Don Tapscott and Anthony D. Williams, **Wikinomics: How Mass Collaboration Changes Everything**, New York: Penguin, 2007, 320 pp., \$25.95 (hardcover).

Book Review by Christian Fuchs University of Saltzburg

The Amazon Mechanical Turk is an online platform on which employers can post "Human Intelligence Tasks" (HITs) that are searched by prosumers looking for paid employment who select and perform these knowledge tasks with the help of their computers, submit the results, and then get paid. \*Developers use the Amazon Mechanical Turk web service to submit tasks to the Amazon Mechanical Turk website, approve completed tasks, and incorporate the answers into their software applications. To the application, the transaction looks very much like any remote procedure call: the application sends the request, and the service returns the results. Behind the scenes, a network of humans fuels this artificial artificial intelligence by coming to the web site, searching for and completing tasks, and receiving payment for their work" (mturk.com FAQs, accessed on November 23, 2007). The reward per task ranges between zero, a few cents (in most cases), and some dollars. One example of an HIT assignment is to determine the presence of opinion in a text article and submit the result, e.g., "Your task is to read the news article or blog post below and determine whether it is editorial in nature or is an expression of opinion, and whether it is positive, negative, or neutral" (mturk.com, accessed on November 23, 2007). Multiple users will input their results which will be used by the task assigner who aggregates and sells the results as a commodity. The example is characteristic for what Tapscott and Williams celebrate as Wikinomics - an online economy based on networking, peering, and collaboration.

Sound like a good way for earning some money? The shadow side in which Tapscott and Williams are not interested, is that the remuneration is poor. In the example just cited, the reward is four cents for an estimated task time of 10 minutes, which results in a total hourly compensation of 24 cents if you repeatedly carry out similar tasks. Hence, this "new" economy of mass collaboration seems to support and advance an extremely flexible regime of accumulation that brings about precarious labour.

In Critical Theory, representatives like Brecht, Benjamin, and Enzensberger argue that the prosumer brings about the emergence of an emancipatory collectivity in media production. The theme that unites these authors is the idea that collective media production by all, for all, is socialistic. Brecht (1932, p.64) contends that radio would advance public life if it were changed "over from distribution to communication. The radio would be the finest possible communication apparatus in public life, a vast network of pipes. That is to say, it would be if it knew how to receive as well as to transmit, how to let the listener speak as well as hear, how to bring him into a relationship instead of isolating him. On this principle, the radio should step out of the supply business and organize its listeners as suppliers" (Brecht, 1932, pp. 64 & 54). Walter Benjamin (1936, pp. 39 & 28) argues that printed letters to the editors would anticipate a situation in which literary license has become a common property. "Thus, the distinction between author and public is about to lose its basic character . . . . At any moment, the reader is ready to

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turn into a writer" (Benjamin, 1936, pp. 39 & 28). This would be a socialization of production because it would enable proletarians to speak, and it would also be an expression of proletarian expertise (Benjamin, 1934). The more consumers become producers, the better a media apparatus like the newspaper or the theatre would be (Benjamin, 1934, p. 243). Hans Magnus Enzensberger (1970) argues that an emancipatory use of media is characterized by a structure in which each receiver is a potential transmitter, programs are produced collectively, the masses are mobilized, and there is feedback, political learning, decentralization, and self-organization. He maintains that the development of the media from distribution to communication and collective production systems would be "consciously prevented for understandable political reasons." For the mass of people to become productive, "the elimination of capitalistic property relationships is a necessary, but by no means sufficient condition." In the capitalism of Web 2.0, the mass has become productive, but the capitalistic property relations still exist. This is an indication that the actual economy of Web 2.0 and Social Software, which is analyzed by Tapscott and Williams in the book at hand, shows that a media structure in which recipients act as producers does not (as assumed by Critical Theorists like Benjamin, Brecht, or Enzensberger) necessarily imply emancipation, but is perfectly compatible with the repressive economic structures of capitalist society.

