

Critical Pedagogy and Wikilearningⁱ

Juha Suoranta

The masses have boundless creative power. They can organize themselves and concentrate on places and branches of work where they can give full play to their energy; they can concentrate on production in breadth and depth and create more and more undertakings for their own well-being. –

Mao Zedong

THE HORIZONTAL NETWORK SOCIETY OF PRODUSERS

In the end of the first volume of his magnum opus *The Information Age*, Manuel Castells, a leading scholar in social sciences and communication, concludes that in times of global information flows and overloads, ruling functions and processes of the world are structured and organized in networks. Networks are structuring our societies, ‘and the diffusion of networking logic substantially modifies the operation and outcomes in processes of production, experience, power, and culture’ (Castells, 1996: 469). In what follows it is assumed that in the current information age, the realm of education and learning – belonging to the practices and processes of the networked society and complexly intertwining with production, experience, power and culture – has been deeply touched and modified by the networking logic.

The network society, in the simplest terms, is a social structure based on networks operated by information and communication technologies based in microelectronics and digital computer networks that generate, process, and distribute information on the basis of the knowledge accumulated in the nodes of the networks. (Castells, 2005: 7)

As Castells remarks, at least since the 1970s, the world has transformed economically, socially and politically due to the prominent and rapid developments in information and communication technologies. Not only we now know but are also poised to admit, that ‘technology does not determine society: it *is* society’ (Castells, 2005: 3). As he further states, ‘people, social actors, companies, policy makers do not have to do anything to reach or develop the network society. We are in the network society, although not everything or everybody is included in its networks’ (16). Momentous to this development have been the birth of the Internet in 1969 and Tim Berners-Lee’s invention of the World Wide Web in 1989. There are three large areas of social behavior and human interaction greatly affected by the digital technologies and the logic of global networking, those of economy, sociability and communication (Castells, 2005: 8–13) of which the last two are in the scope of this article from the point of view of education and learning. Sociability and communication are among the main ingredients in authentic education and learning as they enable us to interact and ‘share skills and knowledge’ (Jandrić and Boras, 2015: 3).

Writing in the openly normative context of critical pedagogy’s tradition, originating from Marx, Freire, McLaren, Giroux and others (see e.g. Darder et al., 2009; Freire, 2005; Giroux, 2011; McLaren, 2003; McLaren and Kincheloe, 2007), my concern

is the following question: How people can educate themselves to be more critically aware of the possibilities of horizontal communication and distributed learning in the digital networks, and how they can use digital communication tools effectively for the common good and eventually overcoming the exploitative capitalist condition of the Internet and other realms of life?

Nowadays, there exists more than one Internet. There is at least a commercial-capitalist Internet controlled by the corporate-state-military-complex, a volunteer-commons-based Internet created by ordinary people and an alternative Internet, or the darknet, operated by the hacker community and crypto-anarchists nurturing their legacy of privacy and ideals of an open source revolution. In the context of critical pedagogy, the following distinction is necessary: critical pedagogues are mainly interested in the volunteer-commons-based Internet (and the communist Internet as I will argue in the final part of this article), deeply sympathetic to the 'Darknet' and its derivations, such as open source movement, and highly critical towards the growing power of the commercial-capitalist Internet.

Bringing people together and providing them with an access to all human knowledge are among the most essential features of critical pedagogy both in theory and practice. This feature of critical pedagogy can be summed up with the idea of *horizontal communication*. As opposed to *vertical communication* in which information is distributed from the few to the many (as in the broadcasting and top-down models of mass communication controlled by the media corporations or the state), in horizontal communication information is not only distributed from many to many but also created by many. Critical pedagogy emphasizes horizontal networks of communication and distributed media where people can contribute richly; they give

and take information; share ideas; debate openly; and send and receive information for free. The difference between vertical mass media and horizontal distributed media is as follows: 'Whereas mass media are hierarchical, linear, with a control centre and one-way flow of media content from few producers to many recipients, distributed media are networked, non-linear, with multi-directional and reciprocal flows of media content from many producers to many consumers' (Wittel, 2012: 317). Horizontal communication and distributed media can be defined as forms of self-directed mass communication as Castells explains:

As the network society diffuses, and new communication technologies expand their networks, there is an explosion of horizontal networks of communication, quite independent from media business and governments, that allows the emergence of what I call **self-directed mass communication**. It is mass communication because it is diffused throughout the Internet, so it potentially reaches the whole planet. It is self-directed because it is often initiated by individuals or groups by themselves, bypassing the media system. (Castells, 2005: 13; bold in original)

Self-direction plus mass communication has nowadays a well-established name: social media. In social media, this horizontal mode of communication has at least the following three implications for the theory and practice of critical pedagogy, and thus to our social being and forms of learning:

Firstly the number of media producers increases dramatically in the digital age. Now everybody with access to a mobile phone or a laptop and access to a network is a potential producer of media content. Secondly digital

technologies enable new social forms of media production and media distribution, for example large scale 'sharing' of media content and large scale forms of collaboration and peer production such as open source code. Thirdly, as the number of media producers increases media themselves are becoming ubiquitous in that all aspects of the social world and our lives become mediated. (Wittel, 2012: 317)

An online encyclopedia such as Wikipedia is an example of the horizontal mode of communication for it is based on self-directed mass communication. It has millions of readers and editors who participate in everyday knowledge creation and distribution with their digital devices. In respect of the ubiquitous of the media, online encyclopedias and other wiki-based platforms of the Internet are often points of departure in information search or other online activities.ⁱⁱ In the horizontal mode of communication, as Bruns (2007) states, producer replaces the distinction between a producer and a consumer, the one who distributes messages from the one who only receives and digests them. In this sense, the idea of a produser bears a resemblance to that of active or creative consumption (Willis, 2003).

