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What is Social Media?

Key questions

- What does it mean to be social?
- What kinds of social theories exist?
- How can social theory help us to understand what is social about social media?
- How social is the web?

Key concepts

Internet

Social media

Web 1.0

Web 2.0

Web 3.0

Émil Durkheim's notion of social facts

Max Weber's notions of social action and social relations

Ferdinand Tönnies' concept of community

Karl Marx's concept of co-operative work

Overview

This chapter introduces how one can think about social media. You will engage with the question: What is social about social media? One of the first reactions that many people have when hearing the term “social media” is to ask: “Aren’t all media social?” This depends on how one conceives the social. In order to understand the meanings of this term, we need to go into sociological theory. This chapter presents some concepts of what it can mean to be social and discusses the implications of these concepts for understanding social media.

Mainly, sociological theory has asked the question of what it means to be social. Answering it therefore requires engagement with sociological theory. Specifically, I will introduce Durkheim’s, Weber’s, Marx’s and Tönnies’ concepts of sociality and apply them to providing an explanation of the social media concept.

Section 2.1 discusses the question of what new social media are and provides some basic features and criticisms of the terms “web 2.0” and “social media”. In section 2.2, you can read different definitions of social media. I point out that we need social theory to understand what is social about social media. For this task, some sociological theory concepts are introduced that allow us to better understand the sociality of social media. I introduce the four concepts developed by social theorists. Émile Durkheim (1858–1917) was a French sociologist who developed the concept of social facts. Max Weber (1864–1920) was a German sociologist who worked out a theory of social action and social relations. Karl Marx (1818–1883) was a social theorist who established a critical theory of capitalism. Collaborative work is one of this theory’s concepts. Ferdinand Tönnies (1855–1936) was a German sociologist who is most well known for his theory of community. Section 2.3 discusses how the concepts of these four thinkers can be used in constructing a model of social media. It also examines how one can empirically study the continuities and changes of the WWW.

2.1. Web 2.0 and Social Media

Web 2.0

The terms “social media” and “web 2.0” have in the past years become popular for describing types of World Wide Web (WWW) application, such as blogs, microblogs like Twitter, social networking sites, or video/image/file sharing platforms or wikis. As the word “social” features prominently in the term “social media”, the question arises: What is social about social media?

The term “web 2.0” was coined in 2005 by Tim O’Reilly (2005a, 2005b), the founder of the publishing house O’Reilly Media, which focuses on the area of computer technology. O’Reilly (2005a) lists the following as the main characteristics of web 2.0: radical decentralization, radical trust, participation instead of publishing, users as contributors, rich user experience, the long tail, the web as platform, control of one’s own data, remixing data, collective intelligence, attitudes, better software by more users, play, undetermined user behaviour. He provides the following more formal definition:

Web 2.0 is the network as platform, spanning all connected devices; Web 2.0 applications are those that make the most of the intrinsic advantages of that platform: delivering software as a continually-updated service that gets better the more people use it, consuming and remixing data from multiple sources, including individual users, while providing their own data and services in a form that allows remixing by others, creating network effects through an “architecture of participation”, and going beyond the page metaphor of Web 1.0 to deliver rich user experiences. (O’Reilly 2005b)

O’Reilly creates the impression that the WWW, featuring BitTorrent, blogs, Flickr, Google, tagging, Wikipedia, etc., was in 2005 radically new and different from the earlier web (1.0). O’Reilly (2005a) consequently spoke of web 2.0 as a “new platform” that features “new applications”.

In 2000, a crisis of the Internet economy emerged. The inflow of financial capital had driven up the market values of many Internet companies, but profits could not hold up with the promises of high market values. The result was a financial bubble (the so-called dot.com bubble) that burst in 2000, resulting in many start-up Internet companies going bankrupt. They were mainly based on venture capital financial investments and the hope of

delivering profits in the future, and this resulted in a gap between share values and accumulated profits. The talk about the novelty of “web 2.0” and social media fits well into the post-crisis situation, in which investors had to be convinced to invest into new Internet start-up companies, which was difficult after the 2000 crisis. The ideology that web 2.0 is something new and different and that it has new economic and democratic potentials helped to convince investors. Web 2.0 and social media were therefore born in the situation of capitalist crisis as ideologies aimed at overcoming the crisis and establishing new spheres and models of capital accumulation for the corporate Internet economy. The talk about novelty was aimed at attracting novel capital investments.

