

# **Surfing You-Tube for Increasing Marginal Returns on Student Engagement in Introductory Microeconomics**

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*This paper presents a teaching technique that diverts from traditional lecture by using scenes from mainstream media in order to teach introductory Microeconomics. We present a user's manual which lines up each topic in a typical semester long microeconomics course with a media clip that easily engages students. The presence of Gen Z students gives rise to developing methods with which instructors can engage digitally native students. Presenting economics concepts through familiar scenes from film, TV or other media outlets engages students and enhances their interest in the material while fostering increased student participation and reflective learning.*

*Keywords: multi-media usage, introductory microeconomics, student engagement with generation z*

## **INTRODUCTION**

The current population of students entering college has grown up with a device in its hand and consequently our students have experienced much of their lives through multi-media elements. It follows that this group of students has an innate fondness for learning through this medium and is naturally drawn to developing an understanding of the world around it by engaging in this platform. These students have grown up immersed in a digital world and companies and academicians alike have found it challenging to communicate in the traditional lecture format as these students find it unnatural and uncomfortable to interact in this way. Finding ways that replicate the You-Tube style videos that appeal to Gen Z is becoming more and more essential. In this paper, we offer a user's manual for economics instructors to implement in a typical semester long microeconomics course. This manual readily provides multimedia content links with descriptions for all of the topics usually presented in these courses. As such, the instructor can implement the familiar you-tube style videos and content that have become an integral part of the current generation's intellectual and social journey.

## LITERATURE REVIEW

It is commonly perceived that the learning styles of Generation Y and Z individuals are disparate to those of prior generations. The digital culture, native to today's traditional undergraduate student, bestows a variety of media forms that transmit information among members of society in way that is distinct and transformative. The traditional undergraduate student's consumption of information parallels this cultural change. Academicians and corporations alike are implementing methods to connect with and educate a culturally changed individual. According to Adamy (2018), "companies are reworking training so it replicates You-Tube-style videos that appeal to Gen Z workers reared on smartphones." Because "Gen[eration] Z kids will grow up with a highly sophisticated media and computer environment," (Schroer, n.d.) academicians are currently experimenting with and researching pedagogical techniques that foster an alliance with this generation's digital-born personalities. Accordingly, the attempt to develop modern pedagogical practices that align with the characteristics of digitally native individuals has produced considerable educational discoveries. Conaway and Clark (2015) explore the use of a popular comedic prime time TV program to explicate economic concepts. They find that students' level of attention, engagement and learning were increased by using excerpts from the program and paralleling them to a particular economic theory. Similarly, Ghent et al. (2010), Gillis and Hall (2010), and Hall (2014) demonstrate the use of comedic prime time television programs to instill economic principles. While Kuester et al. (2014) have developed a website focused solely around using the television show "The Office" to explain economic models.

Movie clips provide analogous opportunities to demonstrate academic principles and are well accepted among their beneficiaries. Leet and Houser (2003) propose a methodology whereby all aspects of an introductory economics course are espoused through movies. To ensure academic integrity in using movies in economics courses, Macy and Terry (2008) study the effects of movie usage on critical thinking with respect to ethical dilemmas. Their findings suggest that the application of movie plots provide a ripe environment for critical thinking and for the application of economic principles. Students "looked beyond the simple opinions and viewpoints to an in-depth analysis of the issues" (Macy and Terry, 2008). Burke et al (2018) explicate a group project whereby students are required to unearth media examples that affirm the economic principle being assimilated thereby immersing and engaging them in the theories and producing an improved level of understanding.

The use of methodologies that provide alternatives to "chalk and talk" in the teaching of economics has become increasingly common (Becker et al, 2006). Continuing the trend of Mateer and others, we have found it helpful to capture student interest with entertaining video clips (Suddath, 2013). As such, following on the work of Leet and Houser (2003), we propose a user's manual which aligns media usage with typical introductory microeconomics topics in an effort to connect students to the principles. As Dixit states in his work, *Restoring Fun to Game Theory*, "imaginative use of game playing, movies, literature, and such other illustrations makes [economics] much more fun to teach and to learn" (Dixit, 2005). This can further be done without sacrificing rigor—a win-win for the professor and the students.

