The Origins of the Modern State

Max Weber: The state "is a human community that (successfully) claims the monopoly of the legitimate use of physical force within a given territory."

A state is an entity that uses coercion and the threat of force to rule in a given territory.

A nation is a group of people who share some sort of common identity like a language, a religion, an ethnicity, or a shared history.

A nation-state is a state in which a single nation predominates and the legal, social, demographic, and geographic boundaries of the state are connected in important ways to that nation.

A failed state is a state-like entity that cannot coerce and is unable to successfully control the inhabitants in a given territory.

In reality, there is a continuum of "stateness" or state effectiveness.

Samuel Huntington: "the most important political distinction among countries concerns not their form of government but their degree of government."

■	Alert
■	Warning
■	Stable
■	Sustainable
■	Not assessed

State Fragility in 2015
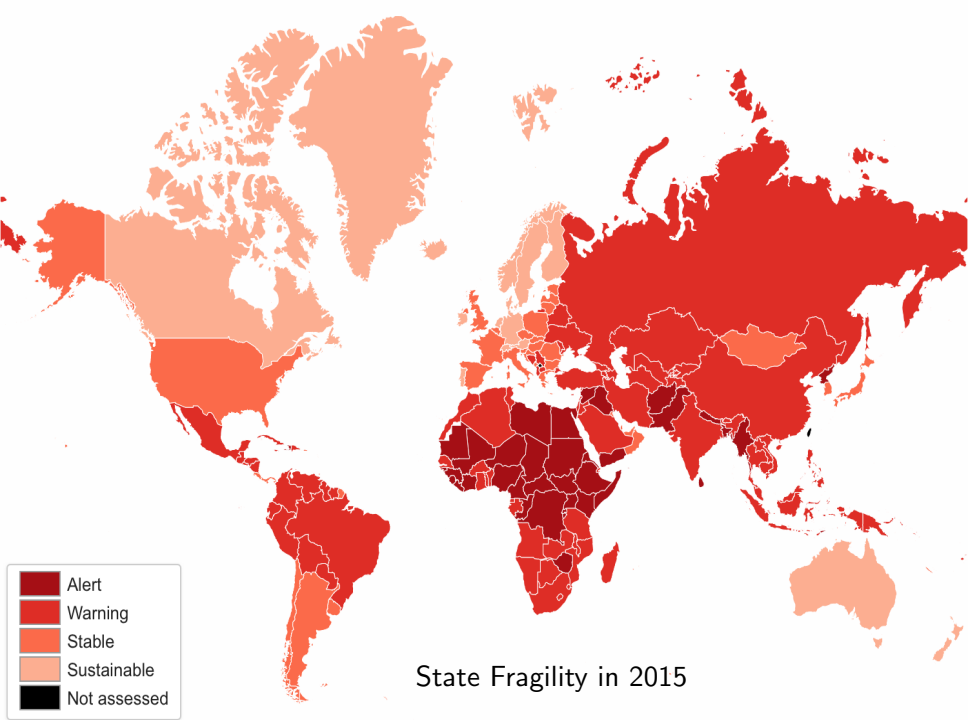
Contractarian View of the State

Early modern political thinkers engaged in thought experiments to think about the role of the state.

What would life be like without a state?

The state of nature is the term used to describe situations in which there is no state.

Hobbes: The state of nature is a "war of everyone against every man" in which life is "solitary, poor, nasty, brutish, and short."

Individuals in the state of nature face a dilemma.

- Everyone would be better off if they could all agree not to take advantage of each other.

- But if an act of violence or theft were to happen, it would be better to be the attacker than the victim.

Without a "common power to keep them all in awe," the people will choose to steal and kill.

Social contract theorists argue that there is something structural about the state of nature that makes it difficult for citizens to behave themselves.

Game theory can shed light on the structural aspects of the state of nature that might lead to problems.

- A stylized interaction between two individuals who can steal or refrain from stealing.

FIGURE 4.1 State of Nature Game without Payoffs

A payoff table represents the strategies and payoffs available to players in a strategic or normal form game.

A preference ordering indicates how a player ranks the possible outcomes of a game.

Individual A
- (Steal; Refrain) > (Refrain; Refrain) > (Steal; Steal) > (Refrain; Steal)

Individual B
- (Refrain; Steal) > (Refrain; Refrain) > (Steal; Steal) > (Steal; Refrain)

Numbers – ordinal payoffs – can be assigned to represent the preference orderings.

- Given four possible outcomes, one could use 4, 3, 2, and 1.

Ordinal payoffs allow us to know how a player ranks the possible outcomes.

