Amplifying Heterodox Economics with Video Clips

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Abstract: Many ECON 101 students do not major in Economics partly because of the way it is taught through the chalk and talk method and partly due to the subject content that emphasizes abstract models over contemporary issues including climate change, inequality, and financial crises. The critique is of both content and presentation. The objective therefore in this paper is to address both these issues. To this end a review of salient ideas of the Reardon et al. (2018) textbook *Introducing a New Economics* is undertaken and paired up with video clips from movies and cartoons to amplify their reach.

Keywords: Jack Reardon; Gregory Mankiw; Neoclassical economics; Heterodox economics; ThunderCats Roar; chalk and talk

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1. Introduction

Many students at the ECON 101 level do not major in Economics. Some economists opine that this is partly due to the way the subject is taught through the chalk and talk method instead of a fun approach through videos, pictures, and storytelling (Acchiardo et al., 2017). Alternatively, other economists argue that mainstream neoclassical economics is centered on mathematical models with stylized assumptions for an abstract economy to preach market fundamentalism instead of helping students address pressing contemporary economics issues including climate change, economic inequality, the future of work, and financial crises (Komlos, 2021a; Reardon et al., 2018). This suggests that Economics instructors fail to reach out to ECON 101 students, which necessitates a change both in teaching pedagogy and in the ECON 101 textbook content. The objective in this paper is to illustrate one approach that aims to incorporate both changes by making the case for incorporating a heterodox Economics textbook, specifically Reardon et al. (2018), and amplifying some of its salient ideas with video clips. This paper is structured in five sections. In Section 2, the motivation behind using Reardon et al. (2018) along with video clips is presented. In Section 3, the salient ideas of the Reardon et al. (2018) textbook are delineated and contrasted with that of mainstream neoclassical textbooks by Mankiw et al. (2020a; 2020b). In Section 4, the case is made for pairing the salient ideas with movie and cartoon clips. Finally, concluding remarks are offered in Section 5.

2. Motivation

Mainstream neoclassical economics, as exemplified by the Mankiw et al. (2020a; 2020b) texts, rests on various principles that include that people face trade-offs with opportunity costs, they are rational, optimize a utility function, undertake marginal analysis, that free trade is good, markets allocate resources to achieve efficiency, government intervention is unwarranted save for protecting property rights, addressing market power, correcting externalities and providing public goods, that productivity is the main determinant of living standards, and that inflation is a monetary phenomenon. Having undertaken principles courses in Economics, students learn to solve for equilibrium using the demand supply framework and learn through that model that minimum wage is an ineffective and blunt tool to address poverty amongst the working poor. Additionally, they learn that taxes inflict deadweight loss, and that increasing personal income taxes or corporate taxes is detrimental, as entrepreneurs vote with their feet or as the burden of the corporate tax is shifted to the workers. In a nutshell, many students at the ECON 101 level, who do not intend to major in Economics and for whom the principles courses are their only exposure to Economics, finish their education with the dogma of market fundamentalism that is inculcated through mathematically stylized and abstract models of a caricature of the real economy (Komlos, 2021a; Reardon et al., 2018).

Komlos (2021a) argues that mainstream neoclassical economics emphasizes individualism over social welfare and that many ECON 101 students are indoctrinated with economic fundamentalism that rests on the ideas that markets are infallible, taxes are toxic, competition is an elixir, and that free trade is the best. He argues that mainstream neoclassical economics downplays concepts of basic needs, bounded rationality, conspicuous consumption, and manipulation of consumers and that satisficing rather than optimizing should be the default model just as oligopoly instead of perfect competition should be the default model in ECON 101 in the age of globalization and giant multinational corporations (Komlos, 2021b). Similarly, Reardon et al. (2018) mention that students walked out of Mankiw's class at Harvard complaining that mainstream neoclassical economics perpetuates economic inequality (p. 329). They reiterate that mainstream neoclassical economics is so narrowly focused on maths and models on a caricature of the economy that it fails to prepare students with real world content and data handling skills (p. 330).

Both Komlos (2019) and Reardon et al. (2018) have offered alternatives to mainstream neoclassical economics just as done by Schneider (2019) and Goodwin et al. (2019). Each one of them deserves an in-depth review of its own. In Jahangir (2020), I have already offered a comparative review of the Komlos (2019) text paired with Mankiw et al. (2020a; 2020b). I considered a comparative review to introduce students to different schools of thought instead of pushing a particular ideology. The goal here is to not only do the same for Reardon et al. (2018) but also to amplify their salient ideas through video clips. The focus is on Reardon et al. (2018) because the authors center the entire book on the main theme of sustainability apart from pluralism and justice. This is significant, as Komlos (2021a) indicates that there is a movement towards emphasizing "degrowth", and that we must focus on ecological problems away from economic growth. Similarly, Krugman (2020) points out that if climate change is not effectively addressed then in the long run none of the issues of healthcare reform, income inequality or financial crises will matter (p. 327). Therefore, the pressing focus on Reardon et al. (2018) in Section 3 of this paper is substantiated and warranted.