## CLIPS DISCUSSION

The intent of this manuscript is to aid economics professors interested in instituting a method of learning whereby media clips are used to demonstrate various economics topics. We present a straightforward user's manual that will allow the instructor to easily adopt this methodology into a typical semester long microeconomics course. The following clips discussion explains how each of the clips relates to a particular microeconomics topic. Details such as the web links to each clip, topics and clip lengths can be found in Appendix 1. This manual presents the topics in the order that they are typically found in an introductory microeconomics course.

**Topic: Scarce Resources (Entrepreneurial Ability)**

*Clip: American Housewife (2016), Season 1 Ep 5, "The Snub"*

Oliver is disappointed with the "flawed reject" polo shirt his mother purchases from the outlet mall. After doing chores to earn enough money to buy a "real shirt", he uses his entrepreneurial ability to create a new enterprise. Notice that Oliver takes initiative to use labor resources to produce a good. This clip can be used to illustrate the difference between entrepreneurial skills and labor as factors of production.

Discussion Questions:

1. List the inputs that Oliver might need to start his business.
2. Classify each input into one of the economic resource categories.

**Topic: Money as a Medium of Exchange**

*Clip: The Simpsons (1994), Season 5 Ep 8, "Boy Scoutz n' the Hood"*

Bart is searching for a dropped peanut and finds a \$20 bill. He is initially disappointed, but then realizes that \$20 can buy lots of peanuts. Bart gives a succinct discussion of the role of money in buying goods and services. This can be used to show that people do not value the pieces of paper on which money is printed, they value the goods they can buy with it.

Discussion question/topic:

1. Explain the difference between real and nominal variables and give examples of each.
2. How does Homer's interest in peanuts illustrate the classical dichotomy?

**Topic: Opportunity Cost**

*Clip: Big Bang Theory (2012), Season 6 Ep 12, "The Egg Salad Equivalency"*

Sheldon is directed by the university, his employer, to undergo training about sexual harassment because he harassed his administrative assistant. In this clip, he tells the assistant that she has to go to the training for him because his time is too valuable. This is a great example of opportunity cost. It can also reinforce that economists consider time and resources other than money when they calculate opportunity costs.

Discussion question/topic:

1. How is Sheldon similar to a college athlete who leaves school to turn professional?
2. Name some opportunity costs other than time that are non-monetary.

**Topic: The Market System (Capitalist Economy)**

*Clip: Parks and Recreation (2015), Season 7 Ep 2, "Ron and Jammy"*

Leslie and Ron are competing in an auction to buy land. Ron wants to purchase the land for business development, while Leslie wants to turn the land into a national park. Leslie does not have the resources to pay for the land at market value, so she places a bid of \$0. This clip can be used to start a discussion of the characteristics of the market system including the use of money, as well as freedom of enterprise and freedom of choice.

Discussion questions:

1. Why does Ron assume that Leslie's \$0 bid will be rejected? Why does Leslie believe that her bid has value?
2. Why might a \$0 bid work for the national park, but not for private business development?

**Topic: Demand, supply and market equilibrium**

*Clip: The Office (2008), Season 5 Ep 11, "Moroccan Christmas" (under Huge Turnaround for Profit)*

Dwight buys up all of the local supply of Princess Unicorn dolls in order to sell them closer to Christmas when demand is more inelastic. This clip can be used to illustrate a number of concepts. Among them are monopoly, elasticity, seasonality, opportunity cost and expected demand. It is a particularly good illustration of how the demand curve changes as we approach the December holiday season. It could also be used to explain high prices of generators in disaster areas where the students can think about short and long run supply.

Discussion questions:

1. What will happen to the demand for Princess Unicorn dolls in January?
2. Is the demand at the holidays for Princess Unicorn dolls elastic or inelastic?
3. Is Dwight's behavior ethical? Would it be ethical if it were fresh water or generators in a disaster area? How do dolls differ from clean water or electricity as economic goods?

**Topic: Elasticity**

*Clip: The Simpsons (1994), Season 5 Ep 17, "Bart Gets an Elephant"*

Homer charges neighbors to see and ride Bart's new elephant. He mistakenly assumes that demand for elephant services is inelastic (although he never uses the term). This clip can be used to discuss the elasticities of luxury goods and necessities. It can also be used to discuss the relationship between elasticity and total revenue. One could call this clip timeless even though it was first shown in 1994. Students still find it funny.

Discussion questions:

1. What is the relationship between total revenue and elasticity?
2. What mistake does Bart make about the demand for elephant services?

