

ECONOMICS Lecture 3

Scarcity and Competition

Dedicated to Armen A. Alchian

Biwei Chen

Learning Objectives

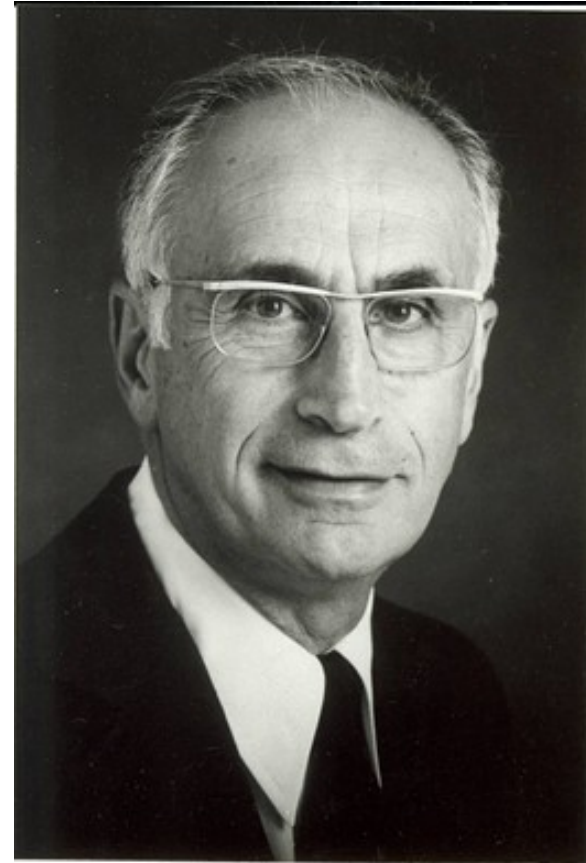
- Understand scarcity and competition
- Characterize various forms of competition
- Choose a criterion or standard of “desirability”
- Evaluate the “fairness” of various competition
- Examine the laws or institutions that affect the prevalence and effectiveness of a competition



<https://www.healthvermont.gov/file/plnhealthequitytreespng>

Armen Albert Alchian (1914–2013)

Alchian is an American economist and an emeritus professor of economics at the University of California, Los Angeles. He is the founder of the "UCLA tradition" in economics, a member of the Chicago School of Economics, and one of the more prominent price theorists of the second half of the 20th century. He is the author of path-breaking articles on information and uncertainty, and the theory of the firm. Through his writings on property rights and transaction costs, he is a founder of the new institutional economics.

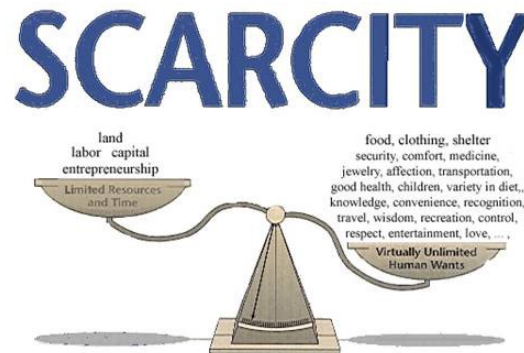


<https://www.econlib.org/library/Enc/bios/Alchian.html>

Economics Arises From Scarcity

Economics is the study of choice under **scarcity**.

- Given the limitations of nature and the unlimited desires of man, scarcity is inevitable and pervasive.
- Humans desire for more goods leads to conflict of interests (competition).
- Scarcity and competition are inseparably paired.



Scarcity and Competition

- Scarcity is implied when *more is preferred to less*.
- Competition always exists where there is scarcity.
- Scarcity dimension: quantity, quality, variety, ...
- With scarcity there is only a choice among limited options, and humans compete with each other for those options.
- Hence, in a society of more than one person, scarcity implies competition (or conflict of interest).

"If you aren't competing, you're dead."

— Arnold Palmer

The Scope of Scarcity

- Based on the definition of scarcity, it is extremely difficult to find any resource that is not scarce. Is scarcity and competition the nature of the world?
- When God created the earth and filled it with sunshine, air, and water, human beings is just part of the creation.
- It seems that sunshine, air, and water are everywhere available without any scarcity. Are they free from competition?
- They were not any more, especially fresh air and water, as people have been increasingly concerned about their living environment.
- People wants goods (fresh air and water) but not bads (polluted air and water). Therefore, goods are always scarce and people must compete for them in one way or another.

