



# The Power Of Algorithms In Social Media: Beyond Herbert Marcuse's One-Dimensional Man

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Abstract— This study attempts to reflect Herbert Marcuse's one-dimensional man thinking in relation to the use of social media. Using a literature study method, this study highlights how social media is used in everyday life amidst the power of capitalism. In terms of social media use, user activity will produce data to be analyzed by algorithms, and the results will be used to form and organize the types of information that users have the potential to access. The algorithmic process in turn makes social media users not need to make serious efforts in choosing information content. This condition, where social media users are controlled by algorithmic technology, reflects Marcuse's thinking about one-dimensional man, where modern and capitalist society today no longer has the ability to think critically. Marcuse then views consumerism as a form of control that deceives individuals; they feel they are already in the midst of a democratic society. In fact, they are only directed towards an authoritative style of power. However, Marcuse in this case does not offer a way out of the trap of capitalism so that humans can return to being two-dimensional. Through this study, researchers will try to explore Marcuse's advanced thinking about one-dimensional man developed by Andrew Freenberg regarding Democratic Rationalization. If Herbert Marcuse analyzed the rationality of technology in the phase of the human dimension towards a single and repressive direction, Andrew Freenberg based his thinking on the view that technology does not always work by following the rules of capitalism. On the contrary, technology is very likely to be used as a medium to mediate and transform society to be more democratic.

Keywords—social media; algorithm; one-dimensional man; Herbert Marcuse; Andrew Freenberg

## Introduction

Understanding digital capitalism is important because social media is always present in everyday life. However, topics or discussions related to the concept of power are often ignored. There is no question about who benefits and who is harmed behind the use of social media. Or, how companies can benefit from social media while ignoring the question of whether society is harmed or not. In social media such as Instagram, Facebook, Tiktok, and so on, algorithms are instruments to gain as much profit as possible,



and are mainly done by personalizing content so that social media users are lulled into false comfort. Every time social media is accessed, the algorithm will work behind the scenes to regulate the type of information that is "appropriate" to be displayed to social media users. In this context, the unawareness of social media users regarding the silent work of algorithms makes them under the shadow of technological power.

At the individual level, the silent work of algorithms can have a positive impact, because individuals can choose content according to their needs (personalization). However, algorithms also have a negative impact, which is called a filter bubble [1], which is a condition in which the audience is isolated in the flow of data or information; this can be found, for example, in news or social networks that are tailored to the interests of social media users. Thrift (2004) calls this situation part of the "technological unconscious" [2], while Pasquale (2015) views it as a black box with a mysterious working system [3].

With the emergence of algorithms as modern technology under the power of capitalism, the logic of instrumental reason becomes dominant. In this situation, humans are instrumentalized in two ways. First, users (of social media) are used as a means to collect capital, power, and reputation. Second, the consciousness of social media users is manipulated with the aim of reshaping the minds of users so that they can agree, not fight, or even allow oppression and exploitation of themselves (minds). Finally, humans are only used as embellishments or complements to machines, a condition that shows how objects (capital) have mastered the subject (humans). On the other hand, the spirit of this kind of capitalism always develops new forms of rationalization and production in order to increase productivity and reduce costs (efficiency) in order to then accumulate capital.

In the context of using social media, every user has the right to determine what type of information they want to access and with whom they want to exchange messages. As a personal medium, social media users have full control over their use of social media. Marcuse (1964) stated that rights and freedoms are vital factors in a technological society [4]. Fuchs (2021) also emphasized the importance of social media users having critical awareness, for example by asking fundamental questions related to the use of social media, such as what is the purpose of using social media, why social media can be used for free, how social media works, how companies make money from social media, who dominates and who is dominated, and so on [5]. These questions are questions that users need to ask. Unfortunately, these questions (regarding power) are often ignored to be asked or do not cross the minds of users [5].

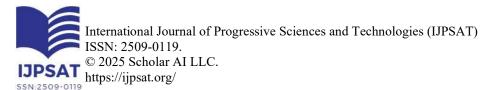
This study attempts to link how the power of algorithms, which works behind the use of social media, with Herbert Marcuse's thoughts on One-Dimensional Man. Marcuse explains that modern humans cannot think for themselves, because technology has reduced or even eliminated individual dignity. Marcuse sees consumerism as a form of control, where individuals think that they are already in a democratic society, even though in reality it is only an authoritative style of power. This means that individuals do not have the freedom they think, because the individual's thought process tends to be directed towards buying and consuming things that are not needed. In capitalism itself, there is a tendency that capitalism and the state have replaced freedom of action with instrumental decision-making, where individuals are expected to only react and not act [5]. This condition is also reflected in the use of social media where algorithms have taken over individual freedom to search, browse, and access information.