The production of ideas takes place in a collaborative, participatory environment which breaks down the boundaries between producers and consumers and instead enables all participants to be users as well as producers of information and knowledge – frequently in an inherently and inextricably hybrid role where usage is necessarily also productive: participants are produsers. (Bruns, 2007: 3)

WIKIWORLD AND WIKILEARNING

The idea of produsers is associated with and characteristic of the Wikiworld, an idea of which Suoranta and Vadén have described in the following words:

The Wikiworld is a system of collective processes rather than a system of ready-made facts given from above, from those who believe that they know better than the rest of us. The Wikiworld is an empowering social construction with positive effects for both political and epistemological democracy and, as we believe, eventually it has the potential to abolish the distinction between the rulers and the ruled. (Suoranta and Vadén, 2010: 1)

In their book they argue, 'We are moving towards a progressive transformation from the institutionalized and individualized forms of learning to open learning and collaboration'.

By the notion of Wikiworld we refer to both the technical and the social spheres of the Internet; more specifically to those social formations and political struggles, can be enforced by the possibilities of the Net. The Wikiworld is built through the 'collaborative turn', or what is called participatory culture, which includes relatively low barriers to civic engagement and activism, artistic and other sorts of expression, easy access for creating and sharing one's outputs with others, peer-to-peer relations and informal mentorship, as well as new forms of socialization, social connections, collectivism and solidarity. (Suoranta and Vadén, 2010: 2)

Wikilearning happens when people learn together on the Internet, when they do not only share their ideas, information and opinions, but also cooperate, create and evaluate things with each other. Researchers, educators, teachers and other cultural workers are building wikis and forming alliances globally with their peers and like-minded people. They are parts of informal networks and 'invisible colleges' and have joined forces in digital temporary autonomous zones by creating new forms of interaction and knowledge production outside closed educational systems (2–3).

Technically speaking, wikilearning is based on wiki software, Ward Cunningham's invention in 1994. 'What distinguished Wikis from other collaborative software was the fact that users could edit any web page or create new pages using only their web browser and a very simple editing or markup language' (Mejias, 2011: 100). Wiki software fulfilled Cunningham's preliminary aim: it allowed fast and easy editing without sophisticated computer programming skills or a specialized computer literacy.

A wiki allows a community of people to edit and create – simultaneously, in real time—as many pages as they want. (...) In theory, in a wiki no participant enjoys more editorial power than another, for any participant can alter the contents of any page at any time (in reality, depending on the system configuration, administrators enjoy certain privileges like locking or deleting pages, or controlling user access). Thus, the writing of a wiki is a non-linear process, as various editors can work on various parts simultaneously and concurrently. And while this may sound like a recipe for chaos, the wiki is practically indestructible because it makes a copy of itself every time a

change is saved, allowing the community to compare earlier versions and revert to them if desired. (Mejias, 2011: 100)

Moreover, there is often a separate discussion page connected to a wiki page promoting the 'public use of reason'. These software features provide a low-threshold tool for collaboration without pre-existing hierarchies, with space for deliberation and debate, shared knowledge construction, and with accumulated cultural and collective memory processes (see Ferron and Massa, 2014; Hara and Doney, 2015; Pentzold, 2009).

Nowadays, there are tens of wiki hosting services ('wikifarms') for educational and other use, and thousands of individual wikis in addition to the flagship of all the wikis, Wikipedia, a free-access, free-content online encyclopedia, with hundreds of language versions and sister projects such as Wikiversity.ⁱⁱⁱ The wiki software is also for many purposes. In critical pedagogy, wikilearning offers a new tool to reach new audiences and use ordinary people's knowledge in an effective and cost-efficient manner in the learning sphere of the Internet. It takes the core ideas of critical pedagogy, those of problem-posing education and dialogue between participants to a new level. In other words, wikilearning can be considered as a new stage in, or an extension of, Freire's pedagogical model: a globally distributed 'pedagogy of all people in the process of permanent liberation'. The following features characterize wikilearning (see also Suoranta and Vadén, 2012: 105–9).

First and foremost, a grand narrative of the enlightenment and progress through education and accumulation of knowledge condense in wikilearning. An ontological assumption is that human beings are rational, and in partnership with others can

change things into better by means of information and knowledge. In this tone, a catch phrase of the current digital era could be: 'All the learners of the world, wikify!' (see Suoranta, 2011).

Epistemologically, wikilearning is based on the assumption that knowledge is a social construct. In wikilearning, this assumption is validated as people create wikis by writing, editing and commenting on them. Knowledge building and negotiation are transparent and, in principle, radically democratic processes. Wikilearning can be used as a tool for practicing and reflecting the production and legitimation of knowledge, and for asking 'how and why some constructions of reality are legitimated and celebrated by the dominant culture while others clearly are not' (McLaren, 2003: 196).