**Topic: Cost of Production (Fixed Costs vs. Variable Costs)**

*Clip: The Office (2009), Season 5 Ep 25, "Broke"*

The employees of the Michael Scott Paper Company meet with an accountant to review their pricing model and opportunities for growth. The accountant points out that Ryan forgot to include variable costs in their pricing. This clip can be used to review fixed costs, variable costs and the costs of production. The average cost curves can be used to illustrate the error in the Michael Scott Paper Company pricing model.

Discussion questions:

1. List the potential expenses of the Michael Scott Paper Company. Which expenses would be considered fixed costs in the short run? Which expenses would be considered variable costs in the short run?
2. Draw the average fixed cost, average variable cost and average total cost curves. Based on your drawing, identify the quantity where the Michael Scott Paper Company currently produces.

**Topic: Market Structure**

*Clip: Modern Family (2015), Season 6 Ep 5, "Won't You Be Our Neighbor", 2:48-3:49*

Jay has invented a new sock organizer for his closet business. While showing his new product to Manny's girlfriend, Sophie, he learns that Sophie is the granddaughter of his competitor. This clip can be used to illustrate the different characteristics of firms among market structures with respect to differentiated products and easy of entry and exit.

Discussion questions:

1. Review the characteristics of pure competition, pure monopoly, monopolistic competition and oligopoly. Which market structure most accurately describes the closet business? Explain in terms of the basic characteristics of the industry.

**Topic: Market Structure (Pure Competition)**

*Clip: The Simpsons (1992), Season 4 Ep 9, "Mr. Plow"*

The scene begins with Homer running a popular and lucrative snow plow business. Due to free entry in this industry, a competitor emerges and attempts to control the market. The methods used to keep competition out are unsavory. This can be used to illustrate free entry into a market. It can also be used to discuss market structure.

Discussion questions/topic:

1. Give examples of barriers to entry in the plow business.
2. How does this example demonstrate the difference between the short and long run in a monopolistically competitive market?

3. What could/should Homer's response be to the changes in his market?

**Topic: Market Structure (Monopolistic Competition)**

*Clip: Little Caesars Pizza Commercial (2019)*

This commercial for Little Caesars Soft Pretzel Crust Pizza shows the attributes of its pizza and highlights the low price of "just \$6 bucks." This clip can be used to discuss the characteristics of price competition and differentiated products with close substitutes in monopolistic competition.

Discussion questions:

1. In which market structures may advertising play a role? Why?
2. What signal is being sent when Little Caesars spends a lot on advertising?
3. How might advertising make the pizza market less competitive?

**Topic: Advertising and Market Structure**

*Clip: Pork "Be Inspired" commercial (2015)*

*Milk "Growing Kids" commercial (2018)*. These commercials are both ads for what we may think of as highly competitive industries. It is useful in explaining the benefits to an industry of stimulating demand for their product. Who are their competitors? It may also be used to discuss the economic costs and benefits of advertising. Another useful aspect of this clip may be a discussion about who paid for the ads. In the case of the pork ad, a lobbyist group called Pork Checkoff paid for it using taxes on the suppliers of pork. This information may be used to discuss rent seeking and government involvement in markets. See: Pork Checkoff <https://www.pork.org/about/> The milk commercial was paid for by the United Dairy Industry of Michigan.

Discussion questions:

1. Have students list the characteristics of pure competition, pure monopoly, monopolistic competition and oligopoly. Which basic characteristics are highlighted in each of the commercials? Which market structure does each commercial most accurately describe? Are the commercials consistent with your intuition about each industry?

**Topic: Market Structure (Oligopoly)**

*Clip: Pepsi Commercial (1995)*

This commercial for Pepsi by Pepsi Co premiered during the 1995 super bowl. It shows two delivery truck drivers, from competing companies, taking a break for a meal at the same diner. This clip can be used to discuss the characteristics of an oligopoly while focusing on non-price competition.

Discussion questions:

1. What are some of the costs incurred by companies engaged in non-price competition?
2. Why would companies in a duopoly prefer to engage in non-price competition rather than price competition?

**Topic: Oligopolies and Strategic Behavior**

*Clip: Golden Balls*

This clip illustrates a Prisoners Dilemma with communication allowed between the two players. This clip can be used to discuss the elements of a game. A parallel can also be made between the players in this game and firms in an oligopoly. You may ask the students what would happen if the same two people played again?