Tapscott and Williams claim that the emergence of Social Software (the "new web," as they call it) has brought about a potential for an economy that is based on mass collaboration, which they term "Wikinomics." The task of the book is to show why and how mass collaboration does not reduce, but rather enhances profitability. The Wikinomics model is based on the four principles of openness (of standards and external involvement), peer production, sharing, and acting globally (20-30).

Tapscott and Williams introduce seven Wikinomics business models that are summarized in the following table:

Model	Characteristics	Accumulation strategy	Chapter	Examples
Peer pioneers	Self-organizing,	Companies should donate	3	Linux, Wikipedia,
	voluntary, non-	gifts and code to open		IBM support for
	monetary	source communities in		Linux
	communities that	order to outsource work		
	collaboratively	("harnessing external		
	produce open source	talent") in non-core areas		
	goods and services.	of business so that		
		production costs are		
		reduced, to attract new		
		customers in		
		complementary areas,		
		enhance competition in a		
		non-core area of business,		
		and develop social capital.		
Ideagoras	Generating ideas for	Companies should seek for	4	InnoCentive, Nine-
	innovations with the	brilliant ideas outside their		Sigma,
	help of social	own company walls, which		InnovationXChange

	networking platforms	gives them comparative		Network, Eureka
	that bring together	advantages in invention		Medical,
	questions and	and allows them to cut		YourEncore,
	solutions to	costs.		Innovation Relay
	problems.			Centers, P&G,
				yet2.com,
Prosumers	Based on the	"Customers get more of	5	Second Life, Lego
	principle of user-	what they want, and		Mindstorms, Music
	generated content	companies get free R&D"		Mashups, Creative
	and products.	(132). Companies should		Commons,
	Consumers become	see customers as co-		YouTube, Slashdot,
	producers.	creators of products and		digg
		hence value. Products		
		should be designed in ways		
		that allow users to design		
		all by themselves, remix,		
		and share.		
New	Collaborative open-	Industry should collaborate	6	Google Print, arXiv,
Alexandrians	access production of	with universities and		Human Genome
	scientific knowledge	researchers in open		Project, Single
		projects that are win-win		Nucleotide
		situations. Scientific		Polymorphisms
		knowledge should be left		(SNP) Consortium,
		open and the applications		Intel's Open
		proprietary.		University Network
Platforms for	Creation of business	By collaborating with other	7	HousingMaps,
Participation	partnerships by	firms and their		CheapGas,
	opening of software	applications, a company's		developer
	services and	product is spread so that		communities of
	databases via an	new customers are		eBay, Google,
	application	attracted or a certain fee or		Amazon;
	programming	share of revenue is		PeopleFinder, BBC
	interface (API).	obtained from the business		Creative Archive,
	Existing platforms or	partner.		Amazon,
	applications are			Scorecard,
	combined or			Neighborhood
	integrated with other			Knowledge
	ones.			California
Global Plant	Physical products are	Quality could be increased	8	BMW, Lifan, Boeing
Floor	modularized and	and costs cut by engaging		
	production is globally	in global outsourcing of		
	outsourced so that	design, manufacturing,		
	products are co-	decision-making and the		

	created by many	involvement of globally		
	contributing actors	distributed creators.		
	that work in parallel.			
Wiki Workplace	Usage of blogs, wikis,	Advantages would be the	9	Geek Squad, Best
	chatrooms, peer-to-	pooling of knowledge,		Buy, Socialtext,
	peer-networks,	resources, and human		Google 20% rule
	podcasts, etc. across	capacities that form		
	departmental and	networks. Flat hierarchies		
	organizational	would be important, and		
	boundaries in order	work should be		
	to collaborate and	transformed into fun ("fun		
	form ad hoc	workplace ethos").		
	communities.	Participatory management		
		and self-organization		
		should be advanced by		
		usage of the new web so		
		that inclusion increases the		
		attachment of employees		
		to the company, and as a		
		consequence, productivity		
		and product quality.		