Wikilearning is a radically open form of learning. State laws or education policies do not regulate it, that is, it is not usually part of the nation state's top-down educational system, but an independent activity in the informal settings of civil society. Wikilearning demands that all content is open access and free for all. This means that in the Wikiworld sharing and adoption of the materials, but not their commercial use, is supported (by using Creative Commons Attribution-NonCommercial 3.0 Unported License).

Wikilearning makes everyone radically equal – the starting point is the freedom of everyone to participate, create and use the materials. It is not regulated by academic degrees and does not intend to produce a rival hierarchy or order of rank. In fact, the hierarchy in disorganization is typically task-based, contextual, informal and susceptible to rapid changes. Moreover, in wikilearning experts, dependent on formal professional training, are 'replaced by the autodidact, informally skilled often through collective experimentation' (Atton, 2002: 153). Furthermore, wikilearning

nurtures reflective uncertainty, at least in principle, for wiki-pages are editable, and thus, in principle, in continuous process of change towards accuracy: the 'edit' and 'history' buttons in every wiki page potentially increase learners' capacities 'to read the word and the world'.

Wikilearning is a form of collaborative learning (see Bruffee, 1999), of mass collaboration and crowdsourcing, meaning that people in various ways participate in building wikis: they write, edit, comment, suggest and evaluate, and there is no-one (teacher, facilitator, mentor) who knows in advance, who has the right answers or who is ready to pour or transplant information into someone's head as in almost all variations of banking education. Wikilearning promotes global open collaboration that potentially goes beyond and transgresses national, gender, age, ethnic and economic boundaries. It belongs to the realm of Marx's general intellect, and millions of people are joining forces in knowledge creation, in which 'the collective worker is never destroyed but can be used repeatedly and for many different purposes' (Desai, 2011: 17).

Wikilearning is characterized by voluntary participation extending to the decision to participate or not; to learn or not; to be involved or not. Often, the intensity and role of participation varies: sometimes, a user can only act a visitor who uses the information, and sometimes a contributor who creates, evaluates and debates. Ideally, wikilearning occurs in a peer-to-peer mode, that is, by learning from each other, and helping each other to learn. More importantly, the peer-to-peer structure allows giving without taking and taking without giving, that is, an exchange is not necessarily reciprocal.

Wikilearning deals with digital information that, unlike other material goods or services, is non-rivalrous, and it does not elapse nor diminish when used. Wikilearning 'costs the capitalist nothing, a fact that by no means prevents him from exploiting it' (Marx, 1867/1977: 508n) just like any other 'free gift' to capital (like 'nature, history, scientific-technical knowledge, and care labor' (Smith, 2012: 167–8)).^{iv}

WIKILEARNING AS HORIZONTAL COMMUNICATION

The age of the Internet and horizontal communication brings up the elementary question of the aims of the education of the future. It is evident that in schoolwork it is not enough anymore to concentrate on face-to-face interaction but also to digital interactions between people close and in the distance. In addition, it is not viable to think pedagogy only from the vantage point of a teacher, or of didactics, linked to the substance knowledge. In critical pedagogy, it has been maintained that there are different types of educational encounters and engagements. Peter McLaren has proposed the following four-stage typology:

Teaching is a process of organizing and integrating knowledge for the purpose of communicating this knowledge or awareness to students through an exchange of understanding in prespecified contexts and teacher/learner environments. *Pedagogy* is distinct from teaching in that it situates the teacher/learner encounter in a wider context of historical and sociopolitical forces in which the 'act of knowing' recognizes and takes into account the differentiated politics of 'reception' surrounding the object of knowledge by the students. *Critical pedagogy* constitutes a dialectical and dialogical

process that instantiates a reciprocal exchange between teachers and students – an exchange that engages in the task of reframing, refunctioning, and reposing the question of understanding itself, bringing into dialectical relief the structural and relational dimensions of knowledge and its hydra-headed power/knowledge dimensions. *Revolutionary pedagogy* goes further still. It puts power/knowledge relations on a collision course with their own internal contradictions; such a powerful and often unbearable collision gives birth not to an epistemological resolution at a higher level but rather to a provisional glimpse of a new society freed from the bondage of the past, a vision in which the past reverberates in the present, standing at once outside the world and beside the world, in a place of insight where the subject recognizes she is in a world and subject to it, yet moving through it with the power to name it extopically so that hidden meanings can be revealed in the accidental contingencies of the everyday. (McLaren, 2000: 185)

All the above-mentioned stages have their place and all of them are needed in designing and applying wikilearning in practice. The first stage helps instructors and facilitators to choose and set up the technical platforms – which wiki-platforms to use and why? The second stage advises to take into account the obvious differences of the educational contexts and diversities between the students. It also reminds of the socio-political conditions that determine educational acts. The third and the fourth stages emphasize the dialectical and dialogical processes that are actualized between and among the learners as they together foresee a glimpse of a new society freed from the bondage of the past (185). As a concrete form of ‘prefigurative struggle’, wikis –

especially such non-commercial and open access as Wikipedia and its sister projects – can

offer a ‘glimpse’ of an authentic humanized, democratic, socialist alternative.

