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Capitalism Versus the Sharing Economy

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I. Introduction

The foundations of the contemporary capitalist system rely on the transfer and manipulation of knowledge and ideas on the global stage. What defines a nation's economic might is not necessarily its GDP or its abundance of natural resources but rather the quality of the ideas it contributes and its capacity to affect social change. While today's environment seems to valorize the individual's value over that of the masses, it is the collective ability of a community to produce certain forms of knowledge that society valuable. By investigating the underpinnings of today's knowledge economy, it becomes clear that *sharing* is the most effective tool for generating more value. This realization, however, carries with it a fundamental contradiction within capitalism: to become more profitable and access a larger market, traditional economic models must be ignored, or, at least, adapted to today's cultural scene. The very technologies and principles that have enabled capitalism to reach its ideological dominance are now the tools that are threatening its existence as we know it. However, rather than accepting this fact, capitalism and its proponents have chosen to battle it head on, without considering the collateral damage – the people.

The situation capitalism faces can best be understood by looking at how specific technologies, which, ironically, are the consequence of a capitalist drive to maximize profit, are being utilized in ways that rattle capitalism's underpinnings. By looking at how open source culture and community-driven content are being used today, one can see how today's capitalist

system is either going cede to this hybrid economy, which rests on the boundary of community and industry, or simply crush its creative potential.

The concept of sharing, the basis of the open source culture, is nothing new, but it has recently emerged as the most effective way to distribute knowledge. The creation of the Internet, which allows the individual to contribute his own content and engage with others', has allowed for a deeper level of discourse on a vast array issues; anything from conspiracy theories to Disney World can be discussed from a variety of viewpoints, in varying depth. The exchanges of arguments and ideas that flow through Internet forums, blogs, and other websites, facilitate a virtual society that gives anyone with access to the Internet a voice. By sharing information in the form of news articles, comments, videos, tweets, and more, a greater number of people are informed of the events and people that surround them. This increased knowledge boosts productivity by giving individuals the information to make better decisions and thereby helps the economy.

II. Wikipedia

A good starting point for this discussion of the hybrid economy is Wikipedia because it illustrates many of the core tenets that distinguish it from capitalism. Wikipedia, "The Free Encyclopedia that anyone can edit", is a community-based encyclopedia. Wikipedia created a so-called "copyleft" license that ensured information found on the site would always be free, thereby setting the "final founding norm for this extraordinary experiment in collaboration" (Lessig 157). Its entire premise rests on the idea that information should be free and accessible to everyone and that anyone should be able to contribute to this project. Wikipedia has become a

¹ In this essay, I use the term "hybrid economy" and "sharing economy" interchangeably because they refer to the same concept with slightly different emphases. The "hybrid economy" refers to the adaptation of traditional capitalist ideals to modern technologies. The "sharing economy" highlights the open source, easily accessible aspects of this new economic system.

pinnacle of the sharing economy, which entirely depends on individuals collaborating and volunteering to work for a common cause.

Lessig's concept of a RO (Read Only) versus a RW (Read Write) culture is particularly applicable to a medium such as Wikipedia. Lessig argues that historically, consumers primarily existed in a RO environment: they could only receive content and use it in a way intended by the company that sold it. Today, however, we live in a RW environment: consumers can receive content and then use/modify it however they want (58). A major driving force behind this shift was the change from analog technology to digital technology. Digital technology has enabled common people to copy, remix, mashup, and alter content with ease; the Internet is the primary platform on which this RW culture spreads.

Clearly, Wikipedia sits at a junction of RO and RW culture: individuals can visit website and read content, or they can edit the content themselves. Wikipedia is proof that RO and RW culture are not mutually exclusive, and that an "either X or Y" framing is simply reductionist. As Lessig states, "all the evidence promises an extraordinary synthesis of the past and the present to create a phenomenally more prosperous future. This future need not be either less RO or more RW: it could be both" (34). This synthesis between the past and present, RO and RW, is a defining feature that makes this hybrid economy powerful because it combines the best elements of both systems.

By allowing an individual to contribute to collective effort to document "every" topic, Wikipedia introduces a new aspect of individual responsibility in a public context. The fundamental idea that a member of society should invest himself in such a collaborative project sends a powerful message that people can and should be trusted to do the right thing, which in this case is to accurately input information. While there are deviants from this concept, referred

to as "trolls", these deviants are a very small minority. Additionally, the setup of Wikipedia ensures that, for the most part, only reliable information is added to its collection.