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<https://www.cnn.com/2016/02/08/world/fresh-air-britain-china-bottles/index.html>

Known for its natural environment including the blue ocean, white beaches, and clean air.



The natural environment attracts tourists all over the world and every year. Its tourism industry is today the largest revenue generator.

Scarcity in the History and Culture



The blue-and-white porcelain. White: milk, symbol of purity in Mongolian culture. Blue: safety and protection (desire for heavenly water), Persian and Arabs.

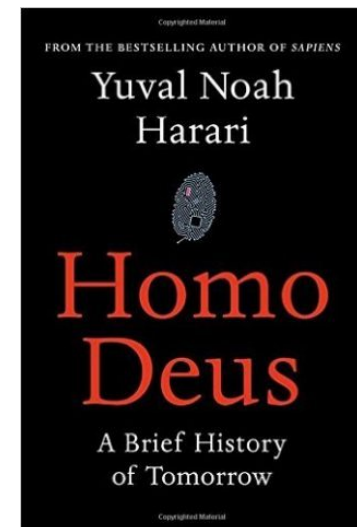
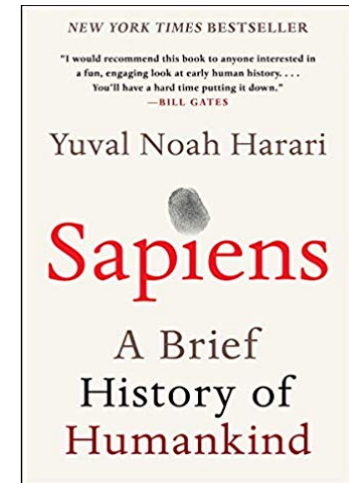
Surplus (Yu) in Chinese New Year



Sapiens: A Brief History of Humankind

- *Seventy thousand years ago, there were at least six different human species on earth. They were insignificant animals, whose ecological impact was less than that of fireflies or jellyfish. Today, there is only one human species left: Us. Homo sapiens. But we rule this planet.*
- *Homo sapiens rules the world because it is the only animal that can believe in things that exist purely in its own imagination, such as gods, states, money and human rights.*

“History began when humans invented gods, and will end when humans become gods.”



Sapiens: A Brief History of Humankind

- *Sapiens are ecological serial killers — even with stone-age tools, our ancestors wiped out half the planet's large terrestrial mammals well before the advent of agriculture.*
- *Money is the most universal and pluralistic system of mutual trust ever devised. Money is the only thing everyone trusts.*
- *Empire is the most successful political system humans have invented, and our present era of anti-imperial sentiment is probably a short-lived aberration. Capitalism is a religion rather than just an economic theory — and it is the most successful religion to date.*
- *Individualism was fostered by states and markets as a way of breaking up families and communities. We are far more powerful than our ancestors, but we aren't much happier.*

Competition in Human History

Scarcity implies competition; competition shapes history.

How do humans compete and rule the world?

- Jungle Law — Natural selection (zero-sum or lose-lose)
- Violence — Brutal competition (zero-sum or lose-lose)
- Kinships — Peaceful competition (win-win)
- Exchange — Gentle competition (win-win)
- Other types of competition: examinations, innovation, research and development, sports, games, beauty contest.

Which type of competition dominates human history?

Which type is “fair?” Which type is more efficient?