Discussion questions/topic:

1. How might this outcome be different if there had been two or more rounds of this game?
2. Draw the game matrix and discuss why the man in the clip may have chosen to play a strategy that was not dominant.
3. Does the ultimatum game shed any light on why the man played the way he did?

**Topic: Prisoners Dilemma**

*Clip: Now You See Me (2013), Scene (Mentalist Interrogation)*

Police interrogate two members of the illusionist group, the Four Horsemen. This clip illustrates the classic prisoners dilemma. It may be used to illustrate the game as well as to discuss the role of information in this type of game.

Discussion questions:

1. The two men being questioned have a prior relationship. How does this factor into the game outcome?
2. Is this a repeated game? Does that affect the outcome observed in the clip?

**Topic: Public Goods: Why They Should Not Be Supplied by the Market**

*Clip: Fire Rescue Auction*

This brief clip shows the shocking result of what might happen if individuals were required to bid for public services like fire protection. It is a demonstration of how the wealthiest individuals would be those who received the service. It also illustrates market failure. Interestingly, foreign currency is used to bid in the clip. It may be fun to point that out to students.

Discussion questions:

1. Why would we not want the private market to supply goods like police and fire protection?
2. Why does the market fail in this case?

**Topic: Government's Role (Public Goods)**

*Clip: Parks and Recreation (2010), Season 2 Ep 15, "Sweetums"*

Ron explains that the entire government could be privatized. Rather than operate free public parks, he believes private business could operate the parks following the model of Chuck E. Cheese and using tokens. This clip can be used to prompt conversation of the rivalry and excludability characteristics in private goods. It can also introduce the concepts of quasi-public goods, social values and positive externalities with respect to an under allocation of resources that would result from the market system.

Discussion questions:

1. Is a park rival? Is it excludable? How could these characteristics be changed? Would these changes be desirable or undesirable from society's perspective?
2. Is education (K-12) a public good? How does it stand up to the rivalry and excludability criteria?

**Topic: Market Failures: Public Goods and Externalities**

*Clip: Mind Blown: Safer ≠ Safe*

This television commercial uses puppets to spread awareness about the dangers of vaping. This clip can be used to foster a discussion on negative externalities and the reallocation process by reducing the private demand for the good. It can also lead to a discussion about the costs associated with reducing negative externalities in terms of the marginal benefit and marginal cost.

Discussion questions:

1. Identify the negative externality described by the commercial.
2. Do the puppets believe private markets underallocate or overallocate resources toward the production of this good? How does the commercial intend to change the allocation? Draw a graph to help illustrate your answer.

**Topic: Creative Destruction**

*Clip: Hidden Figures (2016)*

This excerpt from the movie Hidden Figures, set in 1961, shows a main character asking about the status of the new computer. This clip can be used to generate a discussion on creative destruction as well as structural unemployment and conditions of economic growth.

Discussion questions:

1. How does this clip illustrate creative destruction?
2. What are the consequences of the creative destruction on the employment market?
3. Does this upcoming (in the movie) change in employment represent frictional, structural or cyclical unemployment?

**Topic: Expenditure and Taxes**

*Clip: Friends (1995), Season 1 Ep 4, “The One With George Stephanopoulos”*

Rachel receives her first paycheck and, due to taxes, the check is much smaller than she expected. This clip may be used in a discussion of government spending and taxes. It could also be used in a discussion of labor supply and taxes.

Discussion questions:

1. Who pays FICA? How is the burden of the tax split?
2. How do taxes like FICA affect labor supply?

**Topic: Information Asymmetry**

*Clip: Concussion (2015), scene “The Gift of Knowing”*

In this scene, Dr. Omalu gives a speech on Chronic Traumatic Encephalopathy (CTE). He claims that, if the affected players had known about the risks of CTE, they may have made different choices about their careers. This can be used to discuss the topic of information asymmetry. The clip may also be used to discuss unintended consequences. For example, as football helmets are being better designed to protect more against head injury, players may feel safer and respond by playing more recklessly.

Discussion questions:

1. How are football helmets like insurance? What is moral hazard?
2. More generally, did the NFL have more information about the risks of football as compared to the teenagers who start playing the game hoping to become professionals? How could any information asymmetry that may exist be addressed?