Although Tim O’Reilly surely thinks that “web 2.0” denotes actual changes, he says that the crucial fact about it is that users, as a collective intelligence, co-create the value of platforms like Google, Amazon, Wikipedia or Craigslist in a “community of connected users” (O’Reilly and Battelle 2009, 1). He admits that the term was mainly created for identifying the need of new economic strategies for Internet companies after the “dot-com” crisis, in which the bursting of financial bubbles caused the collapse of many Internet companies. So he states in a paper published five years after the invention of the term “web 2.0” that this nomenclature was “a statement about the second coming of the Web after the dotcom bust”. He was speaking at a conference that was “designed to restore confidence in an industry that had lost its way after the dotcom bust” (ibid.).

Critiques of Web 2.0 and Social Media Optimism

Critiques of web 2.0/social media optimism have, for example, stressed the following points:

- Online advertising is a mechanism by which corporations exploit Internet users who form an Internet prosumer/produser commodity and are part of a surplus-value generating class that produces the commons of society that are exploited by capital (Fuchs 2008a, 2010c).
- Web 2.0 is based on the exploitation of free labour (Terranova 2004).
- Most Internet users are part of a creative precarious underclass that needs economic models that assist them in making a living from their

work (Lovink 2008).

- Blogging is mainly a self-centred, nihilistic, cynical activity (Lovink 2008).
- The Internet economy is dominated by corporate media chains (Stanyer 2009).
- Web 2.0 is contradictory and therefore also serves dominative interests (Cammaerts 2008).
- Web 2.0 optimism is uncritical and an ideology that serves corporate interests (Fuchs 2008a; Van Dijck and Nieborg 2009).
- Web 2.0 is a marketing ideology (Scholz 2008).
- The notion of sharing is used by Facebook and other corporate social media for mystifying the logic of profit, advertising and commerce that is at the heart of their operation (John 2013).
- Web 2.0 users are more passive users than active creators (Van Dijck 2009).
- Web 2.0 discourse advances a minimalist notion of participation (Carpentier and De Cleen 2008).
- Web 2.0 discourse is technological fetishism that advances post-politics and depoliticization in communicative capitalism (Dean 2005, 2010).
- Social media optimism is based on the techno-deterministic ideologies of cyber-utopianism and Internet-centrism (Morozov 2011) that only postulate advantages for businesses and society without taking into account the realities of exploitation and the contradictions of capitalism (Freedman 2012; Fuchs 2011b, chapter 7).
- Corporations appropriate blogs and web 2.0 in the form of corporate blogs, advertising blogs, spam blogs and fake blogs (Deuze 2008).
- José van Dijck (2013, 11) argues that social media automate the social by engineering and manipulating social connections. It would make “sociality technical” (Van Dijck 2013, 12). Douglas Rushkoff (2010, 158) says that as a result “we are optimizing humans for machinery”. “These days the social is a feature. It is no longer a problem (as in the nineteenth and twentieth centuries when the Social Problem predominated) or a sector in society provided for deviant, sick, and

elderly people. Until recently, employing an amoral definition of the social was unthinkable” (Lovink 2011, 6).

How New are Social Media?

Matthew Allen (2012) and Trebor Scholz (2008) argue that social media applications are not new and that their origins can be traced back to years earlier than 2005. Blogs were already around at the end of the 1990s, the wiki technology was suggested by Ward Cunningham in 1994 and first released in 1995, social networking sites already existed in 1995 (Classmates) and in 1997 (Sixdegrees), Google was founded in 1999. The discourse of ever newer versions would allow “products to claim to be new” (Allen 2012, 264), but at the same time also sustain “continuity and promise an easy transition from what came before” (ibid.). Versions would be ways of encouraging consumption. When talking about novelty, one has to be clear whether one talks about the novelty of technology, usage patterns or power relations.