Law of the Jungle and Survival



Violence - Brutal Competition

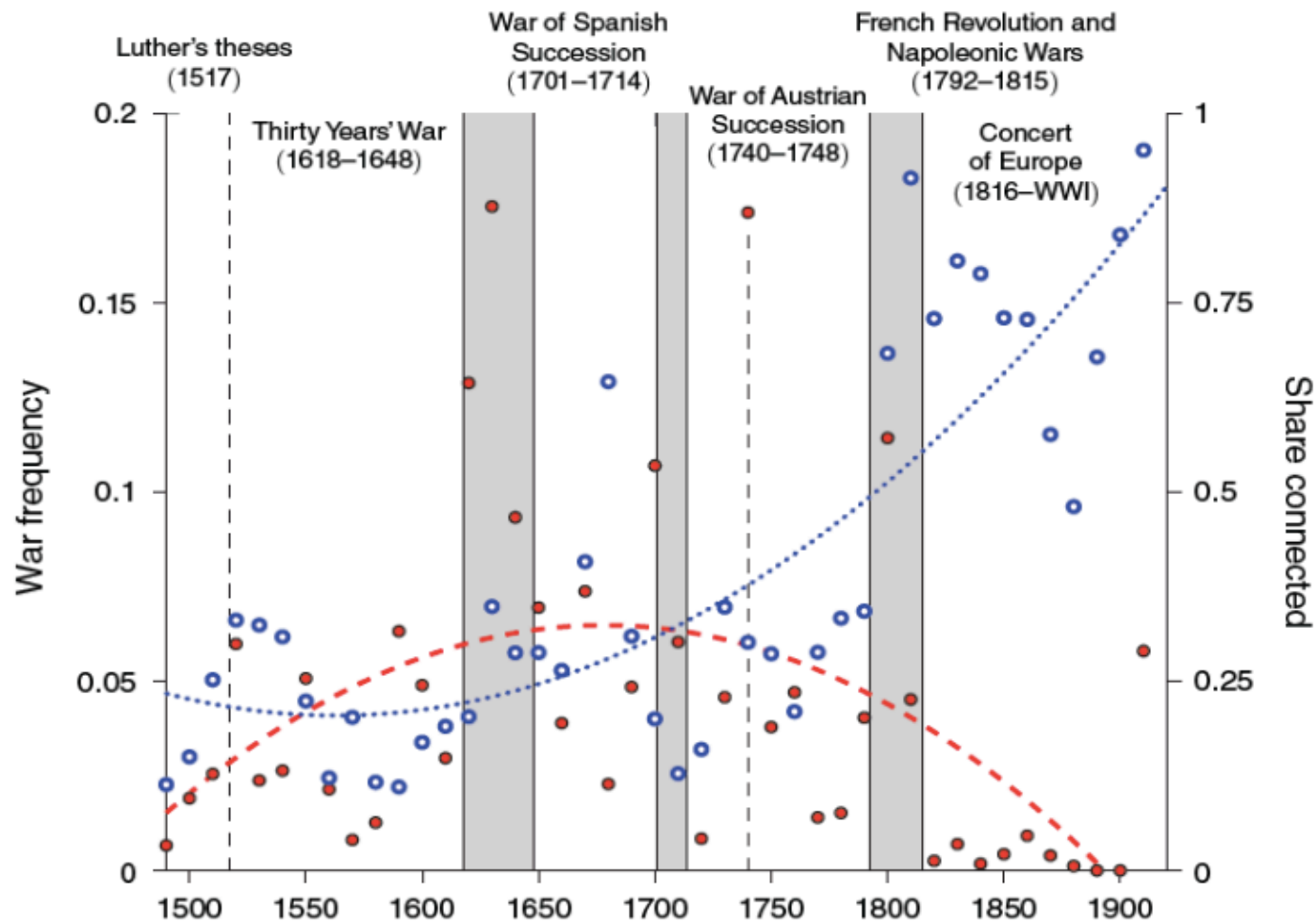
- Violence is an important mode of competition—that is, of resolving inter-personal conflicts of interests.
- Caesar conquered Egypt, Alexander conquered the Near East, the white man acquired America from the native inhabitants by force. ...WWI, WWII, ...Star wars, ...
- Street demonstrations, riots and revolutions are sometimes regarded—even by college students—as appropriate forms of competition for access to political and economic rights.
- 2019 Protests: HK, Lebanon, Iraq, Chile, Ecuador, Bolivia, Egypt, France, Arab Spring, Ethiopia.
- 2020 #BLM protests spread from the U.S. to all around the world in the midst of the coronavirus pandemics.

Kinships - Peaceful Competition

Benzell, Seth G., and Kevin Cooke. 2021. "A Network of Thrones: Kinship and Conflict in Europe, 1495–1918." *American Economic Journal: Applied Economics*, 13 (3): 102-33.

- The authors construct a database linking European royal kinship networks, monarchies, and wars to study the effect of family ties on conflict. To establish causality, we exploit decreases in connection caused by apolitical deaths of rulers' mutual relatives.
- These deaths are associated with substantial increases in the frequency and duration of war, affecting conflict only through changing the kinship network.
- Over our period of interest, the percentage of European monarchs with kinship ties increased threefold. Together, these findings help explain the well-documented decrease in European war frequency.