**Topic: Information Asymmetry and Signaling**

*Clip: Big Bang Theory (2008), Season 2 Ep 11, “The Bath Item Gift Hypothesis”*

Sheldon knows that Penny has bought him a Christmas gift. He goes to great lengths to ensure that he reciprocates appropriately. This clip can be used to discuss gift giving as signals. People care more about the custom of giving gifts when the strength of affection is most in question. What does that tell us about Sheldon?

Discussion questions:

1. What is the economic definition of signaling?
2. Does Sheldon’s lack of empathy affect the size of the gift? If so, in what way?

**TIPS FOR SUCCESS**

While fun and engaging, using media formats to teach the most common topics in an introductory microeconomics course can present challenges. Significant time spent using this technique allows us to offer tips for success. Plan ahead. Utilizing this manual to illuminate topics will benefit students. However, gaining a comfort level for media implementation is essential. Become familiar with all of the clips well in advance of the reveal to the students.

Because media use is innate and interesting for the students, they will often request to view the entire movie or show. As such, the entertainment aspect of this delivery method can sometimes overpower the purpose of the exercise. Help students to focus on the concept within the media and how it relates to the learning objectives and fundamentals being presented. This manual presents clips that run in length from 15 seconds to nearly five minutes so as to focus directly on the topic being explicated by the clip.

Technology occasionally produces difficulties for viewing multi-media elements. Relying on internet access as well as source sites, such as You-Tube can be risky. Consider downloading the media in advance

to avoid these possibilities. Be prepared with a non-technological version of the topic in the event that technology fails completely.

Be conscious of the age, maturity and orientation of the students. Certain scenes or monologues can contain foul language, gun violence, or other potentially offensive situations, such as insensitivities to race, gender and sexual orientation among others. Some of these adversities provide context or entertainment value that appeals to some students, however, consideration needs to be exercised to maintain classroom etiquette and appropriateness.

Finally, copyright infringements need to be considered. The Copyright Act makes an allowance for some educational uses of copyrighted material. For instance, limitations on the exclusive rights section of the law gives instructors the ability to show copyrighted material “in the course of face-to-face teaching activities of a nonprofit educational institution” (17 U.S.C. § 110). Section 107 of The Copyright Act considers additional classroom uses that may not meet the requirements established under Section 110 on a case to case basis (17 U.S.C. § 107). Further, use of copyrighted materials may be used during online instruction if it meets the criteria described under the TEACH Act (17 U.S.C. §§ 1301-1332). Typically, universities and colleges initiate their own policies and procedures for the use of copyrighted work based on the Copyright Act. Best practice is to examine the policies and procedures put in place by your educational institution about any legal issues before executing this methodology.

## CONCLUSION

Today’s undergraduate students have grown up in the digital age. Their educational journey likely included videos that teach colors to toddlers and letters to preschoolers. Their social interactions and professional development continues to be dependent on multi-media elements that often include video components. It is not surprising, therefore, that they have developed an instinctive receptiveness for learning through media and are naturally drawn to engaging in this platform. In this paper, we present a user’s manual for economics instructors using video clips to highlight the topics that are typical to a semester long introductory microeconomics course. We find that presenting economic concepts through video clips is an effective way to reinforce class concepts and increase student engagement.

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## APPENDIX 1 CLIP INFORMATION

Topic	Episode	Link or Timestamp
Scarce Resources	American Housewife Season 1 Ep 5 “The Snub”	17:58-18:59  *available for purchase or rent on Amazon
Money as a medium of exchange	The Simpsons Season 5 Ep 8 “Boy Scoutz n’ the Hood”	<a href="https://www.youtube.com/watch?v=nSkMglxJxss">https://www.youtube.com/watch?v=nSkMglxJxss</a>
Opportunity Cost	The Big Bang Theory Season 6 Ep 12 “The Egg Salad Equivalency”	<a href="http://www.bazinganomics.com/bazinganomics/time-is-too-valuable">http://www.bazinganomics.com/bazinganomics/time-is-too-valuable</a>
The Market System	Parks and Recreation Season 7, Ep 2 “Ron and Jammy”	<a href="https://economicsofparksandrec.com/category/micro-topics/foundations-models/">https://economicsofparksandrec.com/category/micro-topics/foundations-models/</a>
Demand, Supply and Market Equilibrium	The Office Season 5, Ep 11 “Moroccan Christmas”	<a href="http://economicsoftheoffice.com/all/Huge%20Turnaround%20for%20Profit">http://economicsoftheoffice.com/all/Huge Turnaround for Profit</a>
Elasticity	The Simpsons Season 5 Ep 17 “Bart Gets an Elephant”	<a href="http://www.criticalcommons.org/Members/AdrianFohr/clips/elasticity-necessity-or-luxury/view">http://www.criticalcommons.org/Members/AdrianFohr/clips/elasticity-necessity-or-luxury/view</a>
Costs of Production	The Office Season 5	<a href="http://economicsoftheoffice.com/all/?jel=D24">http://economicsoftheoffice.com/all/?jel=D24</a>