## Problems, Objective, and Methodology

In his thoughts on one-dimensional man, Marcuse does not offer a way out where modern humans can be free from the clutches of capitalism and return to being two-dimensional humans. In this case, Marcuse only offers a concept that he calls the rationalization of technology, and that too without a detailed description of the concrete efforts that can be made. Based on these considerations, the researcher tries to explore further thoughts related to one-dimensional man developed by Andrew Freenberg as a new generation in the circle of Critical Theory thinkers. Meanwhile, the method used is a literature study with a critical philosophical approach [6]. This research contributes novelty in the theoretical field concerning social media. This novelty is reflected in several important findings related to the expansion of the analysis of critical technology theory in the context of rereading the role of algorithmic power from the perspective of Herbert Marcuse and Andrew Freenberg's thoughts.

## **Results and Discussion**

Herbert Marcuse and One-Dimensional Man





Herbert Marcuse was one of the most famous and radical thinkers of his time. His life's work offered many brilliant things and became his contribution to the field of Frankfurt School Critical Theory. During the 1960s, Marcuse's thoughts were discussed more than any other philosopher. His critique of advanced industrial society and his defense of radical politics had a tremendous impact in various parts of the world so that he was recognized as the "Father of the New Left". By examining all of Marcuse's published works and the socio-cultural situations he criticized, his thoughts can be assessed in terms of: (1) his contribution to philosophy and social theory; (2) his political project calling for radical social transformation; and (3) his vision of an alternative society and human liberation [7].

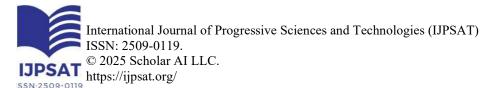
Herbert Marcuse was born to an upper-middle-class Jewish family in Berlin on July 19, 1898 and died on July 29, 1979. In his early life, Marcuse was classically educated as a generation of young Germans were caught up in World War I. When the war ended in 1918, Marcuse witnessed the political turmoil that gripped Berlin. Marcuse was later promoted to the Doctor of Philosophy at the University of Freiburg in 1922. His dissertation, Der deutsche Kunstlerroman, dealt with recurring issues in modern German fiction concerning the stress and frustration of artists with the incompatibility of aesthetic life with the painful exigencies of everyday existence. After a brief hiatus to compile a bibliography of Friedrich Schiller for a Berlin publisher, Marcuse returned to Freiburg in 1929, where he remained until 1933. In Freiburg, Marcuse did postdoctoral work with Husserl and Heidegger. To qualify for an academic career, the German university system required a postdoctoral dissertation directed by an academic chair. Max Horkheimer then offered to be Marcuse's academic sponsor in Frankfurt, which also housed the Institute for Social Research. However, the continuing turbulent political situation in Germany forced Horkheimer and Marcuse to postpone their academic activities in Frankfurt. Instead, Horkheimer brought Marcuse to Geneva to join the newly established branch of the Institute for Social Research. The Institute for Social Research eventually moved to Columbia (New York) in 1934 [7].

Marcuse wrote many extraordinary books; these books, written in English, represent the world of critical social theory brought by the Frankfurt School. Marcuse's critique of capitalist society was published under the titles Eros and Civilization (1955) and One Dimensional Man (1964). His other three books are Reason and Revolution (1960), An Essay on Liberation (1969), and Counterrevolution and Revolt (1972). With a critical attitude and thinking towards what has befallen modern society, Marcuse tries to show things that cover human reasoning as false consciousness, namely reification, hegemony, and domination [8].

One Dimensional Man (1964) shows a form of Marcuse's engagement with Critical Theory that critiques mass culture and communication, including analyzing new modes of technology and forms of social control, and discussing new modes of socialization and the reduction of the individual in mass society. This effort is also Marcuse's ongoing effort to present and develop the categories of dialectical philosophy developed by Hegel and Marx. This effort also marks Marcuse's courage to put forward what previous Frankfurt School theorists had never dared to do, namely to create a systematic synthesis of the analysis of late capitalist society. In the later years of his academic career, this book (One Dimensional Man), made Marcuse the most recognized and admired figure among the New Left thinkers [7].

We can trace the origins of Marcuse's works from the early 1930s to the publication of One Dimensional Man in 1964. In his writings in the early 1940s, Marcuse explains how individualism eventually degraded from the bourgeois revolution to the rise of modern technological society. In Marcuse's writings, humans are seen as helpless and poor subjects in the face of rapidly developing and increasingly complex technology [7]. According to Marcuse, modern science and technology could actually free humans from the demands of hard work. However, what happened was that modern science and technology dominated every aspect of modern society. Science and technology, which later transformed into industry, in turn produced consumer goods in abundance while offering humans an ideal "new world order" to achieve happiness and freedom. In fact, in Marcuse's view, this happiness and freedom would not be possible, because what happened there was a condition where humans were controlled by science and technology, not the other way around [8]. In relation to this reality, Marcuse further assessed that what does not exist is technological rationality.