However, the issue with many texts in heterodox economics is that they are heavily reliant on dense blocks of texts. Reardon et al. (2018) is no exception, as the book is without colourful illustrations, which is in stark contrast to mainstream neoclassical economics textbooks. The lack of glossy pictures can be explained through the need to keep costs low and to ensure sustainable production. Thus, while such textbooks aim to reach out to students through a just and pluralist content in heterodox economics, they are at a disadvantage compared to neoclassical economics textbooks. This is significant, as even in the context of mainstream neoclassical economics, Wooten et al. (2021) mention that since the Becker and Watts (1996) critique of the chalk and talk method of teaching Economics, several instructors have focused on showcasing movie and television clips. Others like Al-Bahrani et al. (2016) highlight using music, paintings, poetry, movies, sports shows, television shows, animated cartoons, and photography in teaching Economics. As an example, Deyo and Podemska-Mikluch (2014) use the Harry Potter world to illustrate economic concepts of scarcity, trade-offs, opportunity costs, marginal thinking, incentives, diminishing returns, division of labour, specialization, comparative advantage, and the benefits of free trade. Similarly, O'Roark (2017) uses comic book superheroes to discuss economic concepts like scarcity, opportunity costs, specialization, public goods, moral hazard, production functions and utility. Such approaches provide a motivation to do the same for heterodox economics and in the present context for the salient ideas of Reardon et al. (2018) in Section 4 of this paper.

3. Salient ideas of Reardon et al. (2018)

The mainstream neoclassical economics textbooks by Mankiw (2020a; 2020b) separate microeconomics from macroeconomics. The microeconomics textbook starts from the ten axiomatic principles that people face trade-offs with opportunity costs, they are rational, optimize a utility function, undertake marginal analysis, that free trade is good, markets allocate resources to achieve efficiency, government intervention is unwarranted save for protecting property rights, addressing market power, correcting externalities and providing public goods, that productivity is the main determinant of living standards, and that inflation is a monetary phenomenon. The textbook is centered on these principles and in the remaining chapters, these principles are hammered as truth through math-based models without any mention of pluralistic approaches to economics. The textbook makes the case for free trade based on Ricardo's theory of comparative advantage, which is followed by establishing the demand and supply model with equilibrium as the central tool through which later policy applications of taxes, ceilings and floors are analyzed. Similarly, perfect competition is centered as the base market model, which is followed by alternative market structures of monopolies and oligopolies. Pressing issues of the future of work, economic inequality, asymmetric information, and behavioural economics are all pushed to the latter portion of the textbook, which are often not covered in ECON 101.

Just as the Mankiw texts are centered around the ten axiomatic principles, the Reardon et al. textbook *Introducing a New Economics* is centered around sustainability, as each chapter connects with the United Nations Sustainability Development Goals. However, Reardon et al. (2018) do not make a neat demarcation between microeconomics and macroeconomics, as various chapters offer a blend of the concepts found in these two disciplines. This is perhaps because the authors uphold the literature on sustainability that views the macro versus micro distinction as an artificial product of the 19th century. Therefore, a step by step and a side-by-side comparison of the various chapters between Mankiw (2020a; 2020b) and Reardon et al. (2018) is not feasible. Nonetheless, a comparative review can be undertaken, which is centered on the salient ideas in Reardon et al. (2018) that include, apart from a different outlook on the axiomatic principles of mainstream neoclassical economics, topics of sustainability, economic inequality, financialization, corporations, the future of work, government intervention through policies like rent control and minimum wage, government and monetary policies, and free trade. This comparative review is important, as it allows to showcase the difference of thought in economics instead of indoctrinating students with a particular ideology.

3.1 Principles of Economics

Rejecting axiomatic principles, Reardon et al. (2018) assert that information is not always certain or complete, that people are not always rational agents, and that all schools of economic thought, other than the neoclassical one, reject equilibrium as a foundational concept (p. 31, 34). The authors decenter the concepts of equilibrium and opportunity costs, claiming that these concepts were influenced and ossified by Newtonian physics, and which do not account for developments in quantum physics (p. 35, 49). They also question the idea that people respond to incentives because they may not be rational, have established habits or brand loyalty, may be desperate or have little market power compared to the sellers (p. 53). Additionally, unlike neoclassical economics, they reject the perfect competition model as a mythical market structure, and question defining efficiency as allocating resources to produce the greatest output, instead of defining it as sustainability or as best utilizing workers' talents (p. 175). Thus, Reardon et al. (2018) contest the principles of economics on rationality, equilibrium, and perfect competition, that are presented as axiomatic truths in mainstream neoclassical economics and shift the focus from efficiency to sustainability.