People need to experience and feel the difference, rather than just hear or read about it, if their consciousness is to undergo an authentic change.

Dialogue, as a form of education and political communication, is one example of what I mean by a ‘glimpse’. It is an extremely important one, because it enables us to experience the alternative or certain aspects of it for a period of time and in a specific context. (Allman, 1999: 104)

Wikilearning is a form of dialogue and an experience through which participants can feel and see the difference: it brings people together to collaborate in a joint project. Participants are often strangers and even anonymous to each other as they write from their localities, but in a way this strangeness highlights the idea of international solidarity between people in their efforts to increase the free and open use of educational resources. Wikilearning has to do with *individual learning* as people participate in wiki-projects (as information takers or givers or both), but also with *collaborative learning*: people join forces locally and in the distance in the shared task of writing and editing wiki-pages. In their effort as users and editors, they use and develop their literacies such as *basic literacy* (reading and writing), *computer literacy* (how to use computers and other digital devices technically) and *information literacy* as skills of information search and basics of data mining, as well as *critical literacy*, that is, analyzing information, evaluating media contents and practice general source criticism and *revolutionary literacy*, that is, how to use wikis and other social media

progressively for radical democratic social change by participating in transformative action on and off the Internet in local and global contexts (see Castells, 2012; Hill, 2013; Kellner and Share, 2009: 288).

The processes of wikilearning fulfill the overall aim of authentic education as interactive and horizontal relation. 'The aim, then, is not that of producing independent, autonomous thinkers – mythological creatures at best – but of facilitating relational processes that can ultimately contribute to the continuing and expanding flow of relationships within the world more broadly' (Gergen, 2009: 243). In terms of classroom learning, this would mean that schools could become 'meeting grounds for the concerns of the world' and circles of expanding interactions and participations from inside the classroom to the larger world. With the help of the Internet, students are not 'limited to learning *about* other, but can begin to learn *with* them' (267; italics in original)

Wikis can engender a new understanding of the potential of digital media.

This is important because despite the emphasis on social networks, most of the digital media we are now infatuated with cater to the egotistical voice of the individual (corporations have built whole business models around this fact). Wikis are unique because by promoting collective production – not just self-publishing – they allow learners to think beyond themselves and to contribute to something larger than themselves. (Mejias, 2011: 106)

In the hands of a critical pedagogue, wikis can strengthen people's solidarity needed in social transformation. It is often the case that young people painlessly capture the 'phenotype' of new information technologies and some of them even advance into

hacker culture and learn the technological layers underneath the digital screen. They can be said to be as 'foot soldiers' of evolving cultural practices, including info-technologies (see Willis, 2003), and in the verge of something not-yet-seen or experienced in the adult world. Sometimes, they even serve as guinea pigs in and of the media markets at the same time as, through the use of the latest hi-tech, they develop and utilize their emotional and aesthetic capital. What is left to a critical pedagogue is to engage in developing their *cognitive* and *critical* skills and capital – and, in the pedagogical settings, search for the 'genotype' of information and communication technologies *together*.

To suggest that it is a critical pedagogue's concern to gain people's – pupils' as well as adult learners' – analytic and critical capacities means that she usually has useful theories, concepts and models of explanation in her possession and – distinctive to learning in everyday life outside schools – *time* and *space* for educational dialogue and reflection. In her work, whatever the settings, a critical pedagogue can use (the above-mentioned) principles of wikilearning to focus on intellectually meaningful and substantive tasks that her pupils can make their own and undertake together. This could include critical analysis of pupils' active and creative consumption habits as well as their meaning making pertaining the use of popular culture and information and communication technologies. As Willis (2003) has it: 'Educators and researchers should utilize the cultural experiences and embedded bodily knowledge of their students as starting points, not for bemoaning the failures and inadequacies of their charges, but to render more conscious for them what is unconsciously rendered in their cultural practices' (413).

Building these capacities with the people are among the fundamental aims of today's critical pedagogy. How to teach people to unlearn the hegemony of the ruling elite and foster revolutionary learning and critical consciousness? In the past, the answers were marches, demonstrations, strikes, public speeches, radical press, leaflets and books. Today, the technological answer is, of course, the Internet – while the very same substantial question has remained: How can people unlearn the mumbo jumbo of the entertainment industry (also known as 'tittytainment') and politics hostile to human well-being, and get the revolutionary, subversive and critical ideas heard and in action amidst the chaos of digital information?

These questions were also in Paulo Freire's agenda. In his *Pedagogy of the Oppressed*, he argued for the pedagogy of liberation: in the first stage, a teacher unveils the world of oppression with the oppressed (who in his time were for the most part illiterate peasants exploited by the landowners). In the mutual learning process, students along with their teachers act to change the current situation, the reality of oppression, into the reality of liberation and themselves to the subjects of history.