In One Dimensional Man, Marcuse places technology as a threat to intellectual autonomy and the ability of humans to voice their own critical ideas or thoughts. For Marcuse, the development of modern industry and the absence of technological rationality have eroded individual rationality. In the midst of the development of technology and capitalism, advanced industrial society demands





an increase in accommodation to the economic and social apparatus, including submission to domination and administration. Therefore, the "mechanism of conformity" spreads to every aspect of society. The efficiency and power of administration also increasingly bind individuals; gradually, this condition causes individuals to lose the characteristics of critical rationality that they possess. One dimension means that individual goals and attitudes are formed and produced technically, and primarily aim to preserve the status quo. Attitudes that seem counterproductive will be ignored. Marcuse's own analysis is based on the historical concept of the rise of the technological world that dominates and controls humans. With the increasingly rapid development of information technology and the capitalism behind it, Marcuse wants to talk about personal space that is mobilized for the interests of mass production.

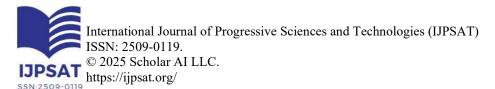
In technological rationality, Herbert Marcuse does not assume that humans are separate from technology. In the context of technology, the form of rationality informed by the way machines work spreads to human subjects, especially those related to work and production. Thus, it dominates other forms of rationality, which can make humans critical and rational towards external authorities. The end result of this process is alienation. By becoming one-dimensional humans, humans are devolved into a condition where they no longer have (or have little) autonomous critical ability. In other words, humans prefer to submit to the influence of external authorities outside themselves. Ultimately, the reality of technology shifts the critical power and at the same time the private space owned by individuals.

Marcuse coined the term repressive desublimation to explain how humans become one-dimensional in modern industrial society. According to Marcuse, the expansion of a stable "technological rationality" has liquidated transcendent forces and oppositions, while the mass production of consumer goods has led to the repressive desublimation of society. Marcuse further argues that the possibility of finding a historical subject capable of actualizing Critical Theory through the transformation of capitalist society seems increasingly remote. As a repressed desire, deviant behavior can be commodified and commercialized and thus does not need to be sublimated. That is, advanced industrial societies have become more efficient and totalitarian, and over time, the lives of their people have become less and less mediated by the process of sublimation.

Marcuse argues that currently technological rationality is no longer merely a bias in its operational activities, but has also become a legitimation mechanism in preserving domination [4]. However, Marcuse's tone of voice towards technology in One Dimensional Man tends to be pessimistic [7]. For Hansen, this pessimism can also be found in the descriptions of Marcuse's thoughts in Marcuse's previous works, such as Some Social Implications of Modern Technology (1941) to From Ontology and Technology (1960). However, Marcuse can see the potential of technology to reduce human suffering or support development. This can be seen from several of Marcuse's writings. In An Essay on Liberation (1969), for example, Marcuse states that science and technology are great vehicles for liberation. In One Dimensional Man, Marcuse states that technology, as a universe of instruments, can increase human weaknesses and strengths. In this way, the continuation of Marx's thoughts on revolution and a new stage in the development of civilization from Marcuse leads to the question of how to view and talk about technology, including how to use technology that can support human imagination. For Marcuse, an important way to identify and develop two-dimensional thinking is through subversion. Therefore, Marcuse considers it important to have an educational system that is able to make individuals recognize their political character.

#### Research Developments related to One-Dimensional Man

Referring to the development of social media and the power of algorithms (capitalism), we can see the development of research that contributes to Marcuse's thinking about one-dimensional man, including those conducted by Andrew Freenberg through Heidegger and Marcuse: The Catastrophe and Redemption of History (2004), Questioning Technology (1999), and (Re)Inventing the Internet: Critical Case Studies (2012). These three works read technology and its development based on the thinking about one-dimensional humans initiated by Marcuse. In addition to Andrew Freenberg, technological rationality, which is the main basis for the birth of one-dimensional humans, was also developed by Marcelo Vieta, one of which can be seen in his writing entitled Herbert Marcuse's Critique of Technological Rationality: An Exegetical Reading (2006). According to Vieta, technological rationality is an important part of understanding the foundations of one-dimensional society. Vieta also criticized Marcuse's thoughts through his writing entitled Inklings of the Great Refusal: Echoes of Marcuse's Post-Technological Rationality Today (2017). The peak of





Vieta's elaboration of ideas is contained in his work entitled Hope for Our Technological Inheritance? From Substantive Critiques of Technology to Marcuse's Post-Technological Rationality (2010). Through his writing, Vieta stated that technological rationality is not the final view of Marcuse's thoughts, and sees three patterns of technological rationality in the life of advanced industrial societies, starting from pre-technological rationality, technological rationality, and post-technological rationality. In this way, Marcuse's thoughts are seen positively in the form of hope, with the prerequisite of critical reason working collectively to realize the post-technological rationality view.