3.2 Sustainability

In Chapter 3, the authors center sustainability as a major theme of the book and return to it by alluding to the 17 UN Sustainable Development Goals throughout the book. They mention that we are depleting natural resources by living beyond our means through private and public debt and specifically highlight Veblen's notion of conspicuous consumption, which is usually ignored in mainstream neoclassical economics (p. 40, 247). Additionally, unlike neoclassical economics where recycling is viewed as a factor that alleviates scarcity, they emphasize that recycling requires energy inputs and therefore even recycled products should be used only when necessary (p. 41). By underscoring the Jevons Paradox and rebound effects, they mention that technological developments like fracking and energy efficiency contribute to decreasing energy prices, which spurs more energy demand and therefore more emissions (p. 48, 50). Thus, while technological progress is viewed as alleviating energy scarcity in neoclassical economics, the authors do not deem it as an elixir for sustainability.

3.3 Economic Inequality

Mainstream neoclassical economics relegates economic inequality to later chapters and usually addresses it through globalization and technological change, where the demand for high skilled workers increases and that of medium skilled workers declines. However, the authors address inequality in Chapter 5 and, unlike mainstream neoclassical economics, focus on the idea of relative poverty instead of absolute poverty (p. 74). Indeed, Komlos (2021b) also reiterates that what matters for an individual's sense of well-being is not absolute income but relative income. The authors highlight that conservative management of fiscal budgets and fiscal austerity have contributed to inequality (p. 82). They state that productivity increases in the U.S. have been concomitant with increasing corporate profits, but not real wages and that this results in income inequality, for the ratio of the average CEO pay to that of the average factory worker has increased over time (p. 82). Additionally, they reference Adam Smith, who expressed that business owners have advantage over workers, as they can live a year upon acquired stocks, but workers could not subsist a week without work (p. 59). Finally, they mention that increase in corporate power and wealth is associated with social and economic inequality, as firms hoard cash instead of engaging in investment and therefore, they amass wealth instead of expanding employment (p. 64, 128, 129). Thus, unlike mainstream neoclassical economics, the authors focus on addressing economic inequality early in the textbook instead of relegating it to later chapters that are more often not covered in ECON 101.

3.4 Financialization

The authors reiterate the idea of economic inequality by associating it with the phenomenon of financialization, where financial services take over economic activity. Economic inequality results, as the objective of maximizing shareholder wealth leads corporations to shift away from long term investment towards market power through short term mergers and acquisitions and which instigates corporations to reduce employment through downsizing and outsourcing (p. 133, 134). The authors also state that speculative financial activities, defined as putting money in risky schemes to get rich faster than by earning wages, contribute to inequality and instability, where the connection between the real and the financial economy is severed and where the allocation of money contributes to the ecological crisis (p. 147). Thus, while mainstream neoclassical economics focuses on incentivizing corporations through lower corporate taxes and explains that the burden of corporate taxes is shifted to the workers, the authors pin economic inequality on the corporate decision to amass wealth instead of investing in the real economy and expanding employment.

3.5 Corporations

Mainstream neoclassical economics presents efficiency wage theory, based on the idea by Ford, who offered $5 a day jobs, much more than the prevailing market wage rate, to decrease worker turnover and boost productivity. However, the authors consider the assembly line as the ultimate control of business over work and delineate Fordism as increasing worker dissatisfaction, absenteeism, and turnover (p. 98). Furthermore, they showcase how global corporations are complicit in physical assault, verbal abuse, forced overtime, and fail to pay wages to workers in developing countries like Bangladesh (p. 101). As an alternative to corporations that extract a significant amount of value generated by labour, the authors consider worker cooperatives that serve the interests of employees instead of external shareholders because profits are shared with employees, and they also manage the workplace with participatory decision making (p. 188, 189, 191). Thus, instead of building producer theory around a firm whose objective is to maximize shareholder wealth, the authors treat workers' cooperative as an alternative to the corporation.

3.6 The future of work

Krugman (2020) states that the support for universal basic income is based on the idea that automation will destroy jobs, but the issue is not automation and instead wage stagnation because of declining bargaining power of workers (p. 289). Nonetheless, Reardon et al. (2018) present basic income as a solution to automation and the loss of decent jobs, which is relevant because even during the economic expansion prior to the financial recession of 2007, not enough decent jobs were created due to downsizing and labour-saving techniques (p. 123). The authors reject the criticism that we can't afford basic income or that it reduces work incentives (p. 109, 111). Instead, they argue that it frees up people from the labour market to work in social sectors, empowers workers to refuse jobs that are burdensome, boring, or low paying, and attenuates climate change by freeing workers from fossil fuel intensive industries and associated unsustainable consumption (p. 110). Additionally, they reject the neoclassical trade-off between labour and leisure and instead treat them as complementary (p. 93). Thus, the authors reject the idea of work as a burden and instead indicate that it must be meaningful, and that they pressingly view the issue of automation and basic income in contrast to mainstream neoclassical economics that does not adequately delve into the issue in ECON 10l.