These models of competition all share one thing in common: "These new forms . . . enable firms to harvest external knowledge, resources, and scale that were all previously impossible. Whether your business is closer to Boeing or P&G, or more like YouTube or Flickr, there are vast pools of external talent that you can tap with the right approach. Companies that adopt these models can drive important changes in their industries and rewrite the rules of competition" (269sq). Per Tapscott and Williams, these models are not so different from prior ones. As this quotation shows, in the end, it really is still all about profitmaking and achieving overall capitalist economic goals. The difference is that Wikinomics strategies are more subtle. They colonize spare time and transform free time into labour time, in which surplus value is created and appropriated by capital. However, the prosumers don't realize that they are being exploited because exploitation now seems fun to them; it is entertaining, and takes place during their spare time.

Wikinomics, hence, is not only a subtle form of exploitation of unpaid labour, but also an ideology. The main idea is to outsource labour to globally distributed customers and collaborators that act as prosumers so that labour and other costs are reduced. Marx showed that if variable capital costs (labour costs) decrease, the rate of exploitation (the relation of surplus value to variable capital s/v) increases. With the rise of Wikinomics, exploitation expands to the realm of spare time, economic colonization and instrumental reason become universal, and the rate of exploitation increases because prosumers, as a tendency, deliver unpaid surplus value. Tapscott and Williams don't call this process exploitation, but they implicitly admit that it is all about the extraction of surplus value from consumers: "Companies can design and assemble products with their customers, and in some cases customers can do the majority of the value creation" (289sq). This is not a novel form of management and organization

because it has in common with Taylorism the overall goal of increasing competitive advantage and the reduction of humans to economic reason in the last instance (cf. Fuchs, Blachfellner & Bichler, 2007).

Most of the authors' Web 2.0 accumulation strategies are based on the notion of the cost-cutting effects of the global outsourcing of labour, supported by the Internet. In reality, this strategy has the form of a new self-employment, which already in the past produced precarious forms of flexibility with more risks, less social security, and less secure employment. The most probable result of an economy based on Wikinomics will be an increase in precarious and unpaid labour that benefits certain companies that exploit unpaid labour. Such a situation remunerates more people for only a strictly limited time for specific tasks. The result will be more precarious jobs and living conditions, with an increased income gap between corporate workers on top, and then flex-workers, temporary workers, and the unemployed at the bottom.

Tapscott and Williams have an idealistic and unrealistic view of capitalism. They argue that in the end, all actors involved in Wikinomics will benefit. For example, they say that the new business models would "drive new innovation, create jobs and wealth, and add tremendous value for customers" (p. 234). If there is one general principle of capitalism, it is that capitalism is a system that never benefits all, but only some at the expense of others, and some more than others so that relative or absolute inequality is generated. In capitalism, economic freedom stands in antagonism with social equity. Capitalism is, overall, always a non-co-operative (i.e., competitive) system because it is particularistic: Capital is accumulated by someone or a group at the expense of others who are being exploited or excluded. There is a dialectic of ownership and non-ownership, accumulation and dispossession of money capital. Tapscott and Williams create the impression that all will benefit from Wikinomics, but they don't see that those who gain competitive advantages will do so at the expense of other economic actors and that those prosumers who work for free in the Wikinomy are exploited by capital.