Allen and Scholz argue that the technologies that constitute “social media”/“web 2.0” are not new. However, on the level of usage, these technologies were not popular in the 1990s and have become popular rather recently. On the level of the power relations of the Internet, it is just as unlikely that nothing changes at all as it is unlikely that there is radical change, because at a certain level of its organization capitalism requires change and novelty in order to stay the same (system of surplus value exploitation and capital accumulation) and continue to exist.

2.2. The Need of Social Theory for Understanding Social Media

Definitions of Web 2.0 and Social Media

Michael Mandiberg argues that the notion of “social media” has been associated with multiple concepts: “the corporate media favorite ‘user-generated content’, Henry Jenkin’s media-industries-focused ‘convergence culture’, Jay Rosen’s ‘the people formerly known as the audience’, the

politically infused ‘participatory media’, Yochai Benkler’s process-oriented ‘peer-production’, and Tim O’Reilly’s computer-programming-oriented ‘Web 2.0’” (Mandiberg 2012, 2).

Here are some example definitions of web 2.0 and social media that can be found in the research literature:

- Social media and social software are tools that “increase our ability to share, to co-operate, with one another, and to take collective action, all outside the framework of traditional institutional institutions and organizations” (Shirky 2008, 20f).
- The novelty of social media would be “the scale at which people who never had access to broadcast media are now doing so on an everyday basis and the conscious strategic appropriation of media tools in this process. Home videos were once viewed by only a few unless selected by curators of TV shows like America’s *Funniest Home Videos*. Today, anyone equipped with a smartphone and an internet connection can post their footage on YouTube. What’s posted online is not necessarily visible to everyone, but when people choose to share content in ‘spreadable’ media (Jenkins, Ford, & Green, forthcoming (2013)) – home videos like ‘Charlie Bit Me’ appear to ‘go viral’, quickly garnering millions of hits” (Baym and boyd 2012, 321).
- “Social media is the latest buzzword in a long line of buzzwords. It is often used to describe the collection of software that enables individuals and communities to gather, communicate, share, and in some cases collaborate or play. In tech circles, social media has replaced the earlier fave ‘social software’. Academics still tend to prefer terms like ‘computer-mediated communication’ or ‘computer-supported co-operative work’ to describe the practices that emerge from these tools and the old skool academics might even categorize these tools as ‘groupwork’ tools. Social media is driven by another buzzword: ‘user-generated content’ or content that is contributed by participants rather than editors” (boyd 2009).
- Van Dijck: “The very word ‘social’ associated with media implies that platforms are user centered and that they facilitate communal activities, just as the term ‘participatory’ emphasizes human collaboration. Indeed, social media can be seen as online facilitators

or enhancers of *human* networks – webs of people that promote connectedness as a social value” (Van Dijck 2013, 11). “As a result of the interconnection of platforms, a new infrastructure emerged: an ecosystem of connective media with a few large and many small players. The transformation from networked communication to ‘platformed’ sociality, and from a participatory culture to a culture of connectivity took place in a relatively short time span of ten years” (Van Dijck 2013, 4).

- “Social media indicate a shift from HTML-based linking practices of the open web to liking and recommendation, which happen inside closed systems. Web 2.0 has three distinguishing features: it is easy to use, it facilitates sociality, and it provides users with free publishing and production platforms that allow them to upload content in any form, be it pictures, videos, or text” (Lovink 2011, 5).
- “Since at least 2004, the internet, and more specifically the web, has witnessed a notorious and controversial shift away from the model of the static web page towards a social web or Web 2.0 model where the possibilities of users to interact with the web have multiplied. It has become much easier for a layperson to publish and share texts, images and sounds. A new topology of distribution of information has emerged, based in ‘real’ social networks, but also enhanced by casual and algorithmic connections” (Terranova and Donovan 2013, 297).
- “In the first decade or so of the Web’s existence (from the 1990s to the early or mid-200s), websites tended to be like separate gardens. [. . .] Web 2.0 is like a collective allotment. Instead of individuals tending their own gardens, they come together to work collaboratively in a shared space. [. . .] At the heart of Web 2.0 is the idea that online sites and services become more powerful the more they *embrace* this network of potential collaborators” (Gauntlett 2011, 4f). It is characterized by the emergence of a “‘making and doing’ culture” (Gauntlett 2011, 11) and by “making and sharing our own *media* culture – I mean, via lo-fi YouTube videos, eccentric blogs, and homemade websites, rather than by having to take over the traditional media of television stations and printing presses” (Gauntlett 2011, 18). Making things online and offline would connect things together and involve “a social dimension and connect us with other people”, the social and physical world (Gauntlett 2011, 3).