Kinships - Peaceful Competition



Source: Benzell and Cook (2021). Hollow blue circles are the share of monarchy-pairs (dyads) ruled by monarchs with kinship ties by decade. Solid red circles are the share of years these country pairs were at war. The divergence of the best fit lines suggest that as connectedness increased, war declined.

<https://www.aeaweb.org/research/familial-ties-network-thrones>

Offers of Exchange - Gentle Competition

- As an alternative to violence, mutual exchange is available as a solution—even though it, too, sometimes classed as improper.
- Voluntary exchange evolves spontaneously in the society as rational individuals benefit from the process.
- Offers of exchange happen in the markets for goods and services.
- A free-enterprise economic system—a system in which the bulk of property is privately owned—is a commonly used basis of competition for valuable resources. Indeed, private property rights is a prelude to market transactions.
- Microeconomics investigates this kind of competition in great detail, but it will also exam the others, too, with possibly surprising implications.

Offers of Exchange - Gentle Competition

Man has almost constant occasion for the help of his brethren, and it is in vain for him to expect it from their benevolence only. He will be more likely to prevail if he can interest their self-love in his favor, and show them that it is for their own advantage to do for him what he requires of them. Whoever offers to another a bargain of any kind, proposes to do this:

Give me that which I want, and you shall have this which you want, is the meaning of every such offer; and it is in this manner that we obtain from one other the far greater part of those goods offices which we stand in need of. It is not from the benevolence of butcher, the brewer, or the baker, that we expect our dinner, but from their regard to their own interest. We address ourselves not to humanity but to their self-love.

—Adam Smith

Competition and Property Rights

- The definition, allocation, and protection of property rights comprise one of the most complex and difficult sets of issues that any society has to resolve, but one that must be resolved in some fashion. A property right is the exclusive authority to determine how a resource is used, whether that resource is owned by government or by individuals.
- The extent and degree of private property rights fundamentally affect the ways people compete for control of resources.
- The fundamental purpose of property rights, and their fundamental accomplishment, is that they eliminate destructive competition for control of economic resources.
- Well-defined and well-protected property rights replace competition by violence with competition by peaceful means.

Social Experiment: Super Bowl Tickets

Suppose you had to distribute 100 tickets to the Super Bowl football game *but not allowed to sell them to the highest bidders*. What forms of competition would you use in assigning priorities for deciding to whom to award the tickets? That is, what system of rationing or allocation would you use?

☐ ...

☐ ...

☐ ...

☐ ...



Competition: Fair or Not?

- Is your way of distributing the tickets fair? That depends on the circumstances and on what you mean by "fair"—it depends on the form of competition you prefer.
- If you think "fair" means giving everyone equal chance, would you want to give everyone an equal chance to sing for you at a concert, or to teach you, or to be your wife, or to operate on you for appendicitis - or to whom you give Super Bowl tickets?
- Among all the distributive methods, which is absolutely fair? Is it the most popular or efficient way?

Competition & Discrimination

- In Super Bowl ticket distribution, is your desirable criterion discriminatory? Against whom you are discriminating?
- Certainly your pleasant system is discriminatory. As a matter of fact, all competition is discriminatory!
- That, indeed, is its purpose: to discriminate among the various claimants in deciding who gets what. In any case, economic theory does not say that any particular form of competition is silly.

Competition and Fairness

- How do we guarantee an equal chance to everybody without discrimination? Sounds like Greek democracy, doesn't it?
- Putting everyone's name on cards, draw 100 at random!
- But, again, do you want to pick your mate that way?
- Do you want men selected for the armed forces that way?
- Obviously, "fair" or "preferred" does not mean "equal chance"
- Then, what kind of "fairness" are people advocating?
- Nothing in economic theory suggests that any particular form of competition is "absurd."
- That evaluation rests on cultural and personal preferences.

Different Meaning of “Fairness”

Equality



The assumption is that **everyone benefits from the same supports**. This is equal treatment.

Equity



Everyone gets the supports they need (this is the concept of “affirmative action”), thus producing equity.

Justice



All 3 can see the game without supports or accommodations because **the cause(s) of the inequity was addressed**. The systemic barrier has been removed.