3.7 Government Intervention

Mainstream neoclassical economics does not countenance government intervention for price ceilings (rent controls) or price floors (minimum wage), as deadweight loss arises because markets no longer remain in equilibrium. However, the authors reject the notion of equilibrium as an ossified idea that rests on Newtonian physics that has been left behind with advancements in quantum physics. They highlight the Post Keynesian defense of minimum wages that not only increase the workers' standard of living and reduce inequality but also increase consumer demand and expected return to investment, which in turn support employment (p. 135). Similarly, they justify rent controls because markets with rental housing in short supply favour "slum" landlords, who historically charged high rents for poor quality apartments (p. 214). The authors also go against the grain of mainstream neoclassical economics by stating that private ownership of common resources does not mean that resources will be used sustainably, and that it is often the cause of overexploitation and ecological degradation (p. 68, 187). Finally, while mainstream neoclassical economics supports the use of patents to spur innovation and Pigouvian taxes to correct externalities, the authors argue that patents protect monopoly power and therefore do not spur but deter innovation, and that using Pigouvian taxes simply reinforces polluting behaviour and the mindset that a fee can always be paid (p. 180, 204). Thus, in contrast to mainstream neoclassical economics, the authors support rent controls and minimum wage, and downplay patents and Pigouvian taxes.

3.8 Government and Monetary Policies

Mainstream neoclassical economics, as upheld by Mankiw (2020b) allows for expansionary fiscal and monetary policies to address recessions. However, the authors state that even with sophisticated models, neoclassical economists could not predict the financial crisis because they view recessions resulting from external shocks to the economic system, whereas Marx, Keynes, and Minsky explained recessions as inbuilt within a capitalist system (p. 252, 253, 255). Specifically, they assert that expansions contain the seeds for recessions, as rising investment and profits lead to higher capital stock, which then reduces the profit rate and future investment (p. 251, 252). Additionally, they favour government policy to revive the economy, by borrowing from the central bank to build houses, infrastructure and invest in energy efficiency technologies, and support Krugman's view of rejecting austerity, which manifests through wage reductions (p. 145, 264).

However, they are critical of the efficacy of monetary policy, specifically of negative interest rates, which are meant to decrease the cost of making a loan or incentivize consumers to spend (p. 145). They state that the autonomy of monetary policy is limited by free flow of capital and speculation, irrespective of flexible or fixed exchange rates (p. 306). Additionally, they assert that the lender of the last resort function of the central bank is not a substitute for prudential bank practices, as it contributes to moral hazard on part of the banks (p. 321). More generally, they reject the axiomatic principle in mainstream neoclassical economics that inflation is always a monetary phenomenon, because central banks started focusing on short term interest rates instead of monetary aggregates and because the father of monetarism, Milton Friedman admitted it's failure in 2003 (p. 303). In a nutshell, the authors give precedence to the role of government policies over monetary policy in addressing financial crises and recessions.

3.9 Free Trade

Mainstream neoclassical economics upholds the axiomatic principle that free trade makes every nation better off. However, the authors state that free trade is not necessarily fair trade, and that free trade relies on cheap energy, which is unsustainable (p. 296). They assert that mass production is undertaken in countries with poor environmental standards and low wages, and therefore trade takes a heavy toll on the environment, as components of the goods are transported across the world many times before the final good is sold (p. 297). Additionally, they mention that nations like U.K. and the U.S. started off as highly protectionist and only started preaching free trade after they become economic superpowers, as they needed unrestricted access to cheap resources and consumer demand in the global market (p. 224).

The authors state that Ricardo himself acknowledged the unrealistic assumptions of his theory based on comparative advantage that the two countries be relatively equal in wealth to prevent the richer country from getting more favourable terms of trade, have perfect competition, full employment, and unrestricted flow of capital, and have constant instead of increasing returns to scale so that smaller countries could produce as efficiently as the bigger ones (p. 310). Additionally, they highlight that Ricardo's theory was developed in a time without concern for environmental limits, and that free trade exposes unskilled workers to international competition where their wages fall, and that it strengthens the economic power of elites in poor countries (p. 311). Finally, the authors state that many developing countries have not achieved sustainable economic development based on market liberalization, reduced government intervention, and reduced regulations and safety nets, as pushed by global institutions like the IMF, WTO and the World Bank, as financial capital flows increase macroeconomic instability and unemployment (p. 279, 288, 318). In a nutshell, the authors reject free trade as beneficial for all contexts and all times and critique the role of global institutions that promote free trade, stating that they have contributed to macroeconomic instability and unemployment.

The comparative review of the salient ideas in Reardon et al. (2018) in juxtaposition with Mankiw et al. (2002a; 2020b), contrasting heterodox economics with mainstream neoclassical economics, undertaken above can be summarized in the following table for ease of reference.