The system Wikipedia introduces completely diverges from the paths traditionally taken by publishers, which is designed to incorporate only the voices of the select few individuals who are deemed "experts" by some measure. While there is no doubt that this boosts the credibility of such sources, it does not guarantee anything about its quality. A report conducted by *Nature* shows that the number of errors found in Wikipedia is only slightly greater than what is found in Encyclopaedia Britannica; on average, both make about the same number of errors per article (Giles 900). This research is alarming for institutions such as Encyclopaedia Britannica and peeredited journals that profit from a monopoly on high-quality information; after all, most people can accept a few mistakes if it eliminates costly subscriptions. Not only is Wikipedia material on par with publication material, it is more frequently updated because it is online and can be updated by anyone, an idea known as crowdsourcing. Crowdsourcing allows people to pool their information and skills for a collective cause, and its power is compounded by the accessibility technology has provided. Because anyone, anywhere can contribute to a crowdsourcing effort, sites like Wikipedia can thrive.

III. Github and StackExchange

Many of the same principles that drive Wikipedia have sparked other websites as well, such as GitHub and StackExchange. GitHub is a version control system for programmers; what that means is that it is a web platform with which programmers store, update, and collaborate on projects. Its motto, "Build software better, together" summarizes its guiding principle: like Wikipedia, it aims to bring together the coding community by sharing code and working together on software development. Much of the work that is publicly available is from individuals or

small teams that are trying to bring a product to life. When someone sees an interesting project they think they could contribute to or modify, they can either "branch" the owner's repository, make changes, and commit those changes to the project, with the owner's permission, or he can clone the project and work on it on his own. Either way is normal, and neither is considered to be any form of theft – such engagement is encouraged.

This transparency not only results in better software, but it also makes GitHub a useful tool for learning programming from other developers: "Being able to watch how someone else coded, what others paid attention to, and how they solved problems all supported learning better ways to code and access to superior knowledge" (Dabbish 7). GitHub's network is built on relationships where inexperienced programmers can learn from the veterans, and everyone shares what they have built with each other. The educational value of a site like GitHub should be reason enough to promote its open source culture; it improves workers' and enthusiasts' technical skills, thereby boosting productivity and generating economic value. Individuals from across the planet are creating "virtual archipelagos" of cooperating software developers that are all connected through the Internet (Takhteyev 9). Research from Carnegie Mellon shows that GitHub's "transparency can support innovation, knowledge sharing, and community building" centered on commitment, work quality, personal relevance, and community significance (Dabbish 10). This research shows that almost all the consequences of a platform like GitHub are positive.

To further expand this notion of a sharing economy, consider a tool like StackExchange. This website is composed of multiple networks of communities that bring together "experts and enthusiasts" in a common forum, where community members can ask questions and discuss anything that falls within that forum's topic. For example, StackOverflow, which is the original

forum that kicked off StackExchange, is a massive network where programmers, ranging from novices to masters, come together and ask/answer questions. The site's popularity arises from its simplicity: you simply post your question, and anyone with the necessary knowledge can answer it. Questions and answers are rated according to their popularity (i.e. how many people found it intriguing/useful) and so the experience is almost entirely user-driven. The power of such a tool is enormous: anyone, anywhere, can ask a question and get excellent answers, often from professionals/experts in that field.

If knowledge is truly power, then clearly a site like StackExchange threatens the hierarchies that are fundamental to the structures of capitalism. When combined with the collaboration of GitHub, "social coding" clearly becomes a reality because programmers have a nurturing ecosystem in which to grow as programmers. Research shows that there is positive correlation between activity on GitHub and activity on StackOverflow; this suggests that as programmers develop their skills, they become more active on both sites, thereby contributing to the code, questions, and answers they provide (Vasilescu 7). What makes these sites so unique is that rather than extracting value from consumers by charging them money for this knowledge, they trust that the knowledge they distribute will generate value on its own in the forms of increased worker productivity, improved software, and even the creation of new startup companies. Clearly, this generated value doesn't add to GitHub or StackExchange's own profits, and that's inherently where the value of open-source lies — in the value it generates for its community instead of corporations.