In the second stage, in which *the* reality of oppression has already been transformed, this pedagogy ceases to belong to the oppressed and becomes a pedagogy of all people in the process of permanent liberation. In both stages, it is always through action in depth that the culture of domination is culturally confronted. (Freire, 2005: 54)

In other words, Freire's aim was to create inclusively horizontal educational relations as Gomez has stated: 'Freire affirms the need of communication pedagogy, considering that the one who dialogues does it with someone on something that may become a new programmatic content' (Gomez, 2009: 52). Freire's pedagogical model

is dialogical in consisting of people who teach and learn from each other as students and teachers in the permanent process of *conscientização*, that is, in the continuous process of critical consciousness-raising. In addition, Freire points out that

[f]or the truly humanist educator and the authentic revolutionary, the object of action is the reality to be transformed by them together with other people – not other men and women themselves. The oppressors are the ones who act upon the people to indoctrinate them and adjust them to a reality which must remain untouched. Unfortunately, however, in their desire to obtain the support of the people for revolutionary action, revolutionary leaders often fall for the banking line of planning program content from the top down. They approach the peasant or urban masses with projects which may correspond to their own view of the world, but not to that of the people.

(Freire, 2005: 94)^v

Gomez has experimented with Paulo Freire's ideas on the Internet in her online education and launched the idea of digital cultural circles after Freire's method of culture circles. In these circles, Freirean pedagogical maxims – nobody educates anybody else and the subject of education is collective 'we' instead of individual 'me' – has been followed:

Nobody educates himself/herself; people educate each other through their interactions with the world. This is a respectful opening where there is no individual 'I think' but a 'we think' as a collective act. Through the dialogic education it is possible to say the word itself, product of action and reflection. The participation in chats, forums, the choice of a visual identity,

the cultural expression in the web, all of them constitute the political act that can come from all possible spaces producing critiques, creativity and transforming actions. (Gomez, 2009: 41)

In relation to the theoretical framework and language of critical pedagogy, wikilearning is a variation of the materialization of Chairman Mao's concept of mass line – what he writes in his introductory note in *Surplus Labour Has Found A Way Out* in 1955: 'The masses have boundless creative power. They can organize themselves and concentrate on places and branches of work where they can give full play to their energy; they can concentrate on production in breadth and depth and create more and more undertakings for their own well-being' (Mao, 1966).

Wikis, crowd-sourced digital tools in the Internet, can be effective tools in developing critical praxis in and outside the classroom. They can offer participants experiences of democratic decision-making, of belonging in the digital community and acting as part of the larger whole. These experiences can in turn result in participants' deepened understanding of the nature of education and communication, and the working of power (Warschauer and Lepeintre, 1997). The Internet is a global apparatus that in principle can distribute information beyond any borders and convey knowledge to the entirety of humanity. It gives 'the power and information to many citizens on a global scale to understand the structures and institutions causing oppression across the planet as well as the potential to join others in a collective movement to confront the institutions and social actors who are responsible for causing social inequalities' (Carroll-Miranda, 2011: 534). In this sense, it is fair to say

that wikilearning is a powerful means for critical learning as it brings people together and provides them with access to the sum of all human knowledge.^{vi}

THE POLITICAL ECONOMY OF WIKILEARNING AND THE PROMISE OF THE COMMUNIST INTERNET

The Wikiworld, wikifarms and the whole archipelago of individual wikis cannot be sufficiently scrutinized and understood in the theory of critical pedagogy without the larger socio-political context and the lenses of critical political economy, for the Wikiworld is an ideological battleground: the ways in which the digital sphere and its physical counterparts are contested by millions of users every day (Suoranta and Vadén, 2010: 2). From the point of view of critical political economy, the promise of the Internet as a tool of emancipation is compromised in several ways. There are still hundreds of millions of people who cannot access the Internet because of the lack of digital devices and/or broadband. In addition to the digital divides, there are commercial and governmental surveillance organizations (like NSA in the United States) that are specialized in monitoring people's digital footprints. This is, of course, another threat to open communication and learning.

There is also an abundance of malware (malicious software), acts of vandalism and censorship in the Internet, which, of course, complicates and restricts the open educational process. Furthermore, the content of the Internet is for the most part nonsense, and only a small part is valuable information. The nonsense is produced by the entertainment industry all over the world, mainly for a purpose of keeping people docile and ignorant – or, as C. Wright Mill's wrote in 1959, to make them 'cheerful

robots’, and the society in which cheerful robots live ‘as the antithesis of the free society – or in the literal and plain meaning of the word, of a democratic society’ (Mills, 2000: 172). The problem with censorship – and, *mutatis mutandis*, with the entertainment industry – is not the blocking of nonsense but the valuable part of the contents. These features of the Internet age can be defined as oppressive conditions that impede authentic learning and force people to adjust to the ready-made and ready-thought realities without a chance to participate and contribute.

In order to overcome these issues, alternatives have been proposed. Among them is an idea of the communist Internet (Fuchs, 2014). The origins of this idea are of course in Marx, who thought that the means of production should be owned by the people. A presumption in the communist mode of production is that communication is an essential part of human nature and society, and therefore both communication and the means of communication belong to all. People ‘are part of the commons of society – all humans continuously create, reproduce and use them in order to exist’ (242). Tools of communication and their free use cannot be denied from humans without harm. Denying them is actually an act of violence. ‘Therefore the commons of society should be available for free (without payment or other access requirements) for all and no class should own them privately’ (242). Fuchs explicates the idea of the communist Internet and its social consequences as follows:

The communist Internet is an association of free producers that is critical, self-managed, surveillance-free, beneficial for all, freely accessible for all, fostering wealth for all, co-operative, classless and universal. On the communist Internet, there is no profit and no advertising and there are no corporations. In a communist Internet age, programmers, administrators

and users control Internet platforms by participatory self-management. Network access is provided free to all and there are no corporate Internet service providers. Internet literacy programs are widely available in schools and adult education in order to enable humans to develop capacities that allow them to use the Internet in meaningful ways that benefit themselves and society as a whole. All humans have free access to web platforms, computer software and hardware. Computing is non-profit, non-commercial, non-commodified and advertising-free. There is no corporate mediation of Internet communication; humans engage more directly with each other over the Internet without the mediation by corporations that own platforms and exploit communicative labour. (242)

As we are living in the world of two forms of capitalism, those of liberal democratic capitalism and state-capitalism, the communist Internet seems to be an ideal. As Fuchs states, there are two scenarios for the future. In the first one, it is an overall communist class struggle that backs up the success of info-communism. 'In the second scenario, some of the characteristics of info-communism, such as the principle of free access and free content provision and online mass collaboration, are absorbed by capitalism, which thereby destroys the communist character of info-communism' (248).

In other words, informational communism cannot survive in the belly of capitalism, but implies class struggle, for 'capitalism is a class society. The capitalist Internet is a class-structured Internet: corporations and other central actors dominate attention, symbolic, social and material benefits. A just society is a classless society. A

just Internet is a classless Internet' (Fuchs, 2014: 257). In the meantime, as class struggle or the classless society is still only in the horizon, we need concrete examples and practices, like Wikipedia, to demonstrate that another Internet is possible, existing and available for all. It is not enough to have technological and intellectual resources in people's hands commonly; material resources are also needed. Thus, the genuine formula for the communist Internet is as follows: the communist Internet = free access to the Internet plus communist ownership of servers plus electrical energy resources (see also Suoranta and Vadén, 2007, 2010).

CONCLUSION

As Fuchs (2014: 257) maintains 'all humans should be able to truly participate and benefit from media and technology, which is not the case today'. This is why in critical pedagogy we need wikilearning consisting of self-organization and self-determination of wiki-activity based on voluntary participation. One of the core assumptions of critical pedagogy is that economic factors and modes of production should be taken into account as forces that shape our social being and identity, and psychological and social processes in general. This is the revolutionary potential of wikis and wikilearning. Wikilearning is a potential form of revolutionary praxis, a radical collective activity in its shared knowledge creation processes.

As knowledge can be defined in this instance as a social product it always involves hegemonic battle over power to rule and regulate. In a capitalist society the ruling elite owns the media and thus sets the ruling ideas. But inside this capitalist realm there is the Wikiworld evolving as yet another hegemonic battleground marking the turn of a tide, for in the Wikiworld

people have unprecedented powers in their possessions. The Wikiworld is not only a counter-hegemonic move but a serious, hard-to-stop mass activity. (Suoranta and Vadén, 2007: 158)

Wikilearning exceeds the formal boundaries of schooling and education, and other exclusive practices of learning. Therefore, it is for everyone and can be accessed anywhere, anytime. At best, wikilearning is continuous invention and reinvention. By utilizing the power of wiki-technologies and people's collective intelligence, wikilearning promotes a world in which an apparently perpetual division between the rulers and the ruled is no possible. It gives us a glimpse of a commons-based or the communist Internet 'on which people share, communicate, decide, discuss, play, create, criticize, network, collaborate, find, maintain and build friendships, fall in love, entertain themselves and each other, educate themselves as common activity without corporate mediation' (Fuchs, 2014: 257).

Wikilearning is 'not only a manifestation of radical openness of education, but also show in practice what emancipated people can do; what those who have decided to think for themselves can achieve in co-operation with others without relying on corporations, governments, the market model education or other closed institutions' (Suoranta and Vadén, 2010: 178). Wikilearning is a tool, using Elizabeth Ellsworth's words, "at the hands of hybrid artists-teachers-researchers-communicators-activists—those provocative testers who design and make doubt-filled gestures, equivocal objects, tentative projections, hopeful anticipations, physical encounters" (Ellsworth 2011: 306). In the Wikiworld, there is no center of power and no vanguards controlling people's self-directed digital developments and educational interactions.

In the Wikiworld, people are marching side by side on the information superhighways – by talking, reading, writing and editing together. Wikilearning is already a colossal global movement and people are participating in millions. In terms of critical pedagogy, this is a mark of a new epoch that is overcoming the era of creed and the malaise of individual education.

Notes

[TS: Please insert endnotes here]

REFERENCES

- Allman, P. (1999). *Revolutionary Social Transformation*. Westport: Bergin & Garvey.
- Atton, C. (2002). *Alternative Media*. London and Thousand Oaks: Sage.
- Bruffee, K. (1999). *Collaborative Learning. Higher Education, Interdependence, and the Authority of Knowledge*. Baltimore: The Johns Hopkins University Press.
- Bruns, A. (2007). Prousage: Towards a Broader Framework for User-Led Content Creation. In *Proceedings Creativity & Cognition 6*, Washington, DC. (Retrieved from <http://eprints.qut.edu.au/6623/1/6623.pdf>)
- Carroll-Miranda, J. (2011). Emancipatory Technologies. A Dialogue between Hackers and Freire. In Malott, C. & Porfilio, B. (Eds.). *Critical Pedagogy in the Twenty-First Century: A New Generation of Scholars*. Charlotte: Information Age Publishing, 521–539.
- Castells, M. (1996). *The Information Age: Economy, Society and Culture*. Volume I. The Rise of the Network Society. Oxford: Blackwell.