Table 1: Contrasting Heterodox Economics with Mainstream Neoclassical Economics

Topic	**Heterodox Economics** *Reardon et al. (2018)*	**Neoclassical Economics** *Mankiw et al. (2020a; 2020b)*
Principles of Economics	Accepts people are not always rational, rejects equilibrium and perfect competition as unrealistic, upholds sustainability	Assumes rationality, upholds equilibrium, views perfect competition as the default model, upholds efficiency
Sustainability	Cautions against conspicuous consumption, views the limits of recycling; technology is not an elixir for sustainability	Technological change, recycling and energy efficiency investments will alleviate energy scarcity

Economic Inequality	Focuses on relative poverty; explains inequality through corporate power; addresses inequality early in the textbook	Usually addresses absolute poverty; explains inequality through globalization and technological change; relegates inequality to back of the textbook
Financialization	Explains inequality through financialization, where short term financial activities take over the real economy and employment generating investments	Focuses on incentivizing corporations through corporate tax cuts; explains that the burden of corporate taxes is shifted to workers
Corporations	Associates Fordism with worker dissatisfaction and turnover; views corporations as complicit in worker abuse; treats workers cooperative as an alternative	Efficiency wage leads to low workover turnover and boosts productivity; views the goal of the firm to maximize shareholder wealth
The Future of Work	Presents basic income as a solution to automation and loss of decent jobs; rejects criticism that basic income reduces work incentives; emphasizes meaningful work	Does not adequately address the issue; generally, raises concerns on affordability or work incentives
Government Intervention	Supports rent controls and minimum wage; downplays patents and Pigouvian taxes.	Rejects rent controls and minimum wage; supports patents and Pigouvian taxes.
Government and Monetary Policies	Views recessions as intrinsic to capitalism; rejects austerity and gives precedence to government policy to invest in projects; critical of the limits of monetary policy; inflation is not always a monetary phenomenon	Views recessions as external shocks to the economy; showcases the use of fiscal and monetary policies; views inflation as a monetary phenomenon
Free Trade	Rejects free trade for all contexts and all times; Trade takes a heavy toll on the environment; Free trade is not always fair trade; contributes to lowering the wages of workers	Free trade makes every nation better off

4 Amplifying Reardon et al. (2018) with Video Clips

As noted in Section 2, since the Becker and Watts (1996) critique of the chalk and talk method of teaching Economics, several instructors started using video clips, music, photography, and social media tools to convey the salient ideas and principles of mainstream neoclassical economics. Such visual methods are used to make economic content more relatable and increase student interest and retention of economic ideas (Acchiardo et al. 2017). However, Al-Bahrani et al. (2016) caution that such methods in the form of assignments and projects should be used as complements rather than as substitutes to traditional teaching, so as not to dissuade the traditional economics student from learning. Notwithstanding this critique, the objective in this section is to amplify some key ideas of heterodox economics by pairing the salient topics from Reardon et al. (2018), which are presented in dense blocks of texts, with exciting video clips. Where Deyo and Podemska-Mikluch (2014) use the Harry Potter world and O'Roark (2017) uses comic book superheroes to discuss economic concepts like trade-offs, opportunity costs, diminishing returns and incentives, such principles and ideas can often be explained universally through many movies and animations. Similarly, Luccassen et al. (2011) uses clips from Beavis and Butthead, Duck Tales, Futurama, and The Simpsons to explain the velocity of money, inflation and long run monetary policy, future and present value, mismeasurement of GDP and structural unemployment. No wonder, a huge literature has sprung up on showcasing such video clips and resources, as documented by Wooten et al. (2021).

However, the emphasis here is on those clips that are part of popular culture, showcase the salient ideas in heterodox economics, and are about 10 minutes in duration. This is because educators suggest that student attention span wanes after about 10 minutes (Luccasen et al. 2011). To this end, the episodes from ThunderCats Roar (2020) come in handy, as they are part of popular culture even if panned by older fans, about 10 minutes in duration and often touch upon ideas upheld by heterodox economics. The show is about a group of human like cats, Lion-O, Tygra, Cheetara, Panthro, WilyKit, WilyKat, and Snarf, whose planet is destroyed and they take refuge on Third Earth where they befriend the resident robots called Berbils and battle their nemesis Mumm-Ra, an ancient mummy, along with a bunch of mutants including Slithe, Monkian, Jackalman and Vultureman. Apart from episodes from this show, other clips from the movies

Christopher Robin (2018), The Company Men (2010), the Indian film Mazdoor (1983) along with the Fear the Boom and Bust: Keynes vs. Hayek (2010) rap video are also highlighted. Additionally, it is not necessary that instructors or students have watched these movies and shows before, as Luccasen et al. (2011) indicate that even if they have not watched a particular show, students nonetheless get intrigued by the idea that cartoons could offer economic content. These clips are showcased as follows, as paired with the salient ideas from Reardon et al. (2018).