The growth of sites such as GitHub and StackExchange, and even social networking sites, such as Facebook and Twitter, suggests that there is an increased demand for user-driven content. Nowadays, people are not willing to depend on corporations to provide them with news

or entertainment – they want to go out and make it themselves. Society refuses to limit itself to the roles traditional capitalism defines for them: employee at a company, performer at a theater, or artist in a studio. Instead, an employee might also want to display his drawing skills, or a pianist may want to show off her web design skills. Traditional economic modes are not suited for this type of crossover: they assign one professional role to each person.

IV. YouTube

This demand for user content is nowhere more visible than at YouTube. YouTube is a different shade of the community-based approach to user content from the ones discussed before. While sites like Wikipedia and GitHub are primarily informational resources, YouTube brings different features to the table. YouTube hosts video content for its users in a vast range of topics, from music videos to how-to videos to comedy skits and more. What makes YouTube so appealing is the fact that anyone can participate in this online community. When videos were exclusively created by large media conglomerates or large studios just a few decades ago, the general populace acted as a passive observer; the common man was simply a recipient. Now, as the people have become producers, the dynamic upon which large corporations previously relied to reap their profits has drastically changed (Burgess 91). The landscape is not so simple anymore: suddenly, people don't need industry content because they can create their own. Of course, it might not be of a "Hollywood" level of quality, but now there is clearly no monopolistic grasp on the video market by industry. Thus, the individual consumer has become empowered, which is exactly the opposite of what companies in a traditional capitalist mindset want.

Looking at how empowerment relates to structures of capitalism, it is clear that YouTube occupies an interesting space at the intersection of society and industry or as Patrick Vonderau,

Associate Professor at the Department of Cinema Studies at Stockholm University, states, "the peculiarity of YouTube lies in the way the platform has been negotiating and navigating between community and commerce. If YouTube is anything, it is both industry and user driven" (11). This peculiarity creates a tension that companies aren't comfortable with. There is so much original content being produced daily by individuals from across the world, it has definitely taken a toll on industry's ability to dominate the business of video entertainment. The notion of "YouTube celebrities" is an excellent example of the success that reflects the nature of YouTube. People whose talents normally may have gone unnoticed can explode in this environment; singers, comedians, artists and more have a broader audience than anyone could have imagined ten years ago (Burgess 100). The empowered, independent consumer is now not only free from dependence on corporations but is also a producer of content.

As corporations try to control production, distribution, and access to content, technologies like YouTube make it easier for common people to subvert these companies, often by accident. There are many instances where individuals have uploaded clips of popular media or parodied content and found themselves facing legal action. Covers of Metallica Albums, scenes from Disney movies, and more, are often the subject of lawsuits from corporations and record labels that claim to be protecting the "owner's" content. Such legal penalties, which can be thousands of dollars, threaten the community YouTube aims to foster, in which creative expression is encouraged and unbounded. Conversely, some even argue that YouTube isn't community-based enough and that "YouTube represents a Web 2.0 model of the sharing economy and not a true commons project; groups or individuals may share their creative content, but they have to rely on a proprietary platform" (Vonderau 118). While this argument is true, the

site is not technically 100% user-driven, YouTube is a leap in the direction of a proper sharing economy.

V. Peer-to-peer sharing

In this discussion of the ways in which the sharing economy operates, it is impossible to overlook the significance of peer-to-peer (P2P) sharing. P2P sharing is exactly what the name suggests: a decentralized way of sharing content between users. Prior to P2P sharing, content distribution could be visualized as a tree, with the base (or trunk) being the producer of the content, generally a company. In this model, there is a single point of distribution that all consumers rely on. A P2P system can be visualized as a spider web, where there is no base, and each point is connected to another by multiple threads. Every user can share and use content from each other, thereby reducing reliance on a single producer.

An especially popular form of this technology is BitTorrent. BitTorrent is a tool that enables the practice of P2P sharing by connecting its users with each other in a way that allows any individual to access content that any other individual is willing to share. Clearly, P2P technologies break away from the traditional business model. Consumers are less likely to go to the companies for content because consumers can now also act as distributors. As discussed earlier, this situation causes companies to act in the only way they think is reasonable: they file lawsuits. These lawsuits are a natural response to consumers "infringing" on their property and are a consequence of traditional capitalism's instinct to protect one's property.