In the context of social media, Marcuse's thoughts on the development of information and communication technology were first mentioned by Peters and Simonson (2004), who studied the development of information and communication technology during the period 1919-1968 and added Marcuse's thoughts in the context of the life of the industrial revolution society after World War II [9]. In From 1984 to One-Dimensional Man: Critical Reflections on Orwell and Marcuse, Kellner compares Marcuse's theory which he thinks is similar to the Orwellian view of technological totalitarianism. Cibangu's study (2013) shows the contribution of Marcuse's thoughts as a form of critical social theory when criticizing the role of communication science and information technology [10]. Marcuse's thoughts were then sharpened and used to analyze social media by Fuchs (2016) [11], while Mahaswa (2017) offers a different perspective where social media can support efforts to democratize society digitally [12].

In subsequent developments, the one-dimensional human perspective has received attention from many researchers. Maboloc (2017), for example, analyzes Marcuse's views on the conditions of social media and the digitalization of people's lives; he understands that the existence of social media has the potential to create a form of totalitarianism and technological capitalism in a new form [13]. Bilic (2018) in his research states that algorithms can be understood as products of human society and the social conditions that underlie them [14].

Anthonio (2022) in his study stated that Marcuse's thinking also forms work as a form of human repression [15]. In fact, Miller (2022) openly conducted philosophical speculation and experiment in which society was in a condition that was only fixated on the principle of a single social work logic [16]. From a historical perspective, one-dimensional humans are very likely to occur if there is no effort to disseminate diverse perspectives [17] and adhere more firmly to the perspective of unity on the basis of authoritarian politics [18].

Gounari (2021) criticizes the new form of one-dimensional humans in the context of social media dominated by capitalism and governments whose goal is to maintain the status quo of power [18]. Bergo & Gomes (2022) provide a dialectical framework of enlightenment in technology to re-examine that behind social media mediation there is the possibility of various violent products that are not directly realized by users [19]. Meanwhile, Schutzbach (2022) believes that in the era of neoliberalism accompanied by the rapid development of social media technology, efforts to assert critical reasoning can be carried out through more open aesthetic politics through social media itself so that a joint movement can emerge [20].

The Occurrence of One-Dimensional Humans in Social Media Users

The term one-dimensional man is a special term embedded by Herbert Marcuse in analyzing the impact of technological rationality that works in advanced industrial society (technological society). Marcuse studies the impact of technology while tracing changes in individuals and their technological rationality. For Marcuse, technology becomes a social process in which humans are involved in it and ultimately become an inseparable part of the technology itself. In this case, Marcuse is concerned with the fate of individuals because technology actually has the potential to reduce individuals. Not only that, Marcuse also explains that technology has the potential to eliminate individual dignity by sublimating individuals into the crowd. Therefore, Marcuse views that technological rationality ultimately becomes a new form of repression that originates from the power of advanced capitalism. The work of advanced capitalism itself is no longer exploiting surplus value in a traditional way, but has developed into a way of seeing and understanding society. So, the perspective of society's understanding seems to only be between choice A or B; the choice is limited, singular, and repressive, there is no opportunity for a more pluralistic diversity of perspectives. Although One Dimensional Man was written in 1962, the work is still relevant to the current social situation. Historically, the meaning of one-dimensional society also works in the world of social media. This can be seen from the unconsciousness of users due to the over-utility provided by the system. As a result, users have difficulty determining the most original, unique, and aesthetic perspective.



This unconsciousness occurs in the name of technological rationality. Critical awareness also gradually becomes dull and becomes false awareness. Everything stems from the ease and pleasure offered by social media. Users seem to be spoiled with various features, communication effectiveness and efficiency, content diversity and tend to change quickly in a matter of seconds. The world of social media is a fast-paced world. With just one touch, the whole world seems to be in the hands of its users. As a result, unconsciousness syndromes occur that shackle the critical reasoning of users. This unconsciousness penetrates into everyday life until it becomes a normal behavior, because everyone also does the same thing. Therefore, forgetting time, forgetting usefulness (benefits), ignoring needs, consumerist tendencies, forgetting context, and ignoring the risks that arise become normal phenomena in the context of today's social media users. The time spent surfing can even replace rest time. Users seem to be given comfort. In fact, they are actually still working for invisible added value, which comes from the intensity, expenditure, and interludes of circulating advertisements.