Individual A

- (Steal; Refrain) > (Refrain; Refrain) > (Steal; Steal) > (Refrain; Steal)
    4   3   2   1

Individual B

- (Refrain; Steal) > (Refrain; Refrain) > (Steal; Steal) > (Steal; Refrain)
    4   3   2   1

FIGURE 4.2 **State of Nature Game with Payoffs**

	B	
	Refrain	Steal
A Refrain	3, 3	1, 4
A Steal	4, 1	2, 2

Note: Player A's (the row player's) payoffs are shown first in each cell; player B's (the column player's) payoffs are shown second. A comma separates the payoffs for the players in each cell.

What would a rational decision maker do?

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A strategy specifies the choices that are made by a player at every point in a game where that player has a choice to make.

A Nash equilibrium is a combination of strategies, one for each player, such that each player in the game does not want to unilaterally change her strategy given the strategy adopted by the other player.

We can find Nash equilibria by looking for each player's best replies.

A player's best replies indicate the choices that are 'best' for *each* of the possible choices that the other player might make.

If both players are doing the best they can given the strategy adopted by the other player, then neither player wants to unilaterally change their strategy – we have a Nash equilibrium.

Put yourself in the shoes of individual A.

1. What is your best reply if individual B chooses to refrain?

2. What is your best reply if individual B chooses to steal?

FIGURE 4.3 **Solving the State of Nature Game I**

		B	
		Refrain	Steal
A	Refrain	3, 3	1, 4
	Steal	**4**, 1	2, 2

Steal is the best reply if individual B refrains.

FIGURE 4.4   Solving the State of Nature Game II

		B	
		Refrain	Steal
A	Refrain	3, 3	1, 4
	Steal	<u>4</u>, 1	<u>2</u>, 2

Steal is the best reply if individual *B* steals.

Now put yourself in the shoes of individual B.

1. What is your best reply if individual A chooses to refrain?

2. What is your best reply if individual A chooses to steal?

FIGURE 4.5

Solving the State of Nature Game III

	B	
	Refrain	**Steal**
A Refrain	3, 3	1, ④
A Steal	**4**, 1	**2**, 2

Steal is the best reply if individual A refrains.

FIGURE 4.6   Solving the State of Nature Game IV

		B	
		Refrain	Steal
A	Refrain	3, 3	1, ④
	Steal	**4**, 1	**2**, ②

Steal is the best reply if individual A steals.

FIGURE 4.6 — Solving the State of Nature Game IV

	B	
	Refrain	Steal
A Refrain	3, 3	1, ④
A Steal	**4**, 1	**2**, ②

The Nash equilibrium is where both players are playing best replies.

FIGURE 4.6 Solving the State of Nature Game IV

		B	
		Refrain	Steal
A	Refrain	3, 3	1, ④
	Steal	**4**, 1	**2**, ②

Nash equilibrium: (Steal; Steal)

Observed outcome: Both individuals steal.

Payoffs: Individual A obtains 2 and individual B obtains 2.

A player has a dominant strategy if that strategy is a best reply to all of the other player's strategies.

A dominant-strategy Nash equilibrium occurs when both players have a dominant strategy.

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A dominant-strategy Nash equilibrium occurs when both players have a dominant strategy.

Is the Nash equilibrium (Steal; Steal) a *dominant-strategy* Nash equilibrium?

FIGURE 4.6   Solving the State of Nature Game IV

		B	
		Refrain	Steal
A	Refrain	3, 3	1,④
	Steal	**4**, 1	**2**,②

Both players have a dominant strategy to steal.

(Steal; Steal) is a dominant-strategy Nash equilibrium.

Individuals will live in a persistent state of fear when there is nobody to keep them in a state of "awe."

The state of nature may seem abstract but ...

- Iraq under U.S. occupation, Darfur region in Sudan, New Orleans after Hurricane Katrina.

Nobel Laureate Robert Fogle argues that Hobbes' state of nature describes most of human history.

FIGURE 4.6   Solving the State of Nature Game IV

		B	
		Refrain	Steal
A	Refrain	3, 3	1, ④
	Steal	**4**, 1	**2**,②

What's weird about this equilibrium?

FIGURE 4.6 **Solving the State of Nature Game IV**

		B	
		Refrain	Steal
A	Refrain	3, 3	1, ④
	Steal	4, 1	2, ②

Both players could do better if they refrained.

Individual rationality leads to an outcome that is inferior in the sense that *both* players agree that some alternative outcome is better.

It's not enough for the actors to recognize their mutually destructive behavior.

How comforted would you feel if the other individual promised, perhaps in a contract, not to steal from you?

Civil Society and the Social Contract

Hobbes' solution to the state of nature was to create a sovereign with sufficient force that people would stand in awe.

Individuals should transfer power to the sovereign in exchange for protection.

Individuals would give up their natural rights in return for civil rights.

- Natural rights are universal and exist in the state of nature.

