda\alpha}{\lambda\alpha + (1-\lambda)\beta} \right) \end{array} \right] \end{array} \right\} \right],$$

takes the value 0.

2.2. A Formal Description and Analysis

The leader has two possible types, $\theta \in \{G, B\}$.

In each period t , the following events take place:

- A principled decision $\omega_t \in \{1, 2\}$ is drawn, independently with equal probability. The leader and the sophisticate observe the principled decision. The naif and the zealot do not.
- A zealot decision $\xi_t \in \{1, 2\}$ is drawn. With conditionally independent probability $1 - \alpha$, the zealot decision equals the principled decision. The leader and the zealot observe the zealot decision. The sophisticate and the naif do not.
- A bad leader decision $\zeta_t \in \{1, 2\}$ is drawn. With conditionally independent probability $1 - \beta$, the bad leader decision equals the principled decision. The leader observes the bad leader decision. The sophisticate, zealot and naif do not.
- The leader publicly announces a (cheap talk) message $m_t \in \{1, 2\}$.
- The naif, the zealot and the sophisticate each then choose an action $a_t^i \in \{0, 1, 2\}$ (where $i \in \{N, S, Z\}$).

The informational assumptions are as follows. The leader is long lived and observes $(\omega_t, \xi_t, \zeta_t, m_t, a_t^N, a_t^S, a_t^Z)$ in each period. The sophisticate is long lived and observes $(\omega_t, m_t, a_t^N, a_t^S, a_t^Z)$ in each period; entering period 1, he assigns probability λ_0 to the leader being good. A new naif is born in each period. He observes only whether there was obedience in the previous period ($m_{t-1} = a_{t-1}^S = a_{t-1}^N = a_{t-1}^Z$) or not. Formally, he observes I_{t-1} , where

$$I_t = \begin{cases} 1, & \text{if } m_t = a_t^S = a_t^N = a_t^Z \\ 0, & \text{otherwise} \end{cases} .$$

(By convention, we set $I_0 = 1$). A new zealot is also born each period (his history turns out to be irrelevant).

2.2.1. Payoffs

The sophisticate and the naif are assumed to have payoff function $u_S, u_N : \{0, 1, 2\}^3 \times \{1, 2\}^3 \rightarrow \mathbb{R}$, where, for each $i = S, N$,

$$u_i(a^S, a^N, a^Z, \omega, \xi, \zeta) = \begin{cases} 1, & \text{if } a^S = a^N = a^Z = \omega \\ 0, & \text{if } a^i = 0 \\ -c, & \text{otherwise} \end{cases}$$

The sophisticate has discount rate (δ), while the naif is myopic (discount rate 0).

The good leader has utility function

$$u_G(a^S, a^N, a^Z, \omega, \xi, \zeta) = \begin{cases} 1, & \text{if } a^S = a^N = a^Z = \omega \\ 0, & \text{otherwise} \end{cases}$$

and discount rate δ .

The bad leader has the same preferences as the good leader, except (1) he is myopic (discount rate 0); (2) he wants the sophisticate and naif to coordinate on the bad leader state, not the legal state, so

$$u_B(a^S, a^N, a^Z, \omega, \xi, \zeta) = \begin{cases} 1, & \text{if } a^S = a^N = \zeta \\ 0, & \text{otherwise} \end{cases}$$

The zealot has a dominant strategy to set his action equal to the zealot state:

$$u_Z(a^S, a^N, a^Z, \omega, \xi, \zeta) = \begin{cases} 1, & \text{if } a^Z = \xi \\ 0, & \text{otherwise} \end{cases}$$

2.2.2. Equilibrium

We will look at equilibrium in strategies that do not depend on all of history.

Entering period t , the sophisticate believes that the leader is "good" with probability λ_{t-1} , "bad" with probability $1 - \lambda_{t-1}$.

- The leader's strategy depends only on his type θ , the zealot state ξ_t and the bad leader state ζ_t :

$$s_t^L(\theta, \xi_t, \zeta_t) = \begin{cases} \xi_t, & \text{if } \theta = G \\ \zeta_t, & \text{if } \theta = B \end{cases}$$

Thus the good leader follows the law if and only if $\xi = \omega$. The bad leader follows the law if and only if $\zeta = \omega$.

- Entering period t , the sophisticate believes that the leader is "good" with probability λ_{t-1} , "bad" with probability $1-\lambda_{t-1}$. The sophisticate's strategy depends on λ_{t-1} , the leader's current recommendation m_t , and the previous period obedience state I_{t-1} :

$$s_t^S(\lambda_{t-1}, m_t, I_{t-1}) = \begin{cases} m_t, & \text{if } \lambda_{t-1} \geq \lambda^* \text{ and } I_{t-1} = 1 \\ 0, & \text{otherwise} \end{cases}$$

- The naif's strategy depends only on the leader's current recommendation m_t , and the previous period obedience state I_{t-1} :

$$s_t^N(m_t, I_{t-1}) = \begin{cases} m_t, & \text{if } I_{t-1} = 1 \\ 0, & \text{otherwise} \end{cases}.$$

- The zealot's strategy depends only on the current zealot state:

$$s_t^Z(m_t, \xi_t) = \xi_t.$$

Under these strategies, if the leader recommends the principled policy, the sophisticate's updating rule will be

$$\lambda_t = \frac{\lambda_{t-1}(1-\alpha)}{\lambda_{t-1}(1-\alpha) + (1-\lambda_{t-1})(1-\beta)};$$

if the leader does not recommend the principled policy, the sophisticate's updating rule will be

$$\lambda_t = \frac{\lambda_{t-1}\alpha}{\lambda_{t-1}\alpha + (1-\lambda_{t-1})\beta}.$$

Let us first check for the optimality of the sophisticate's strategy. This will pin down the equilibrium value of λ^* .