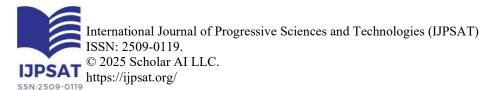
From the false consciousness that originates from social media, society is slowly being directed to a single dimension, namely starting with the dissemination of behavioral speech acts that Marcuse calls one-dimensional behavior. This term refers to the single orientation provided by the social media algorithm system. The power of this single algorithm will slowly blur language, blur between fact and opinion, create a consumptive seductive language, hypnotize the time and space (spatial) of users, or even be able to lead the emotions of the masses (crowds) towards certain psychological conditions. The danger of this leading of mass emotions is the absence of a critical dimension that is able to criticize or even dismantle the values that emerge in the crowd. These values can be sought and understood when users lose their sense of the aesthetic dimension in an experience. The world seems to be directed to only one goal, namely communicating on social media in a pseudo and unlimited way. In fact, socialization still needs to be carried out in order to maintain freedom of expression that is more aesthetic than socialization (via social media) which is rigid, operational, and pragmatic.

The Power of Algorithms: A Critique of Herbert Marcuse's One-Dimensional Man

Breines (1972) analyzed Marcuse's view as a new form of critical interruption of domination in a technological society influenced by fantasy, imagination, and aesthetics, which are the hegemony of advanced capitalism [21]. This fantasy is produced through modern technology which is intended to close off critical thinking in society. Humans are actually a species that lives in solidarity and forms a non-repressive society through every aesthetic activity, while technology should be able to free all forms of human repression, including from various bureaucratic pressures [21]. Breines further saw that Marcuse's criticism placed industrial society in a subordinate position to technology so that it ultimately sacrificed various aspects of humanity in the name of productivity, development, and pseudo-welfare rationality.

In Studies in Critical Philosophy (1972), Marcuse argues that the basis of the capitalist mode of production leads to dehumanization, because science and technology in this case are aimed at reconstructing the totality of reality so that violence and poverty (as a result of exploitation) are inevitable [21]. In other words, technology is a new form of control over global society today, which according to Marcuse is also another form of fascism.

The work and power of Algorithms have in fact exceeded human imagination and humanity itself, where the subjectivity factor is no longer involved in its processes, which for example manifests in an objective political decision or public policy. Marcuse's argument about the end of utopia does not position the role of technology that is able to exceed human imagination, where the power of the algorithm that is currently working is between this duality, namely between being able to sharpen it or even dull the power of imagination. Miles (2012) stated that Herbert Marcuse's weakness in embodying a liberation movement is that it only relies on one dimension of human aesthetics, one of which is art, which has now also experienced degradation due to being replaced or replicated by the power of algorithms [22]. Social media can be a simple example where Marcuse's criticism of totalitarianism in the context of technology and consumerism can only be in line with industrial culture, and as a result is not enough to analyze how popular culture has now merged with the high demand from society for various forms of enjoyable entertainment. Therefore, social media has become a fun entertainment space, a platform that is ultimately considered to be able to fulfill all the desires of its users.





MacIntyre believes that Marcuse's critique of one-dimensional humans only stops at criticizing contemporary society and modern philosophy. The two do not go hand in hand. The technology that is developing in the midst of contemporary society makes various existing problems increasingly complex. Instead of solving existing problems, intellectuals tend to only focus on ideas from a modern perspective. From MacIntyre's critique, Marcuse's thoughts were re-examined to see if they could be used to understand the problem of algorithmic power (social media) which had not yet emerged during Marcuse's lifetime.

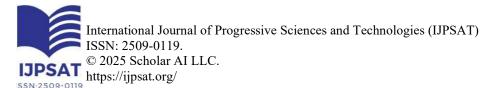
Eagles (2018) has summarized Marcuse's revolutionary ideas related to his critique of advanced capitalism [23]. There is one idea of Marcuse that explains that the false satisfaction of technology can be countered by massive and large-scale rejection. However, this idea contradicts the freedom echoed by Marcuse himself. Marcuse does not specifically state what he rejects and what is allowed. In this case, Marcuse only rejects the repression of capitalism. However, in the midst of the increasingly rapid development of information and communication technology, Marcuse's rejection will lead to a reality that tends to look negative, pessimistic, and dystopian

Feenberg (2017) criticized Marcuse's one-dimensional society idea by dividing Marcuse's essentialism concept which views technology as the only tool or instrument that can change the condition of society [24]. Freenberg stated that there are four (4) basic assumptions behind Marcuse's one-dimensional idea. First, the emergence of technical-scientific rationality as a dominance in the cultural context. Second, the rational-formalistic paradigm has changed the meaning and values in life. Third, the loss of multidimensional understanding of the world in which humans live. Fourth, the potential for damage due to the dominance of a single culture in the form of technical manipulation.