- Civil rights do not exist in the state of nature but are instead created by states through laws.

This exchange would be achieved with the help of a social contract.

A social contract is an implicit agreement among individuals in the state of nature to create and empower the state. In doing so, it outlines the rights and responsibilities of the state and the citizen in regard to each other.

Social contract theorists have differed over the extent to which individuals should delegate authority to the state.

Social contract theorists view the state as a third-party enforcer that can dole out punishments to individuals who engage in socially destructive behavior that violates the social contract.

These punishments would be structured in such a way that 'steal' is no longer a dominant strategy for individuals in society.

But how does this work?

FIGURE 4.7

Civil Society Game

		B	
		Refrain	Steal
A	Refrain	3, 3	1, 4 − p
	Steal	4 − p, 1	2 − p, 2 − p

Note: p = the value of the punishment doled out by the state to anyone who steals.

Cardinal payoffs allow us to know how much more the players prefer one outcome to another.

FIGURE 4.7 Civil Society Game

		B	
		Refrain	Steal
A	Refrain	3, 3	1, 4 − p
	Steal	4 − p, 1	2 − p, 2 − p

Note: p = the value of the punishment doled out by the state to anyone who steals.

How big does the punishment need to be for the individual to prefer refraining?

FIGURE 4.8 Civil Society Game When $p > 1$

		B	
		Refrain	Steal
A	Refrain	**3**,③	**1**, 4 − p
	Steal	4 − p,①	2 − p, 2 − p

Nash equilibrium: (Refrain; Refrain)

Observed outcome: Both individuals refrain.

Payoffs: Individual A obtains 3 and individual B obtains 3.

Problem solved, right?

Problem solved, right?

But why would anyone want to do us all a favor by acting as our policeman?

One common story is that members of civil society are engaged in an exchange relationship with the state.

The sovereign agrees to act as a policeman in exchange for 'taxes' that the citizens pay.

Given that the state will demand tax revenue to carry out its job, it is not immediately obvious that the citizen will choose to leave the state of nature for civil society.

When is civil society preferred to the state of nature?

FIGURE 4.9 **Choosing between the State of Nature and Civil Society**

	State of Nature				Civil Society	
		B				B
		Refrain	Steal			Refrain	Steal
A	Refrain	3, 3	1, ④	A	Refrain	**3 – t**, ③ **– t**	**1 – t**, 4 – p – t
	Steal	**4**, 1	**2**, ②		Steal	4 – p – t, ① **– t**	2 – p – t, 2 – p – t

Civil society is preferred to the state of nature only if

1. The punishment imposed by the state is sufficiently large that individuals prefer to refrain rather than steal.
   and
2. The tax charged by the state for acting as the policeman is not so large that individuals prefer the state of nature to civil society.

In our particular game, these conditions require $p > 1$ and $t < 1$.

The comparison between the responsibilities that the state imposes on its citizens and the benefits that the citizen obtains from living in civil society is central to the very nature of politics.

Hobbes lived through civil and religious war and was therefore willing to allow the state to impose almost any level of taxation in return for protection.

Locke saw the state of nature as workable, if inefficient, and so wanted more restrictions on the state.

Contemporary debates about civil liberties and the power of the state focus on the same tradeoff.

The creation of the state *may* solve the problem individuals have with each other, but it creates a problem between individuals and the state.

If we surrender control over violence to the state, what is to prevent the state from using this power against us?

Predatory View of the State

The contractarian view of the state focuses on the conflicts of interest *between individuals*.

The predatory view of the state focuses on the potential conflicts of interest *between individuals and the state*.

When will states enforce rules and foster cooperation rather than use their comparative advantage in violence to prey upon the citizenry?

States are like individuals in the state of nature.

States face their own security dilemma in that they have potential rivals constantly vying to take their place.

The concern for security leads states to use their power to extract resources from others.

Charles Tilly: States should be viewed as extortion or protection rackets.

As before, the state trades security for revenue.

The difference is that the seller of security represents a key threat to the buyer's continued security.

Monty Python, click ▸ here

If we didn't trust individuals in the state of nature, why should we trust representatives of the state who have even more power?

What explains the emergence of the modern state?

If we didn't trust individuals in the state of nature, why should we trust representatives of the state who have even more power?

What explains the emergence of the modern state?

Charles Tilly: "War makes the state . . . States make war."

The need to compete with external and internal rivals creates a need for rulers to raise revenues to fight wars.

The elimination of internal rivals and the development of the capacity to extract resources is the process of state making.

The modern state did not rise intentionally, but as a by-product of leaders' attempts to survive.

The need to extract resources from their subjects placed constraints on the predation of some early modern leaders.

- Leaders could simply seize the assets of their subjects.

  or

- Leaders could try to extract the resources they needed through 'quasi-voluntary compliance.'