Castells, M. (2005). The Network Society: From Knowledge to Policy. In Castells, M. & Cardoso, G. (Eds.). *The Network Society: From Knowledge to Policy*. Washington, DC: Johns Hopkins Center for Transatlantic Relations, 3–21.

Castells, M. (2012). *Networks of Outrage and Hope*. Cambridge: Polity Press.

Darder, A., Baltodano, M. & Torres, R. (2009) (Eds.). *The Critical Pedagogy Reader*. 2nd ed. New York and London: Routledge.

Del Vicario, M., Bessi, A., Zollo, F., Petroni, F., Scala, A., Caldarelli, G., Stanley H. E. & Quattrociocchi, W. (2016). The Spreading of Misinformation Online. *PNAS* 113(3), 554–559. <https://doi.org/10.1073/pnas.1517441113>

Desai, R. (2011). The New Communists of the Commons: 21st Century Proudhonists? *International Critical Thought* 1(2), 204–223.

Ellsworth, E. (2011). The Wicked Problem of Pedagogy, An Afterword. In Scholz, T. (Ed.). *Learning Through Digital Media Experiments in Technology and Pedagogy*. New York: The Institute for Distributed Creativity. (Retrieved from https://clalliance.org/wp-content/uploads/files/Learning_Through_Digital_Media.pdf)

Ferron, M. & Massa, P. (2014). Beyond the Encyclopedia: Collective Memories in Wikipedia. *Memory Studies* 7(1), 22–45.

Freire, P. (2005). *Pedagogy of the Oppressed*. New York: Continuum.

Fuchs, C. (2014). *Social Media. A Critical Introduction*. Thousand Oaks: Sage.

Gergen, K. (2009). *Relational Being. Beyond Self and Community*. New York: Oxford University Press.

Gomez, M. (2009). Emmanuel Levinas and Paulo Freire: the Ethics of Responsibility for the Face-to-Face Interaction in the Virtual World. *International Journal of Instruction* 2(1), 27–58.

Giroux, H. (2011). *On Critical Pedagogy*. New York: Continuum.

Hara, N. & Doney, J. (2015). Social Construction of Knowledge in Wikipedia. *First Monday*, 20(6). <http://firstmonday.org/ojs/index.php/fm/article/view/5869/4572> (Accessed November 2, 2015)

Hill, S. (2013). *Digital Revolutions. Activism in the Internet Age*. Oxford: New Internationalist Publications.

Jandrić, P. & Boras, D. (2015). Introduction. In Jandrić, P. & Boras, D. (Eds.). *Critical Learning in Digital Networks*. New York: Springer, 3–12.

Kellner, D. & Share, J. (2009). Critical Media Literacy and Radical Democracy. In Apple, M., Au, W. & Gandin, L. (Eds.). *The Routledge International Handbook of Critical Education*. London and New York: Routledge, 281–295.

Mao, Z. (1966). *Quotations from Chairman Mao*. Peking: Foreign Language Press.

Marx, K. (1867/1977). *Capital*, Volume 1. London: Penguin.

McLaren, P. (2000). *Che Guevara, Paulo Freire and the Pedagogy of the Revolution*. Lanham: Rowman & Littlefield.

McLaren, P. (2003). *Life in Schools. An Introduction to Critical Pedagogy in the Foundations of Education*. Boston: Allyn and Bacon.

McLaren, P. & Kincheloe, J. (2007) (Eds.). *Critical Pedagogy. Where Are We Now?* New York: Peter Lang.

Mejias, U. (2011). How I Used Wikis to Get My Students to Do Their Readings. In Scholz, T. (Ed.). *Learning Through Digital Media Experiments in Technology and Pedagogy*. New York: The Institute for Distributed Creativity. (Retrieved from https://clalliance.org/wp-content/uploads/files/Learning_Through_Digital_Media.pdf)

Mills, C. W. (2000). *Sociological Imagination*. Oxford and New York: Oxford University Press.

Pentzold, C. (2009). Fixing the Floating Gap: The Online Encyclopaedia Wikipedia as a Global Memory Place. *Memory Studies* 2(2), 255–272.

Smith, T. (2012). Is Socialism Relevant in the ‘Networked Information Age’? A Critical Assessment of The Wealth of Networks. In Anton, A. & Schmitt, R. (Eds.). *Taking Socialism Seriously*. Lanham: Lexington, 157–186.
https://www.academia.edu/12037354/Is_Socialism_Relevant_in_the_Networked_Information_Age_A_Critical_Assessment_of_The_Wealth_of_Networks

Suoranta, J. (2011). Learners and Oppressed Peoples of the World, Wikify! In Malott, C. & Porfilio, B. (Eds.). *Critical Pedagogy in the Twenty-First Century: A New Generation of Scholars*. Charlotte: Information Age Publishing, 497–520.

Suoranta, J. (2019a) Wikilearning como recurso de aprendizagem para refugiados. In Gomez, Margarita Vicroria (ed.) *MigraEducas: vulnerabilidade como potência*. São Paulo: Virtus Educação, 176–186.