These four dimensions are Marcuse's framework for rethinking the various obstacles to fighting a one-dimensional society that is unconsciously trapped in the deception of capitalism. By Feenberg (2017), the movement is called a 'subjective rebellion', which is carried out by reaffirming eros (the basic instinct of life) [24]. For Marcuse, reviving the repressed dimension of eros will encourage the movement to emerge from within, not solely on the encouragement of external factors. The main idea behind this movement is the state when society is tired of the increasingly absurd social conditions, without direction, and filled with structural violence [24]. This movement certainly also needs to be supported by more democratic social institutions based on reshaped technical rationality.

Marcuse's critique of algorithmic power in the one-dimensional human frame does not only attack the affective, aesthetic, and emotional dimensions of humans. Vieta (2017) explains that Marcuse's view of technological rationality is no longer relevant to maintain a great refusal movement in order to fight the domination of capitalism [25]. Vieta (2017) further offers an attempt to go beyond the concept of technological rationality, namely by formulating the term post-technological rationality [25]. This new radical movement can occur when subjects have a radical awareness of what must be fought for in realizing freedom of thought without the shackles of technological rationality. Seeing the current state of contemporary technology, Vieta (2017) states that political rejection can be achieved through at least three (3) moments in building a different economic and social society and at the same time daring to fight against all forms of repression [25]. First, forming an alternative community (political, social, economic and so on). Second, initiating radical education. Third, building a space to restore society from the failure of the production system. Vieta's view may be successful when the criticized socio-economic order has the opportunity to be reorganized. However, there is one forgotten problem that has not been resolved so far, namely the internal structure and coherence of the capitalist system itself, where movement is only possible if both are in a vulnerable condition.

Based on the description above, the researcher realizes that there are several shortcomings in Marcuse's one-dimensional idea, which tends to only emphasize the technological aspects that are characterized by industrial culture rather than popular culture. Social media itself is part of popular culture that is inherent in the acceleration of industrial culture that emphasizes aspects of acceleration, effectiveness, and work efficiency. Social media becomes a space between the two. If Marcuse only relies on the conditions of popular culture in the second class or the class below it rather than the noble culture in the constellation of emancipatory art, this situation will be inversely proportional to the ambivalence of values that exist in social media. This ambivalence of values is reinforced by Feenberg's idea (2002) which emphasizes the importance of understanding technology as the context of technology itself [26]. The fundamental error in the assumption of a one-dimensional society is the existence of





control and loss of self-autonomy over a system that works with it. This kind of deterministic monism makes the analysis of social media technology (or technology in the broad sense) always off target.

This inaccuracy of the target is the source of the value ambiguity that will be directed towards a particular technology. For example, when a social media user refers to a preference choice according to an aesthetic and rationalistic lifestyle, then the user's homepage will follow the preference chosen. The power of the algorithm itself does not work solely to reap as much profit as possible for capitalists, but also provides a space that can stimulate eros to work voluntarily. Therefore, repression is no longer a form of repression in Marcuse's view, but becomes recreation. The next challenge is when a one-dimensional society is simplified to a "technological mode" that is oriented towards repression and limiting access, because the openness of the internet and social media can also encourage various new social movements that are more massive in nature.

Democratization of Technology: Beyond the One-Dimensional Human

Andrew Feenberg is a successor to the tradition of critical theory and a student of Herbert Marcuse. Feenberg's thinking on technology can be understood through three works: The Critical Theory of Technology (1991) revised in 2002 as Transforming Technology: A Critical Theory Revisited, Alternative Modernity: The Technical Turn in Philosophy and Social Theory (1995), and Questioning Technology (1999). Freenberg is a philosopher of technology who has made important contributions to the development of critical theory of technology and a visionary in viewing technology. As a student of Marcuse, Freenberg wanted to realize Marcuse's vision of technology to some extent to produce a combination of Marcuse and Foucault's dystopian thinking with Marx's socialist philosophy. Feenberg argues that we may one day be able to articulate a utopian vision in which a humane and livable world can be realized. He argues that previous critical theorists of technology have failed because of their tendency to criticize technology without offering ways to change or reform it. For Feenberg, critical theory of technology is an important approach to understanding the social and political dimensions of technology, and to analyzing how technological change affects society.