Such technology changes not only the economic landscape but also changes the sociopolitical one. Ian Condry, cultural anthropologist at the Massachusetts Institute of Technology, states "new digital technologies can reconstitute the power of media, which in the broadcast era was, and to a large extent still is, dominated by wealthy elites and powerful corporations. The makers of BitTorrent contend that their technology can help produce a more democratic public sphere by mitigating the distortions of wealth" (199). Condry isolates an interesting interplay between technology and capitalism: increased access changes the public sphere and reduces the inequalities of capitalism. As the public acquires tools like BitTorrent, they take charge of their economic fate, instead of leaving it in the hands of the "market forces".

Out of all the technologies discussed so far, P2P sharing seems the most like stealing: one can download almost any music, movie, TV show, video game, or other media for free. But an interesting way to frame this, as Lessig explains, is to compare it to theft of a physical object (284). When someone steals a computer, they remove the object from the possession of the owner and keep it with themselves. However, when someone downloads a movie, the movie is simply duplicated, and now both the "owner" and consumer have a copy. This example illustrates a new idea that is fundamental to the sharing economy: ownership is not a zero-sum activity. In fact, one of the most significant features of digital content is its ease of transport and distribution; instead of mailing your friends a VCR tapes, you can simply attach the file in an email and send it to all your friends at once, almost instantaneously. Yet, companies aim to treat digital content such as music and movies as physical objects, as to maintain their control over its spread and use. This increased regulation from companies on how, when, and where consumers can use digital media creates a pressure buildup that is released in the form of digital "piracy" or P2P sharing (Lessig 272). In a way, digital sharing neutralizes the stranglehold corporations have on content and gives the consumer a way to fight back against the overly-restrictive industry.

VI. Conclusion

Capitalism's resilient nature has allowed it to exist as one of the most successful economic systems of all history. Through its booms busts, capitalism has brought with it higher

standards of living, structure for society, and innovation. However, in the process of creating growth, it generated tools such as the Internet that often contradict its own principles. The Internet, computers, digital media, and more, have directly contributed to much of recent history's economic advancement but, at the same time, now challenge this very system. Capitalism now stands at an interesting crossroads between its past and present: it has to reconcile the technologies it has spawned with the laws that define it. The advent user-driven technologies over the past decade or so have redefined the global economy; the structural limitations of traditional capitalism have been exposed and tested by websites and technologies such as Wikipedia, GitHub, StackExchange, YouTube, and P2P sharing. Each carries with it an interesting array of features that distinguish it from conventional business models and illuminate the future of the hybrid economy. The concepts of RW technology, collaborative learning, open source culture, and decentralized networks are part of a technological revolution that rests on the notion that sharing is the most productive way to engage with the world. This concept stands in direct contrast to the traditional school of thinking, where limiting access and distribution of knowledge, expertise, products, and content, is the best way to stimulate economic growth.

However, what makes these technologies so interesting is not how they can converge and "fit in" to this new economy, but rather the ways in which they diverge from the old and bring new economic and social value to the world. The collaborative nature of the discussed Internet projects prioritizes the user above the company and values collaboration over competition. The user-driven approach to markets is clearly appealing because it is distributes content tailored for the user and produced by the user. Tools such as YouTube and BitTorrent enable users to share with each other directly without requiring corporate intermediaries or expensive equipment. In a sense, these technologies seem to unify the consumer against the corporations and bypass

traditional structures, thereby restoring power to the "people", who are also happen to be the consumers.

In response to these emerging technological and economic trends, the capitalist system has two main options: repress these changes or adapt to them. So far, it appears that capitalist institutions are fighting to prevent these changes from altering the traditional economic landscape through increased regulation, propaganda, lawsuits, and other penalties. However, as companies and government begin to understand the overwhelming evidence that sharing truly is the most powerful tool for the next generation economy, it is probable that capitalism will adapt as it historically has. The hybrid economy is not some distant, unreasonable idea; it represents the best of both worlds, traditional capitalism and modern technology. As the coming years reveal the course capitalism will take, only one thing is certain: modern technology has instilled a culture of sharing that has irreversibly altered the global economic and social landscape.