	Ep 25 "Broke"	
Market Structure	Modern Family Season 6 Ep 5 "Won't You Be Our Neighbor"	2:48-3:49  *available for purchase or rent on Amazon
Pure Competition	The Simpsons Season 4 Ep 9 "Mr. Plow"	<a href="https://econ.video/2017/10/03/simpsons-mr-plow/">https://econ.video/2017/10/03/simpsons-mr-plow/</a>
Monopolistic Competition	TV commercial Little Caesars Pizza (2019)	<a href="https://www.youtube.com/watch?v=RzRR_nCWw6Q">https://www.youtube.com/watch?v=RzRR_nCWw6Q</a>
Pure Competition continued	TV commercial Pork "Be Inspired" (2015) Milk "Growing Kids" (2018)	<a href="https://www.youtube.com/watch?v=R_UDq9tpX0w">https://www.youtube.com/watch?v=R_UDq9tpX0w</a>  <a href="https://www.ispot.tv/ad/dLvj/americas-milk-companies-growing-kids">https://www.ispot.tv/ad/dLvj/americas-milk-companies-growing-kids</a>
Oligopoly	TV commercial Pepsi Co (1995)	<a href="http://www.youtube.com/watch?v=qy4_XKYo0rQ">www.youtube.com/watch?v=qy4_XKYo0rQ</a>
Oligopolies and Strategic Behavior	Golden Balls A British game show	<a href="https://www.youtube.com/watch?v=yM38mRHY150">https://www.youtube.com/watch?v=yM38mRHY150</a>
Prisoners Dilemma	Now You See Me (2013) <i>Mentalist Interrogation</i>	<a href="https://www.youtube.com/watch?v=AQX2Q-V2Uh8">https://www.youtube.com/watch?v=AQX2Q-V2Uh8</a>  33.41-37
Public Goods	Fire Rescue Auction	<a href="https://www.youtube.com/watch?v=oGudMA9RJU">https://www.youtube.com/watch?v=oGudMA9RJU</a>
Government's Role	Parks and Recreation Season 2 Ep 15 "Sweetums"	A Token Park <a href="https://economicsofparksandrec.com/tag/public-goods/">https://economicsofparksandrec.com/tag/public-goods/</a>
Market Failures: Negative Externalities	Mind Blown: Safer $\neq$ Safe	<a href="https://www.youtube.com/watch?v=1OGI4f6IwnM&amp;list=PLt8WW_ZE9HQFze3_MJ_LtyAM2etYj5ia7&amp;index=6">https://www.youtube.com/watch?v=1OGI4f6IwnM&amp;list=PLt8WW_ZE9HQFze3_MJ_LtyAM2etYj5ia7&amp;index=6</a>
Creative Destruction	Hidden Figures (2016)	<a href="https://youtube.com/watch?v=syZeizyYNUs">https://youtube.com/watch?v=syZeizyYNUs</a>
Expenditures and Taxes	Friends Season 1 Ep 4 "The One with George Stephanopoulos"	<a href="https://www.youtube.com/watch?v=DP89Uefobcs">https://www.youtube.com/watch?v=DP89Uefobcs</a>
Information Asymmetry	Concussion (2015) Scene: "The Gift of Knowing"	<a href="https://www.youtube.com/watch?v=Mdp4T_G0Xsc">https://www.youtube.com/watch?v=Mdp4T_G0Xsc</a>  1:49-1:52.18
Information Asymmetry and Signaling	Big Bang Theory Season 2, Ep 11 "The Bath Item Gift Hypothesis"	<a href="https://www.youtube.com/watch?v=FpGkLzG11CI">https://www.youtube.com/watch?v=FpGkLzG11CI</a>