According to Freenberg, critical theory of technology is not something in the usual sense of the term, but rather an ambivalent and suspended development process between different possibilities. The ambivalence of technology is distinguished from neutrality by the role attributed to social values in the design, use, and technical systems. In this view, technology is not destiny, but an arena of struggle. According to Feenberg (2017), critical theorists argue that technology frames modern society and culture, limiting the range of meaningful human experiences [24]. Feenberg sees that earlier critics of technology believed that the nature of technology was negative for humans, where technology was associated with technocracy, meaningless modern life, human obsolescence, and so on. As a result, the positive side of technology is lost amidst these concerns. Freenberg (2017) also states that critical theory of technology is very suspicious of the benefits obtained by the beneficiaries of technological progress [24]. Therefore, Freenberg offers a correction to the tendency of critical theory to see technology as a force of domination and reification. Freenberg's idea of technological reform reopens the discussion regarding technological innovation as something undetermined, where technology can be open to the democratic process. At this point, Freeberg wants to bring users into the technology equation.

In understanding critical technology theory, Feenberg states that we must first understand two other theories as an introduction, namely instrumental theory and substantive theory. According to Feenberg (2017), instrumental theory is the dominant view of modern governments and the policy sciences they rely on, while substantive theory claims that what the use of technology does to humanity and nature is more important than its real purpose [24]. Feenberg (2017) then explains that instrumental theory offers the most widely accepted view of technology [24]. This is based on the common sense idea that technology is a tool ready to serve the purposes of its users. This means that technology is neutral, without its own valuative content. Feenberg (2017) sees that there is a minority view that denies the neutrality of technology [24]. According to substantive theory, this view argues that technology is a new cultural system that restructures the entire social world as an object of control.

Feenberg's thinking on critical theory of technology is influenced by the thinking of Karl Marx, Herbert Marcuse and Michel Foucault. For Feenberg (2017) these three thinkers present the most important notes on forms of modern domination [24]. Marx himself was one of the first thinkers (philosophers) to place technology at the center of his understanding of the human condition. At the same time, Marx was also a critic of technology, especially industrial machinery in the nineteenth century. Marx argued that



in the capitalist organization of production, every tool for the development of production undergoes a dialectical reversal so that it becomes a means of domination and exploitation of producers.

The second philosopher who contributed to Feenberg was Marcuse. Marcuse himself formulated his theory of technological rationality under the influence of and as a reaction to Weberian rationalization theory. Marcuse offers a classic explanation of technology in critical theory as a form of "technocracy". In One Dimensional Man, Marcuse presents a picture of modern society that is similar to the administrative world as described by Adorno and Horkheimer; however, Marcuse also identifies the positive potential of a new generation of technology that he believes can create a much better civilization [27]. For Marcuse, technology is a socio-historical project built on the interests of those in power who project what society wants to do with "humans" and "things". Marcuse suggests that technical transformation may be a way to overcome this problem. Marcuse's critique of technology is part of a critique of ideology, where technology is seen as a tool of social control and ideology itself. Ideology here is defined as the widespread distribution of technological rationality that makes it impossible to build alternative ways of thinking. Herbert Marcuse saw that technology is not neutral, but is embedded in social relations, production systems, and in the relationship between science and technology. Whether technology is good or bad for humanity will depend on who holds the control, and this is an important starting point for Feenberg's critical theory of technology.

The third figure who played a role in Feenberg's thinking was Foucault, who provided an understanding that power and knowledge are networks of social forces and tensions in which everyone is trapped as subject and object. These networks are built around techniques, some of which are embodied in machines, architecture, or other devices, all of which are embodied in standard forms of behavior that do not force and oppress individuals. Foucault views power and knowledge as a coin with two sides. Every power is always related to the formation of a field of knowledge, and there is no knowledge that does not presuppose and shape power relations. Through Marcuse and Foucault, Freenberg gained an understanding that an effort to liberate power depends on reversing the balance of power between the system and individual resistance.

According to Feenberg (1999) technology is a force in modern society, a force greater in many domains than the political system itself [28]. However, if this is true, technology must be considered a new kind of law, no different from other public decisions. The technology that shapes human life reflects certain social interests that have been delegated the power to decide many aspects of life, including how humans communicate. However, if technology is so powerful, why don't we apply the same democratic standards to it as we do to other political institutions. The existence of modern society itself is indeed supported by technology that has developed so complexly that it is difficult to understand. However, humans must not relinquish their control over technology [29]. According to Feenberg (2017), critical theory of technology offers a platform for reconciling seemingly contradictory strands of reflection on technology [24]. Therefore, only through a critical and empirically oriented approach can we understand what is happening around us today.