- Social media tools feature “the elements of profile, contacts and interaction with those contacts”, “blur the distinction between personal communication and the broadcast model of messages sent to nobody in particular” (Meikle and Young 2012, 61). Social media “manifest a convergence between personal communication (to be shared one-to-one) and public media (to be shared with nobody in particular)” (Meikle and Young 2012, 68).

These approaches discussed above describe various forms of online sociality: collective action, communication, communities, connecting/networking, co-operation/collaboration, the creative making of user-generated content, playing, sharing. They show that defining social media requires an understanding of sociality: What does it mean to be and act in a social way? What is the social all about? There are different answers to these questions. The field concerned with these kinds of questions is called social theory. It is a subfield of sociology. To provide answers, we therefore have to enter the research field of social theory.

Media and Social Theory

Media are not technologies, but techno-social systems. They have a technological level of artefacts that enable and constrain a social level of human activities that create knowledge that is produced, diffused and consumed with the help of the artefacts of the technological level. There is a recursive dynamic relation between the technological and the social level of the media. Media are based on what Anthony Giddens (1984) calls the duality of structure and agency (see Figure 2.1, Fuchs 2003): “According to the notion of the duality of structure, the structural properties of social systems are both medium and outcome of the practices they recursively organise” (25) and they both enable and constrain actions (26). Media are techno-social systems, in which information and communication technologies enable and constrain human activities that create knowledge that is produced, distributed and consumed with the help of technologies in a dynamic and reflexive process that connects technological structures and human agency.

The Internet consists of both a technological infrastructure and (inter)acting humans. It is not a network of computer networks, but a network

that interconnects social networks and technological networks of computer networks (see Figure 2.2). The technical network structure (a global computer network of computer networks based on the TCP/IP (Transmission Control Protocol/Internet Protocol) protocol, a model that is used for defining how data is formatted, transmitted and received on the Internet) is the medium for and outcome of human agency. It enables and constrains human activity and thinking and is the result of productive social communication and co-operation processes. The technological structure/part of the Internet enables and constrains human behaviour and is itself produced and permanently reproduced by the human communicative part of the Internet. The Internet consists of a technological system and a social subsystem that both have a networked character. Together these two parts form a techno-social system. The technological structure is a network that produces and reproduces human actions and social networks and is itself produced and reproduced by such practices.

If we want to answer the question what is social about social media and the Internet, then we are dealing with the level of human agency. We can distinguish different forms of sociality at this level. They correspond to the three most important classical positions in social theory, the ones defined by Émile Durkheim, Max Weber and Karl Marx (Elliott 2009, 6f).