4.1 Principles of Economics

In episode 26 of ThunderCats Roar titled "Snarf's Day Off", the ThunderCats' pet robot Snarf disguises as a cat called Mr. Bottom Dollar to spend time with Mrs. Gristidi who sells calendars based on Mr. Bottom Dollar's pictures at the Craft Fair. The evil protagonist Mumm-Ra also disguised as Jethro is in competition selling ceramic frogs. The episode shows that Mrs. Gristidi has loyal customers, one of whom says that he loves whatever is sold by Mr. Bottom Dollar. In competition, Mumm-Ra, as Jethro, tries to entice customers by offering his ceramic frogs at 50% off and then through other gimmicks. Yet, people refuse to be swayed even when Jethro offers the ceramic frogs for free. This neatly ties with the idea raised by Reardon et al. (2018) that people may not respond to incentives because they may not be rational, have established habits or brand loyalty (p. 53). Showing this clip can lead to an interesting discussion on consumer habits and the limits of competition.

Figure 1: ThunderCats Roar Episode 26: Snarf's Day Off

Image Source:

https://thundercats.fandom.com/wiki/Snarf%27s_Day_Off?file=ThunderCatsRoarEpisodeSnarfsDayOffSc10.jpg

4.2 Sustainability

In episode 7 of ThunderCats Roar titled "Panthro Plagiarized", Panthro invents a gravity fork, which pulls in food through gravitational force generated by the fork. While this makes the ThunderCats happy, it turns out that their nemesis mutant Vultureman, plagiarizes Panthro's idea and creates an even stronger gadget, which he calls the gravity pincher. This allows Vultureman to terrorize the resident Berbils of Third Earth. He even has a monument built of him that showcases that his invention has been trademarked. A standoff ensues between Panthro and Vultureman, where both use their technological inventions to battle one another and, in the process, they end up uprooting trees, causing molten lava from a mountain, and bringing Third Earth to destruction by drawing the moon closer. This ties up with the idea raised by Reardon et al. (2018)

that technology is not an elixir for sustainability and if anything, technological competition instigates faster depletion of resources. Showing this clip can also lead to an interesting discussion on the role of patents towards sustainability.

Figure 2: ThunderCats Roar Episode 7: Panthro Plagiarized

Image Source:

https://thundercats.fandom.com/wiki/Panthro_Plagiarized!?file=ThunderCatsRoarEpisodePanthroPlagiarizedSc23.jpg

4.3 Economic Inequality

In episode 31 of ThunderCats Roar titled "Corporate Buyout", Cheetara's 7-year-old acting CEO, JanJan, of her multibillion-dollar company uses the company credit card for conspicuous consumption including shrimps, massages, and resorts. The company goes bankrupt and is taken over by Karnor's company. Cheetara is unable to save her employees from Karnor's takeover and the episode makes both Cheetara and JanJan realize that being CEO isn't about spending money and riding dolphins. The episode shows how both get into action to save their company together and finally reveals that Karnor is actually dead and that his takeover continued long after he became a bag of bones behind the computer. Cheetara and JanJan recognize that there is more to life than running a business, and that is, living. This ties up with the idea raised by Reardon et al. (2018) that economic inequality results when corporations shift towards short term mergers and acquisitions, which instigates corporations to reduce employment (p. 133, 134). Showing this clip can lead to an interesting discussion on conspicuous consumption, the lifestyle and games played by excessively rich CEOs and the perilous nature of the jobs of the average workers, who earn a pittance in comparison.

Figure 3: ThunderCats Roar Episode 31: Corporate Buyout

Image Source:

https://thundercats.fandom.com/wiki/Corporate_Buyout?file=TempTitleCardForThunderCatsRoarEpisodeCorporateBuyout.png

4.4 Financialization

The movie The Company Men (2010) has a factory scene where Tommy Lee Jones, the Chief Financial Officer of a shipbuilding corporation gives a spiel to Ben Affleck's character, an employee with a six-figure salary, who is laid off, as the company begins to restructure to increase profits, increase the stock price and thwart a hostile takeover. This ties up with the ideas raised by Reardon et al. (2018) that corporations shift towards short term mergers and acquisitions, the connection between the real and the financial economy is severed, and firms hoard cash instead of engaging in investment and therefore, they amass wealth instead of expanding employment (p. 64, 128, 129, 147). Showing this clip can also lead to an interesting discussion on the work of construction workers and garbage collectors that contribute to the economy compared to the work of financial executives and brokers that add to wasteful speculative activities without any contribution to the real economy.

Figure 4: The Company Men: The Factory Scene

"We used to make something here. Back before we got lost in the paperwork. At one time, we had a frigate, right here, back there. Guided missile cruiser. ... Two thousand men a shift, three shifts a day. Six thousand men earned an honest wage in that room. Fed their kids, bought homes. Made enough to send their kids to college. Buy a second car. Building something they could see. Not just figures on a balance sheet, but a ship. They could see, smell, touch. Those men knew their worth, knew who they were.