Capitalism is a competitive society in the sense that it benefits certain groups at the expense of others. I have argued in another place, based on the principle of Essence taken from dialectical philosophy, that co-operation, understood as human collaboration that brings advantages to all, is the Essence of society because a fully competitive society is self-destructive, whereas a fully cooperative society is possible, which makes co-operation a more grounding phenomenon of society than competition (Fuchs, 2008). If Truth is seen as the correspondence of Essence and Existence, then capitalism is a false society, and only a fully co-operative society is a true state of human existence. One important quality of capitalism that has been grasped by Marx is that capitalism, in advancing productivity by technological and organizational progress, at the same time deepens exploitation and alienation and produces potentials for a fully co-operative society (Fuchs, 2008). In this context, Marx has spoken of the antagonism between the productive forces and the relations of production. One novel quality of transnational informational capitalism is that co-operative potentials are no longer predominantly advanced in forms that feel alienating and uncontrollable for the masses. Instead, information, "immaterial" labour, media, and technology advance the overall competitive and instrumental character of society by integrating the subjectivity of human actors so that the impression is created that their work and lives are fun, participatory, rewarded, acknowledged, etc. Yet in reality, those actors become ever more subsumed under the control of capital to a greater extent and in ever more spheres of human existence (Fuchs, 2008). In an economy based on Wikinomics principles, spare time, as a tendency, becomes labour time in which surplus value is produced.

Mass collaboration has traditionally been associated with socialist self-management, collective grassroots control of the means of production, and the emergence of a co-operative economy, in which necessary labour is reduced to a minimum and which functions according to the principle of "to each according to his needs, from each according to his abilities." Tapscott and Williams argue that Wikinomics would not be a threat for capitalism and not be based on communist principles: "mass collaboration and peer production are really the polar opposites of the communism that Gates and Lanier despise . . . Whereas communism stifled individualism, mass collaboration is based on individuals and companies employing widely distributed computation and communication technologies to achieve shared outcomes through loose voluntary association" (17). This is neither completely wrong nor right because certain forms of online mass collaboration obviously pose threats for capitalist interests, as one can see in those examples where certain companies and industries try to legally stop file sharing (e.g., Napster) or prosecute copyright infringement. If people give something that is normally sold as a commodity for free to others, many will be happy to receive those gifts, and as a result there will be a tendency of falling profits in the respective business areas.

This seems to be especially the case with strictly non-commercial platforms that allow the free sharing of information. But there is a certain truth in Tapscott and Williams' remarks because there are numerous Web 2.0 examples in which sharing, peering, and gifts are used for making large profits (e.g., YouTube, MySpace, Google). As with all bourgeois thinking, Tapscott's and Williams' book is undialectical; they think in terms of "either . . . or," not in terms of "both . . . as well as." As a result, they argue that Web 2.0 is fully capitalistic and doesn't threaten capitalist profitability. In reality, Web 2.0 both affirms capitalism and produces potentials that can undercut profitability and anticipate a fully cooperative economy. In this respect, Web 2.0 is characterized by the antagonism between the digitally networked productive forces and the generalized capitalist relations of production (Fuchs, 2008).

Wikinomics shows how mass collaboration and digital gifts can be subsumed under capitalist logic. The difference between my own approach and the authors' is that the latter welcome this development, whereas I consider it from a neo-Marxist perspective as the extension and intensification of alienation and exploitation (Fuchs, 2008), yet I recognize that, at the same time, it bears certain potentials for alternative developments. Transnational informational capitalism is characterized by a paradox situation that was foreseen 30 years ago by Herbert Marcuse, in which subjective unfreedom is accompanied by the highest objective potentials for emancipation that have thus far existed in human history (Fuchs, 2008).

I have characterized this paradox economy as the gift commodity Internet economy (Fuchs, 2008). Commercial Web 2.0 applications are typically of no charge for users; they generate profit by achieving as many users as possible by offering free services and selling advertisement space to third parties and additional services to users. The more users, the more profit, that is, the more services are offered for free, the more profit can be generated. Although the principle of the gift points towards a post-capitalist society, gifts are today subsumed under capitalism and used for generating profit in the Internet

economy. The Internet gift economy has a double character; it supports and at the same time undermines informational capitalism.