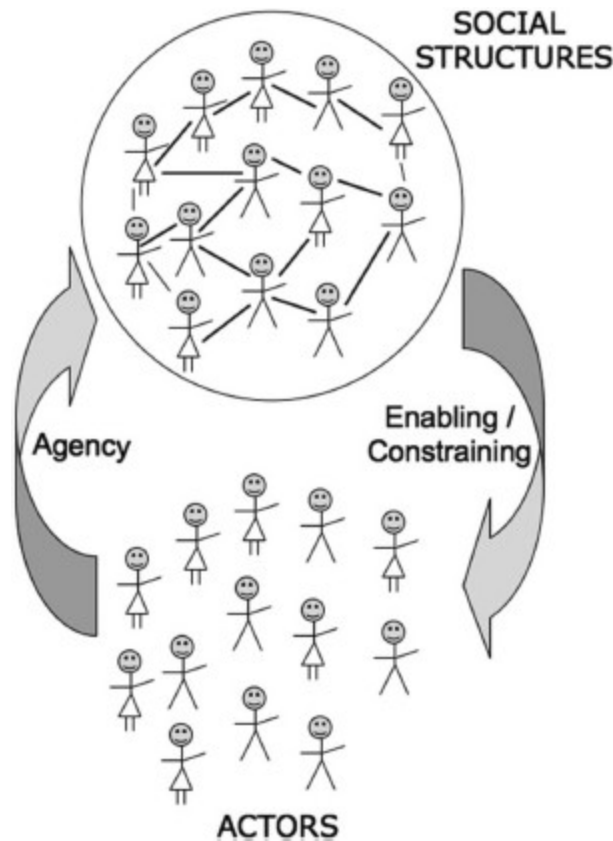


Figure 2.1 The dialectic of structure and agency

Émile Durkheim: The Social as Social Facts

The first understanding of sociality is based on Émile Durkheim's notion of the *social* – social facts:

A social fact is every way of acting, fixed or not, capable of exercising on the individual an external constraint; or again, every way of acting which is general throughout a given society, while at the same time existing in its own right independent of its individual manifestations. (Durkheim 1982, 59)

All media and all software are social in the sense that they are products of social processes. Humans in social relations produce them. They objectify knowledge that is produced in society, applied and used in social systems. Applying Durkheim's idea of social facts to computing means that all software applications and media are social because social structures are

fixed and objectified in them. These structures are present even if a user sits in front of a screen alone and browses information on the World Wide Web because, according to Durkheim, they have an existence of their own, independent of individual manifestations. Web technologies therefore are social facts.

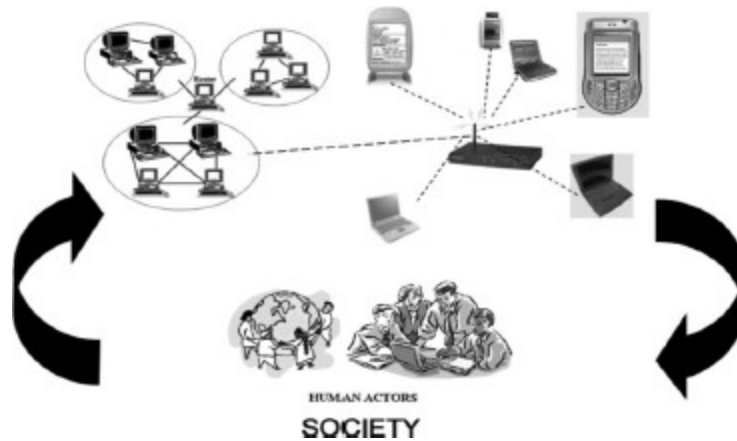


Figure 2.2 The Internet as duality of technological computer networks and social networks of humans

Max Weber: The Social as Social Relations

The second understanding of sociality is based on Max Weber. His central categories of sociology are *social action* and *social relations*: “Action is ‘social’ insofar as its subjective meaning takes account of the behavior of others and is thereby oriented in its course” (Weber 1978, 4). “The term ‘social relationship’ will be used to denote the behaviour of a plurality of actors insofar as, in its meaningful content, the action of each takes account of that of the others and is oriented in these terms” (Weber 1978, 26). These categories are relevant for the discussion because they allow a distinction between *individual* and *social activities*:

Not every kind of action, even of overt action, is “social” in the sense of the present discussion. Overt action is not social if it is oriented solely to the behavior of inanimate objects. For example, religious behavior is not social if it is simply a matter of contemplation or of solitary prayer. [. . .] Not every type of contact of human beings has a social character;

this is rather confined to cases where the actor's behavior is meaningfully oriented to that of others. (Weber 1978, 22f)

Weber stresses that in order to constitute a social relation, behaviour needs to be a meaningful symbolic interaction between human actors.