Fairness: Most People Don't Get It



- Equality of opportunity
- Inequality of outcome



- Equality of outcome
- Inequality of opportunity

Competition: Is it Efficient?

- Is your desirable criterion of distributing the tickets efficient?
- That depends on the comparison groups and on what you mean by "efficient." Unlike "fairness," efficiency does not involve value or moral judgement. Two contexts are provided.
- For an engineer, one machine is more efficient than another because it produces more work output per unit of energy input. But the basic law of thermodynamics states that the ratio of physical output (ends) to input (means) necessarily equals one.
- To economists, efficiency is a relationship between ends and means. Instinctively, we think of economic efficiency as implying the absence, or minimization, of waste or loss.
- As a reminder, opportunity cost helps in this evaluation.

Competitive Criteria & Survival Traits

In accordance with the classic theory of selective survival of the fittest, let's consider what type of person would prevail under various competitive criteria:

- If beauty were rewarded, ...?
- If food were parceled out to the tallest people, with short people getting the least, ...?
- One might propose to allocate goods on the basis of forensics and personality, somewhat as we compete for political office, ...?
- If resources could go mainly to those who are best able to create goods and services, ...?

Competitive Criteria & Survival Traits

- If beauty were rewarded, the beauty of women would increase- because women would make deliberate, conscious efforts to improve their beauty, and because the more beautiful would be more likely to survive.
- If food were parceled out to the tallest people, with short people getting the least, you can understand why the average height of the population would increase over time.
- One might propose to allocate goods on the basis of forensics and personality, somewhat as we compete for political office. Under that system, the society would become noted for its articulate and personable people.
- If resources could go mainly to those who are best able to create goods and services, in that kind of society the more productive would be the wealthier and the dominant group.

Competitive Criteria and Rules

- Competitive criterion decides “winners” and “losers” in the game. Winners excel in their wealth, power, skills, intelligence, beauty, creativity, hierarchy, and seniority.
- Broader perspective: criteria determine how our society allocates scarce resources and distributes incomes among its members.
- On top of the criteria, there are pertinent rules associated with each game to support its smooth functioning (effectiveness).
- Let’s consider the rules applied in different sports or academic rules students must abide by. What are the relevant rules or policies? What are the roles of these rules in the sport or academic competition?
- Furthermore, why is it important to ensure fairness in all competitions? What is a meaningful interpretation of “fairness” once a certain type of competition is chosen?