Quasi-voluntary compliance refers to a situation in which the subject feels she is getting something in return for the tax dollars the state is extracting.

By regulating their predatory instincts, rulers could opt to increase their net extractive capacity by reducing the costs of conducting business and by taking a smaller portion of a larger pie.

But why did some leaders choose to limit their predation more than others?

An Aside

Can cooperation occur in the state of nature?

Cooperation was not possible when the State of Nature Game was played only once.

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Can cooperation occur in the state of nature?

Cooperation was not possible when the State of Nature Game was played only once.

But it turns out that it is possible if the State of Nature Game is infinitely repeated.

A discount factor tells us the rate at which future benefits are discounted compared with today's benefits; in effect, it tells us how much people value the future.

Example: Choice of $1,000 today or $1,000 in a month's time.

- If it didn't matter to you whether you received the money today or in a month's time, your discount factor, d, would be 1.

- If receiving the money in a month's time was worthless to you, then your discount factor would be 0.

The discount factor is bounded, $0 \leq d \leq 1$.

Another way to think about the discount factor is that it captures the probability that you will be around in the next period to receive your 'future' payoff.

The higher your discount factor, the more you care about the future.

The present value of a stream of benefits tells us how much this stream of future benefits is worth to us today.

Example: Promise of \$1 every day from now into the future.

Present Value (Promise) $= 1 + 1d + 1d^2 + 1d^3 + \ldots + 1d^\infty$

$$= 1 + d + d^2 + d^3 + \ldots + d^\infty$$

$$= \frac{1}{1-d}$$

The present value of a promise of \$5 $= \frac{5}{1-d}$ etc.

How will the individuals in the state of nature play a repeated State of Nature Game?

One strategy they might employ is known as a grim trigger strategy.

1. If you refrain, I will refrain.

2. If you steal, I will **always** steal.

FIGURE 4.2 **State of Nature Game with Payoffs**

	B	
	Refrain	Steal
A Refrain	3, 3	1, 4
A Steal	4, 1	2, 2

$$\text{Present Value (Refrain)} = 3 + 3d + 3d^2 + 3d^3 + \ldots + 3d^\infty = \frac{3}{1-d}.$$

FIGURE 4.2   State of Nature Game with Payoffs

		B	
		Refrain	Steal
A	Refrain	3, 3	1, 4
	Steal	4, 1	2, 2

$$
\begin{aligned}
\text{Present Value (Steal)} &= 4 + 2d + 2d^2 + 2d^3 + \ldots + 2d^{\infty} \\
&= 4 + 2d(1 + d + d^2 + d^3 + \ldots) \\
&= 4 + 2d\left(\frac{1}{1-d}\right) \\
&= 4 + \frac{2d}{1-d}.
\end{aligned}
$$

1. The present value of refrain is $\frac{3}{1-d}$.

2. The present value of steal is $4 + \frac{2d}{1-d}$.

Whether individuals prefer to refrain rather than steal depends on the discount factor.

Present Value (Refrain) > Present Value (Steal)

$$\frac{3}{1-d} > 4 + \frac{2d}{1-d}$$

$$\frac{3}{1-d} > \frac{4 - 4d + 2d}{1-d}$$

$$\frac{3}{1-d} > \frac{4 - 2d}{1-d}$$

$$3 > 4 - 2d$$

$$2d > 1$$

$$d > \frac{1}{2}.$$

If $d > \frac{1}{2}$, individuals will prefer to refrain rather than steal.

Cooperation is possible in the state of nature without needing to create a state.

Individuals must care enough about the future and their interactions must be infinitely repeated.

Thus, the state is not strictly necessary for cooperation.

Should we all become anarchists?

Should we all become anarchists?

Probably not.

Cooperation is only one of the possible outcomes of the repeated State of Nature Game.

- (Steal; Steal) continues to be a Nash equilibrium as well.

Moreover, it is costly for individuals to cooperate in the state of nature.

- Individuals have to monitor each other's behavior and be willing to punish non-compliance.

Thus, relying on cooperation to come about through a decentralized process without the state may not be the best thing to do.

Some Additional Game Theory Examples

Golden Balls: A Modified Prisoner's Dilemma Game

Golden Balls

	B	
	Split	Steal
A Split	50, 50	0, 100
A Steal	100, 0	0, 0

- Golden Balls I, click ▸ here

- Golden Balls II, click ▸ here

FIGURE 4.12 A Game of Chicken: The Tractor Face-Off

		Chuck	
		Swerve	Drive Straight
Ren	Swerve	3, 3	2, 4
	Drive Straight	4, 2	1, 1

- Tractor Faceoff, click ▸ here

- Deficit Reduction 2011 (2:57-16:56), click ▸ here

The Evolution of Trust, click ▸ here