Taking as given the strategies of other players, we know that if the leader has ever been disobeyed, he will never be obeyed (given the naif's strategy). So the sophisticate's continuation value at any history where there has been disobedience is 0. Let $v(\lambda)$ be the continuation value of the sophisticate at any history where there has been no disobedience and the sophisticate believes that the leader is good with probability λ . The value function satisfies the following Bellman equation:

$$v(\lambda) = \max \left[0, \left\{ \begin{array}{l} (1-\delta) \left[\lambda((1-\alpha) - c\alpha) + (1-\lambda)((1-\beta) - c\beta) \right] \\ + \delta \left[(\lambda(1-\alpha) + (1-\lambda)(1-\beta)) v \left(\frac{\lambda(1-\alpha)}{\lambda(1-\alpha) + (1-\lambda)(1-\beta)} \right) \right] \\ + (\lambda\alpha + (1-\lambda)\beta) v \left(\frac{\lambda\alpha}{\lambda\alpha + (1-\lambda)\beta} \right) \end{array} \right\} \right].$$

Under our assumption on payoffs,

$$\beta(1+c) > 1 > \alpha(1+c),$$

v is continuous, weakly increasing and - for some $\lambda^* \in (0,1)$, equal to 0 for $\lambda \leq \lambda^*$ and strictly increasing for $\lambda > \lambda^*$. Now to establish that the good leader's strategy is a best response, first observe that once the leader has been disobeyed, he is ignored, so everything is a best response. If he has not been disobeyed, let $V(\lambda)$ be his value function under the equilibrium strategies. Now V must solve

$$V(\lambda) = \left\{ \begin{array}{l} 0, \text{ if } \lambda < \lambda^* \\ \left\{ \begin{array}{l} (1-\delta)[(1-\alpha) - c\alpha] \\ +\delta \left[(1-\alpha)V\left(\frac{\lambda(1-\alpha)}{\lambda(1-\alpha)+(1-\lambda)(1-\beta)}\right) + \alpha V\left(\frac{\lambda\alpha}{\lambda\alpha+(1-\lambda)\beta}\right) \right] \end{array} \right\}, \text{ if } \lambda \geq \lambda^* \end{array} \right\}$$

This will be equal to 0 for $\lambda < \lambda^*$; discontinuous at λ^* ; and strictly positive, continuous and strictly increasing on $[\lambda^*, 1]$. If the principled policy is equal to the zealot policy, then his current payoff and his reputational payoff are each maximized by announcing the truth. If the principled policy is not equal to the zealot policy, then his payoff to announcing the principled policy is 0, while his payoff to announcing the zealot's preferred policy is

$$\delta V\left(\frac{\lambda\alpha}{\lambda\alpha+(1-\lambda)\beta}\right)$$

which is weakly greater. Given the strategies of the followers, the bad leader has a conditionally dominant strategy to recommend the bad leader policy. The zealot has a dominant strategy to choose the zealot policy. Finally, observe that the naif knows that the reputation of the sophisticate at the beginning of the game is λ_0 . His beliefs about the leader's current beliefs about the leader will be a complicated object. But the fact that the leader has always been obeyed can only shift his beliefs up. His incentive to tell the truth will be at least as great as the sophisticate.

3. A Case Study

Miller (1997) compares the authority of the Argentinian and U.S. supreme courts between the mid 19th century and the end of the 20th century. Much of the Argentinian constitution of 1860 was modelled on the much respected U.S. constitution, including provisions guaranteeing freedom of speech and the press, and

the inviolability of private contracts. Under the new constitution, the Argentinian supreme court developed authority to adjudicate the constitutionality of laws that paralleled the U.S. case. Yet from similar starting points in the late 19th century, the U.S. and Argentine courts took very different paths, with the Argentine court never recovering its authority from a mass impeachment in 1947 and the U.S. court's authority becoming ever more entrenched. What explains the different trajectories?

Miller documents that the two Supreme Courts faced very similar challenges in the 1920s and 1930s. In particular, both courts ruled popular economic legislation (e.g., minimum wage laws) to be unconstitutional on the grounds that they violated the constitutional right to freely enter in private contracts and struggled to maintain their autonomy (and principles) in the face of popular discontent at their anti-majoritarian tendencies. On the other hand, the Argentine court faced challenges that the U.S. courts never had to face: when military governments took power in coups, the court faced a particularly stark choice between being obeyed and being principled, and they chose to maintain their authority at the cost of *de facto* recognition of the military government. Yet the authority of the court survived the military juntas and was removed, by a mass impeachment, during the populist democratic government of Juan Peron. While the court's *de facto* recognition of military governments featured in the articles of impeachment, so did the court's constitutional interpretation, which was seen as a constraint on the labor agenda of the new government and played a central role in the debate. Just as Roosevelt considered impeachment as an alternative to court-packing to get around the anti-New Deal stance of the U.S. court, Peron considered court-packing rather than impeachment to get around the Argentine court's anti-labor stance.

Thus the Argentine and U.S. cases are not so different. The U.S. and Argentine courts struggled in similar ways to maintain their authority despite clear evidence that their authority was threatened either by abandoning legal principle or by continuing to support unpopular legal principles in the face of public and political opposition. The U.S. court recovered from the dip in its authority during the court packing episode, while the Argentine court did not. In the language of our model, the Argentine court faced more shocks that heightened the tradeoff between principle and pragmatism.

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