Suoranta J. (2019b) Wikilearning in Teaching Critical Pedagogy. In: Peters M. (eds) *Encyclopedia of Teacher Education*. Springer, Singapore.

https://doi.org/10.1007/978-981-13-1179-6_324-1

Suoranta; J. & Vadén, T. (2007). From Social to Socialist Media. In Kincheloe, J. & McLaren, P. (Eds.). *Critical Pedagogy. Where Are We Now?* New York: Peter Lang, 143–162.

Suoranta, J. & Vadén, T. (2012). Wikilearning as Radical Equality. In Trifonas, P. (Ed.). *Learning the Virtual Life. Public Pedagogy in a Digital World*. New York: Routledge, 98–113.

Suoranta, J. & Vadén, T. (2010). *Wikiworld*. London: Pluto Press.

Warschauer, M. & Lepeintre, S. (1997). Freire's Dream or Foucault's Nightmare: Teacher-Student Relations on an International Computer Network. In Debski, R.,

Gassin, J. & Smith, M. (Eds.). *Language Learning through Social Computing*. Parkville: Applied Linguistics Association of Australia, pp. 67–89.

Willis, P. (2003). Foot Soldiers of Modernity: The Dialectics of Cultural Consumption and the 21st-Century School. *Harvard Educational Review* 73(3), 390–415.

Wittel, A. (2012). Digital Marx: Toward a Political Economy of Distributed Media. *tripleC* 10(2), 313–333. <http://www.triple-c.at/index.php/tripleC/article/view/379> (Accessed November 2, 2015)

Zollo, F., Bessi, A., Del Vicario, M., Scala, A., Caldarelli, G., Shekhtman, L., Havlin, S. & Quattrociocchi, W. (2017). Debunking in a World of Tribes. *PLoS ONE* 12(7), e0181821. <https://doi.org/10.1371/journal.pone.0181821> (Accessed October 8, 2019).

ⁱ An earlier and a condensed version of this text was held as keynote in the 1st International Conference on Critical Pedagogy ‘Marx, Mao, Freire and Critical Pedagogy’ at Northeast Normal University, Faculty of Education, Center for Critical Pedagogy Research, China (October 10, 2015). I have used parts of this chapter in Suoranta (2019a) and Suoranta (2019b).

ⁱⁱ During my first visit to China (the cities of Changchun and Beijing) in October 2015, I couldn’t help noticing how people of both cities used their mobile phones and tablets intensively in communicating via the Internet. This should not come as a surprise, however, for China’s Internet penetration is over 50% of the population (as of 2016 and counting), which makes it the world number one in users of the Internet (see <http://www.internetlivestats.com/internet-users/china/>).

ⁱⁱⁱ In May 2019, there were 301 language versions of Wikipedia (see https://en.wikipedia.org/wiki/Wikipedia#Language_editions). As stated in the

Wikiversity's front page, 'Wikiversity is a Wikimedia Foundation project devoted to learning resources, learning projects, and research for use in all levels, types, and styles of education from pre-school to university, including professional training and informal learning'. Wikiversity's different language versions differ not only in size and how they are structured but also in content (e.g. it goes without saying that in addition to the fact that the Finnish version is smaller than the English version, the two are also structured and composed differently).

^{iv} 'Units of capital today are happy to appropriate the creative achievements of social labor outside the capital/wage labor relation as "free gifts". Consider, for example, the millions of lines of open software code used by corporations in their processes of production and distribution, the manner in which firms' marketing and design have taken advantage of millions of hours spent by consumers providing evaluations of and design suggestions for commodities, or the new forms of commodities that open software has helped produce. Insofar as commons-based peer production is incorporated within capital circuits as a 'free gift', those engaged in this form of production are in effect working for capital for free. They are therefore 'exploited' by capital in a broad sense of the term. The fact that they freely chose to engage in commons-based peer production complicates this state of affairs without changing the essential matter' (Smith, 2012: 168).

^v In the footnote on the same page of *Pedagogy of the Oppressed*, Freire cites Chairman Mao's idea as follows: "'Our cultural workers must serve the people with great enthusiasm and devotion, and they must link themselves with the masses, not divorce themselves from the masses. In order to do so, they must act in accordance with the needs and wishes of the masses. All work done for the masses must start from their needs and not from the desire of any individual, however well-intentioned. It often happens that objectively the masses need a certain change, but subjectively they are not yet conscious of the need, not yet willing or determined to make the change. In such cases, we should wait patiently. We should not make the change until, through our work, most of the masses have become conscious of the need and are willing and determined to carry it out. Otherwise we shall isolate ourselves from the masses. (...) There are two principles here: ~~30~~ one is the actual needs of the masses rather than what we fancy they need, and the other is the wishes of the masses, who must

make up their own minds instead of our making up their minds for them”. From the *Selected Works of Mao-Tse-Tung*, Vol. III. “The United Front in Cultural Work” (October 30, 1944) (Peking, 1967), pp. 186–187’ (Freire, 2005: 94).

^{vi} This claim, of course, has its downside, for, along with authentic knowledge, the measure of misinformation and rumors is on the rise in the digital echo chambers of the Internet (see Del Vicario et al., 2016; Zollo 2017 et al.).