Freenberg then introduced the idea of democratic rationalization, where there is a reconceptualization of the relationship between technology, rationality, and democracy. For Freenberg (2017), fundamental change requires a democratic transformation of technology [24]. For this reason, Freenberg offers the idea of 'democratic intervention' and 'participatory democracy' as actions of citizens involved in conflicts over technology. For Freenberg himself, there are several methods that can be taken to encourage democratization, such as the dialectical approach, symmetrical and asymmetrical methods, aspects of dual rationality and in layers. Democratic intervention can be translated into direct action, new regulations, new designs, and in some cases can even be in the form of ignoring technology.

According to Feenberg (2017), we become what we are in choosing technology, which in turn shapes our future choices [24]. However, Freenberg is of the view that the choice of civilization is not determined by technology alone, but can also be influenced by human actions. So, Freenberg does not reject or oppose technology, but wants to fight technocracy [29]. In the universe of technocracy, there is no room for the democratization of technology, because the work of technology does not follow the tastes of society, but follows the laws of nature that can only be understood by the individuals who are involved in it. Feenberg (2017) also states that technology is basically biased towards certain powers and tends to reproduce that power [24]. In this case, for example, we can observe how profit becomes a driving force in digital companies as capitalist businesses. Despite the tendency towards



dominance (power), digital technology has a variety of applications and can facilitate critical rationality, including striving for comprehensive technical rationality. This is where critical theory needs to rethink its theory of technology, where its analysis seems inconsistent with the basic idea of immanent critique [27].

#### Conclusion

Herbert Marcuse, as the initiator of one-dimensional society, provided inspiration as well as sharp criticism of technological developments in the era of advanced industrialism, where the work of capitalism could no longer be separated from the lives of workers, or even integrated into the private spaces of life. On the other hand, the depth of this integration is not realized by social media users. This is a reality that illustrates that monotonous and static technological rationality has taken over various aspects of human life. A society that lives within the framework of this epistemological framework must work according to the logic of the crowd as if everything they do is collective rationality. In fact, this rationality has no clear direction and purpose. All of its speech acts are illusory, tending only to affirm and recognize one single power: capitalism.

Herbert Marcuse never predicted the digital future that would happen after his death. However, Marcuse's legacy of thought provides constructive criticism of what is happening and might happen, namely the rise of a one-dimensional society. The context of Marcuse's thought cannot be separated from how conventional capitalism works, which always exploits workers openly in an open system without giving any choice. This pattern ultimately creates a psychological impact on workers where they cannot make any changes, because all possible paths have been cut off repressively.

In this fast-paced era, digitalization occupies a position as the spearhead, including on a social scale where society is brought into a world that is easy and efficient. The reduction of diverse social realities into a single one ultimately becomes an inevitability that is collectively accepted. As part of technology, social media can not only accelerate and expand communication between its users, but also reduce all relationships that should experience direct presence (interpersonal). As a result, all emotions that occur between two speakers become blurred. Emotions are only represented by emoticons, support is only represented by likes, voices are only limited to words that are also limited by machines. Alternative searches are also limited by algorithmic machines that work centrally. In addition, strict supervision is also carried out, not in order to monitor criminal acts, but to maintain certain powers.

The dynamics of Marcuse's thinking in research are increasingly visible when an idea or concept must be contrasted with diverse and changing realities. From conventional technology to digital technology, from passive capitalism to active capitalism, and from technical workers to digital workers. All of these transitions can occur because of a system that is supported and maintained by the capitalist system through its digital ecosystem. Marcuse's criticism is certainly still very relevant regardless of his critics who see Marcuse as a pessimistic thinker about technology. However, researchers can re-criticize that this pessimistic position is a path of critical theory to encourage critical thinking in society so that it can create a more democratic and emancipatory society.

Other perspectives, such as democratization and freedom, will only work as far as there is agreement from and between users and capital. However, the use of the term democracy seems to only work on commitment and freedom to provide input to social media companies, and that only allows normative answers and never solves the most real problems. Thus, if we refer to Herbert Marcuse's theory, it can be said that the dominance of capital power still seems to control the ecosystem of social media platforms. This can certainly be reviewed, because media users only have limited power to be able to control themselves as the embodiment of new individuals with new identities. So, all backgrounds in the real world seem to disappear and only accept the work of the new world displayed through social media. Autonomy becomes a jargon for users, and control becomes a necessity for capital in creating a new ambiguous technological society. If users realize Marcuse's idea, then their choice is only to carry out a radical, massive, and critical great refusal to all forms of unexpected, hidden repression and manipulate real-life reason through virtual fantasy in a false consciousness frame.



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