The gift commodity Internet economy can be read as a specific form of what Dallas Smythe (1981, 2006) has termed the audience commodity. He suggests that in the case of media advertisement models, the audience is sold as a commodity. "Because audience power is produced, sold, purchased and consumed, it commands a price and is a commodity. . . . You audience members contribute your unpaid work time and in exchange you receive the program material and the explicit advertisements" (Smythe, 1981/2006, pp. 233 & 238). Audiences constitute unpaid labor; the consumption of the mass media is work because it results in a commodity, which is to say it produces that commodity. In this model, the audience's work would also include "learning to buy goods and to spend their income accordingly," the demand for the consumption of goods, and the reproduction of their own labour power (Smythe, 1981/2006, 243sq).

With the rise of user-generated content and free access social networking platforms and other free access platforms that yield profit by online advertisement, the Web seems to come close to the accumulation strategies employed by capital on traditional mass media like TV or radio. The users who Google data, upload or watch videos on YouTube, upload or browse personal images on Flickr, or accumulate friends with whom they exchange content or communicate online via social networking platforms like MySpace or Facebook, constitute an audience commodity that is sold to advertisers. The difference between the audience commodity on traditional mass media and on the Internet is that in the latter the users are also content producers, there is user-generated content, the users engage in permanent creative activity, communication, community-building, and content-production. That the users are more active on the Internet than in the reception of TV or radio content is due to the decentralized structure of the Internet which allows many-to-many communication. Due to the permanent activity of the recipients and their status as prosumers, I would, in the case of the Internet, argue that the audience commodity is a prosumer commodity. The category of the prosumer commodity does not signify a democratization of the media towards participatory systems, but the total commodification of human creativity. Much of the time spent online produces profit for large corporations like Google, News Corp. (which own MySpace), or Yahoo! (which owns Flickr). Advertisements on the Internet are frequently personalized; this is made possible by surveilling, storing, and assessing user activities with the help of computers and databases. This is another difference from TV and radio, which, due to their centralized structure, provide less individualized content and advertisements. But one can also observe a certain shift in the area of traditional mass media, as in the cases of pay per view, tele-votes, talkshows, and call-in TV and radio shows. In the case of the Internet, the commodification of audience participation is easier to achieve than with other mass media. The rise of the Internet prosumer commodity also shows that the visions of critical theorists like Benjamin, Brecht, and Enzensberger of an emancipatory media structure have today been subsumed under capital.

The gift commodity economy is based on what Tiziana Terranova (2000) has termed free labour; as a tendency, prosumers produce surplus value without payment. Michael Hardt and Antonio Negri (2005) speak in this context of the exploitation of the multitude that produces knowledge as part of the commons of society. Free labour is the labour that produces the prosumer commodity that is sold to

corporations at specific rates so that they are allowed to provide personalized advertisements that target and try to mind-control the users while they are active online in order to convince them to buy certain products or services.

Capital is accumulated by collaboration, the provision of free access, peering, sharing, networking, communicating, and opening resources. Consumers become producers of surplus value: "In each instance the traditionally passive buyers of editorial and advertising take active, participatory roles in value creation" (Tapscott and Williams 2007, p. 14). There are "models where masses of consumers, employees, suppliers, business partners, and even competitors co-create value in the absence of direct managerial control" (55). The result is not the emergence of "a new economic democracy . . . in which we all have a lead role" (15), as Tapscott and Williams claim, but a subtly operating, coercive, and highly exploitative capitalist economy that tries to reduce labour and other investment costs by the global dynamic outsourcing of labour to prosumers, competitors, and subcontractors with the help of Web 2.0.

Tapscott and Williams argue that it can be reasonable for companies to create platform incentive systems, i.e., to pay money to users for certain services in order to motivate them to participate and add value (205-209). "A more comprehensive framework might include royalty payments to top innovators . . . Companies that attract and reward the best participants have the opportunity to create new sources of competitive advantage" (207). To pay some money to users who generate surplus value is better than to pay no money to them, but the authors' overall idea is that only the best ideas are rewarded, so that more people engage more intensively in order to get a reward, which will result in more overall production and exploitation of surplus. The only reasonable claim in this context is that all prosumption should be paid for by corporations because they create surplus value. Such a move would advance coming closer to the ultimate goal of a fully co-operative society, in which no surplus is exploited and people co-operate freely in a post-scarcity, high-technology economy that distributes all goods for free and advances the well-rounded development of all individuals. Such a society is non-capitalist in character.