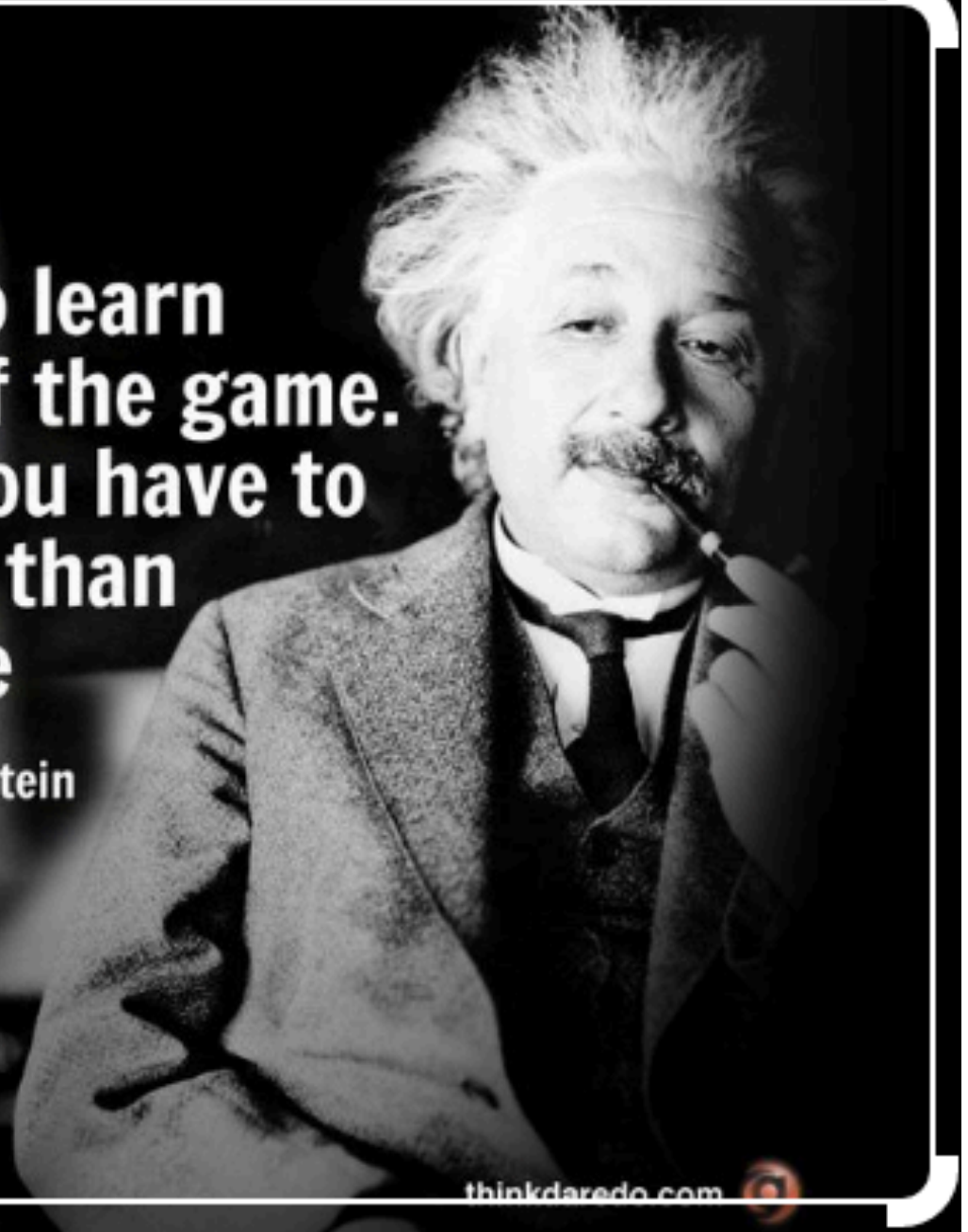
Competitive Criteria and Rules

- The rules of the game help to determine the ways and effectiveness people cooperate and compete with one another.
- The rules govern competitive behavior and guarantee fairness.
- Now try to answer three challenging questions.
 1. In the market place, what is its competitive criterion?
 2. What are the “rules of the game” in market exchange? Which is more essential, the criterion or the rules? Why?
 3. Among all the competitive criteria, which is most efficient?
(Absence or minimization of waste/loss in resource allocation)



**You have to learn
the rules of the game.
And then you have to
play better than
anyone else**

- Albert Einstein



Reference

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[4] Efficiency by Paul Heyne

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[5] Yuval Noah Harari (2011) Sapiens: A Brief History of Humankind.

[6] Antony Davies (2017) Five Inequality Myths. 

<https://www.learnliberty.org/videos/5-inequality-myths/>

[7] Ancient Greek Democracy

<https://www.history.com/topics/ancient-greece/ancient-greece-democracy>

Case Study: Ancient Greek Democracy

- In 507 B.C., the Athenian leader Cleisthenes introduced a system of political reforms that he called demokratia, or “rule by the people” (demos—“the people” and kratos—“power”). It was the first known democracy in the world.
- Although this Athenian democracy would survive for only two centuries, its invention by Cleisthenes, “The Father of Democracy,” was one of ancient Greece’s most enduring contributions to the modern world.
- The Greek system of direct democracy would pave the way for representative democracies across the globe.
- “In a democracy,” the Greek historian Herodotus wrote, “there is, first, that most splendid of virtues, **equality before the law.**”

Ancient Greek Democracy: Facts

- Cleisthenes' demokratia abolished the political distinctions between the Athenian aristocrats who had long monopolized the political decision-making process and the middle- and working-class people who made up the army and the navy. However, **the “equality” Herodotus described was limited to a small segment of the Athenian population in Ancient Greece.**
- For example, in Athens in the middle of the 4th century there were about 100,000 citizens (Athenian citizenship was limited to men and women whose parents had also been Athenian citizens), about 10,000 metoikoi, or “resident foreigners,” and 150,000 slaves. Out of all those people, **only male citizens who were older than 18 were a part of the demos**, meaning only about 40,000 people could participate in the democratic process.

Competition in the Universe: The Three Body Problem (2006)