One day you're making fifty dollars the next day, 5,000. And then one day, five million. Start out with a crazy plan. Take insane risks. Barely make enough money to feed your family. Not a chance in hell you're going to succeed. And then, all of a sudden, you've got all these things. You get terrified of losing them. Stock options, corporate jets, vacation homes in the Bahamas. You know.

Truth is... I like 500-dollar lunches and 5000-dollar hotel suites. Now everything I spent 30 years trying to build for myself and everybody else is gone."

Image Source: https://www.youtube.com/watch?v=fXoxxdWLc80

https://subslikescript.com/movie/The_Company_Men-1172991

4.5 Corporations

Komlos (2021b) argues that mainstream neoclassical economics is replete with assumptions that support structural or systemic racism. Keeping this in view, a clip from the Indian movie Mazdoor (1983) is considered instead of one from western movies. This clip is of a song with legendary Bollywood actor, the late Dilip Kumar (d. 2021) that is centered on the *mazdoor* (labour) and the ills of *sarmaya dari* (capitalism). The distinct lyrics of the song with the repetitive parts removed along with the English translation are presented below. This ties up with the ideas raised by Reardon et al. (2018) on how corporations are complicit in workers' abuse in countries like Bangladesh and how workers' cooperatives are alternatives to corporations, as profits are shared with employees, who also manage the workplace with participatory decision making (p. 101, 188, 189, 191). Showing this clip can also lead to an interesting discussion on workers' rights and living standards under capitalism versus welfare economic systems in Scandinavian countries.

Figure 5: Indian movie Mazdoor: Lyrics with English translation

Song Lyrics	English Translation
Hum mehnat kash is duniya se *Jab apna hissa mangenge* *Ek bagh nahi ek khet nahi* *Hum saari duniya mangenge* *Doulat ki andheri raato ne* *Mehnat ka suraj chupa liya* *Doulat ki andheri raato se*	*When us hardworking labour* *will ask for our rights* *It won't be a garden or a field* *We'll ask for the whole world* *The dark nights of wealth* *have hidden the sun of labour* *From the dark nights of wealth*

Hum apna savera mangenge	*We'll ask for our morning*
Kyo apne khoon pasine par *Hak ho sarmaya dari ka* *Mazdoor ki mehnat par hum* *Mazdoor ka qabza mangege*	*Why should our blood and sweat* *Be beholden to Capitalism* *On the hard work of labour* *We'll ask the control of labour*
Har zor zulam ki takar me *Hartaal humara nara hai* *Har zalim se takrayenge* *Har zulm ka badla mangenge*	*Against every oppression* *We'll raise the slogan of strikes* *We'll face every oppressor* *We'll seek justice for every oppression*

Image Source: https://pagalworld.icu/song/12729/hum-mehnatkash

http://www.lyricsgram.com/song/hum-mehnat-kash-21480

4.6 The future of work

In episode 12 of ThunderCats Roar titled "Working Grrl", JanJan's people accept Cheetara as their mayor as she is the fastest on the racetrack. However, Monkian drinks a speed potion to beat Cheetara, and the whole town immediately replaces her with Monkian as the mayor. Monkian then proceeds to enslave the people in chains and makes them work on gargantuan projects for self-aggrandizement. Cheetara in turn becomes the CEO of a company and eventually takes over the Monkian racetrack and has him evicted. The episode shows the fickle nature of celebrity cults, how people with a particular skill are easily replaced because of technology (the speed potion), and how justice eventually comes not from talent but from a corporate takeover. This ties up with the ideas raised by Reardon et al. (2018) generally on meaningful work that brings people joy in contrast to conspicuous consumption and the significance of corporations in the economy. Showing this clip can also lead to a discussion on supporting basic income because of automation and technological progress.

Figure 6: ThunderCats Roar Episode 12: Working Grrl

Image Source:

https://thundercats.fandom.com/wiki/Working_Grrrl?file=ThunderCatsRoarEpisodeWorkingGrrrlSc20.jpg

4.7 Government Intervention

The movie Christopher Robin (2018) has a boardroom scene where Ewan McGregor, who plays the titular character and works for the company Winslow Luggages, highlights the significance of the purchasing power of average working people at the board meeting. This loosely connects with Reardon et al. (2018) on the issue of consumer demand, when they highlight the Post Keynesian defense of minimum wages that increases consumer demand and expected return to investment, which in turn supports employment (p. 135). Showing this clip can also lead to a discussion on the significance of maintaining the purchasing power of the average worker compared to corporate tax cuts that fatten company executives and their shareholders.