Due to its lack of grounding in scientific discourse and its extremely sloppy dealing with scientific sources and quotations, *Wikinomics* is not a scientific monograph, but more a guide for business leaders. Nonetheless, it is worthwhile reading for readers who want to observe how affirmative thinking and bourgeois ideology operate within the discourse on Web 2.0.

In the end, there is an important truth in the work of Brecht (1932, p. 64), who wrote that the usage of the media in the interest not of the few, but of all, is unfeasible in the capitalist social order, but feasible in another order. Web 2.0 and Wikinomics show that networked prosumption in a capitalist order serves the economic interests of the few, but has the potential to serve the interests of all in another societal order that can be concretely anticipated today.

My aim is not to pose a purely pessimistic view on the economistic techno-optimism of Tapscott and Williams because there are actual examples, like peer-to-peer file-sharing or Wikipedia, that show that already today there are examples for techno-social Internet-based systems that transcend the instrumental logic of competition and instrumental reason and anticipate a society that is based on cooperation, sharing, and participation. These accounts are either radical in the sense that they argue that

Internet and society have anti-capitalist potentials, or they are social-democratic in the sense that they argue that there is a new importance of public goods inherent in the Internet (e.g., Atton, 2004; Barbrook, 1998, 1999, 2007; Benkler, 2006; Lessig, 2006; Söderberg, 2002).

On the radical side, Atton (2004, p. ix) stresses that in the "anti-copyright and open software movements . . . philosophy of communicatarianism and usufruct offer alternatives to the political economies of copyright ownership and intellectual property rights." Richard Barbrook (1998, 1999, 2007) argues that, due to digital gifts, "within the mixed economy of the Net, anarcho-communism has become an everyday reality" (Barbrook, 1998). "By giving away their own personal efforts, Net users always receive the results of much greater amounts of labour in return from others. Although many on-line activities are trivial, some collaborations are now creating very sophisticated products, such as the Linux operating system and interactive music pieces. Net users are now developing a much more efficient and enjoyable way of working together: cyber-communism" (Barbrook, 1999). A similar account is given by Johan Söderberg (2002): "The success of free software in out-performing commercial software is a showcase of the productive force of the general intellect, foreseen by Marx 150 years ago. It underpins the claim by Autonomist Marxists that production is becoming intensively social, and supports their case of a rising mismatch between collective labour power and an economy based on private property . . . It is here that Marxism has its role to play as a toolbox of critical analysis and ideological awareness. Ultimately, the direction of history is not reducible to emerging productive forces, conveniently mapped out by historical materialism, but is contested and resolved in struggles between social actors. In this struggle the hacker movement is important, I stress, because they can challenge capital's domination over technological development."

An example for the social-democratic version of the argument is that Yochai Benkler contends that there are now socially-produced alternatives to information commodities: "The basic technologies of information processing, storage, and communication have made nonproprietary models more attractive and effective than was ever before possible" (Benkler, 2006, p. 462). Arguments similar to the ones put forth by Benkler are made by Lawrence Lessig: "With respect to intellectual property, I argue against code that tracks reading and in favor of code that guarantees a large space for an intellectual commons" (Lessig, 2006, p. 276).

Synthesizing both the Web 2.0 commodity-argument and the Web 2.0 commons-argument for me means an actualization of the Marxian antagonism between productive forces and relations of production: "Networks are forms of development as well as fetters of capitalism . . . Networks are a material condition for a free association, but the cooperative networking of the relations of production is not an automatic result of the networked productive forces, a network society . . . is something that people must struggle for" (Fuchs, 2008, p. 160).

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