Figure 7: Christopher Robin: The Boardroom Scene

"Because the answer to all your problems is nothing ... What happens when people have time off work? Nothing to do. They go on holiday. And what do people need to go on holiday? Luggage, Mr. Winslow! You employ thousands of people all across your companies and if you

were to give them all paid holidays … At the moment, you supply the wealthy. And no one else. Do you see? But now look. If we all could afford to go on holiday up here, there would be hundreds and thousands of ordinary people going to the countryside, to the lakes, and beaches, all with their Winslow Luggage. And if we made the prices cheaper then everybody could afford to buy them."

Image Source: https://www.ncronline.org/news/media/christopher-robin-offers-respite-your-concerns

https://subslikescript.com/movie/The_Company_Men-1172991

4.8 Government and Monetary policies

The Fear the Boom and Bust: Keynes vs. Hayek (2010) rap video has been quite popular as an educational resource for undergraduate economics. While the lyrics of the entire rap is full of references to Keynesian economics and Hayek's ideas, two of the stanzas, one by Keynes and the other by Hayek, emphasize the limits of monetary policy and the idea that the seeds of a recession are sown during an expansion. This ties up with the ideas raised by Reardon et al. (2018) that expansions contain the seeds for recessions, as rising investment and profits lead to higher capital stock, which then reduces the profit rate and future investment; and the limits of the efficacy of monetary policy, specifically of negative interest rates (p. 145, 251, 252). Showing this clip can also lead to a discussion on the role of running a deficit during a recession, the futility of austerity policies, lower taxes and the slice and dice approach to necessary social expenditures.

Figure 8: Fear the Boom and Bust: Keynes vs. Hayek

Keynes:

And if the Central Bank's interest rate policy tanks

A liquidity trap, that new money's stuck in the banks!

Deficits could be the cure, you been looking for

Let the spending soar, now that you know the score

Hayek:

The place you should study isn't the bust

It's the boom that should make you feel leery, that's the thrust

Of my theory, the capital structure is key.

Malinvestments wreck the economy

Image Source: https://www.youtube.com/watch?v=d0nERTFo-Sk

4.9 Free Trade

In episode 34 of ThunderCats Roar titled “Berb-cules”, the Berbils who had built Cat’s Lair for the ThunderCats and Castle Plundarr for the mutants, get bullied by the mutants. The ThunderCats counsel them not to build for the evil mutants. The Berbils then build a huge robot they call Berb-cules that ends up taking away both Cat’s Lair and Castle Plundarr. This leads to an interesting question on what would happen if workers were to revolt against corporations to demand their rights. While Reardon et al. (2018) do not directly address this issue, they reject free trade as beneficial for all contexts and all times and it is in this context that the video loosely ties up with the textbook. Showing this clip can also lead to a discussion on what would happen were China to pull out its investments from the U.S. or when it started asking for payback for all the huge investments it has been making in Asia and Africa.

Figure 9: ThunderCats Roar Episode 34: Berb-cules

Image Source:

https://thundercats.fandom.com/wiki/Berb-cules_(episode)?file=TempTitleCardForThunderCatsRoarEpisodeBerbcules.png

5 Concluding Remarks

The objective in this paper was to showcase how instructors could address the critique that many ECON 101 students do not major in Economics partly because of the way it is taught through the chalk and talk method and partly due to the subject content that emphasizes abstract models over pressing real life contemporary issues of climate change, inequality, and financial crises.

Thus, the critique is of both content and presentation. To this end a review of salient ideas of Reardon et al. (2018) was undertaken in juxtaposition with the position of the Mankiw et al. (2020a, 2020b) textbooks that uphold mainstream neoclassical economics. This was done to address the critique on content, as Reardon et al. (2018) focus on a just and pluralist approach to the pressing issues of our times. Additionally, a comparative review was undertaken to showcase the diversity of thought in economics instead of indoctrinating students with a particular ideology. However, Reardon et al. (2018) is by no means a perfect textbook, as it is devoid of colourful illustrations and rests on dense blocks of texts. Therefore, the salient ideas of Reardon et al. (2018) were paired up with video clips from movies and cartoons. This helps address the critique on presentation. Additionally, as any textbook has limitations of its own, hopefully Reardon et al. (2018) can add more substance on Modern Monetary Theory and cryptocurrencies in future editions.

The limitation of this paper lies on the use of movie clips and the show ThunderCats Roar, whose episodes are not freely available on YouTube and instructors may have to subscribe to Amazon Prime to access them. Additionally, there may be overlap in the economic content of the various videos. For instance, both “Working Grrl” and “Corporate Buyout” may allude to similar themes on corporations. Although, it is up to the instructor to evoke the ideas they want to emphasize in class. Finally, while this paper sets the stage for accessing heterodox economics content from movie and animation clips, a lot more content can be accessed from other episodes of ThunderCats Roar and from other movies, animations and shows generally. In a nutshell, just as there has sprung up a huge literature on showcasing the principles of mainstream neoclassical economics through popular movie and cartoon clips, this paper endeavours to do the same by amplifying the ideas of heterodox economics by pairing Reardon et al. (2018) with video clips.

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