Ferdinand Tönnies: The Social as Community

The notions of community and co-operation, as elaborated by Tönnies and Marx, are the foundation for a third understanding of the social as collaboration. Ferdinand Tönnies conceives co-operation in the form of “sociality as community”. He argues that “the very existence of *Gemeinschaft* [community] rests in the consciousness of belonging together and the affirmation of the condition of mutual dependence” (Tönnies 1988, 69), whereas *Gesellschaft* (society) for him is a concept in which “reference is only to the objective fact of a unity based on common traits and activities and other external phenomena” (Tönnies 1988, 67). Communities would have to work within a harmonious consensus of wills, folkways, belief, mores, the family, the village, kinship, inherited status, agriculture, morality, essential will and togetherness. Communities are about feelings of togetherness and values.

Karl Marx: The Social as Co-operative Work

Marx discusses community and collaborative aspects of society with the help of the notion of co-operative work. Marx and Engels argued that co-operation is the essence of society. In capitalism, it has become subsumed under capital so that it is alienated labour, and can only be fully developed in a free society. For Marx and Engels, co-operation is the essence of the social:

By social we understand the co-operation of several individuals, no matter under what conditions, in what manner and to what end. It follows from this that a certain mode of production, or industrial stage, is always combined with a certain mode of co-operation, or social

stage, and this mode of co-operation is itself a “productive force”. (Marx and Engels 1846, 50)

Co-operation is a foundation of human existence:

By the co-operation of hands, organs of speech, and brain, not only in each individual, but also in society, human beings became capable of executing more and more complicated operations, and of setting themselves, and achieving, higher and higher aims. (Engels 1886, 288)

But co-operation is also the foundation of capitalism: “A large number of workers working together, at the same time, in one place (or, if you like, in the same field of labour), in order to produce the same sort of commodity under the command of the same capitalist, constitutes the starting-point of capitalist production” (Marx 1867, 439).

Marx argues that capitalists exploit the collective labour of many workers by appropriating surplus value. Co-operation would therefore turn, under capitalist conditions, into alienated labour. This antagonism between the co-operative character of production and private appropriation that is advanced by the capitalist development of the productive forces is a factor that constitutes crises of capitalism and points towards and anticipates a co-operative society:

The contradiction between the general social power into which capital has developed and the private power of the individual capitalists over these social conditions of production develops ever more blatantly, while this development also contains the solution to this situation, in that it simultaneously raises the conditions of production into general, communal, social conditions. (Marx 1894, 373)

A fully developed and true humanity is, for Marx, only possible if man “really brings out all his *species*-powers – something which in turn is only possible through the co-operative action of all of mankind” (Marx 1844, 177). For Marx, a co-operative society is the realization of the co-operative essence of humans and society. Hence he speaks based on the Hegelian concept of truth (i.e. the correspondence of essence and existence, the way things should be and the way they are) of the “reintegration or return of man

to himself, the transcendence of human self-estrangement”, “the real *appropriation* of the *human* essence by and for man”, “the complete return of man to himself as a *social* (i.e., human) being” (Marx 1844, 135). Marx (1875) speaks of such transformed conditions as the co-operative society.

The basic idea underlying Marx’s notion of co-operation is that many human beings work together in order to produce goods that satisfy human needs and that, hence, also the ownership of the means of production should be co-operative. It is interesting that Marx already had a vision of a globally networked information system. Of course he did not speak of the Internet in the mid-nineteenth century, but he anticipated the underlying idea: Marx stresses that the globalization of production and circulation necessitates institutions that allow capitalists to inform themselves on the complex conditions of competition:

Since, “if you please,” the autonomization of the world market (in which the activity of each individual is included), increases with the development of monetary relations (exchange value) and vice versa, since the general bond and all-round interdependence in production and consumption increase together with the independence and indifference of the consumers and producers to one another; since this contradiction leads to crises, etc., hence, together with the development of this alienation, and on the same basis, efforts are made to overcome it: institutions emerge whereby each individual can acquire information about the activity of all others and attempt to adjust his own accordingly, e.g. lists of current prices, rates of exchange, interconnections between those active in commerce through the mails, telegraphs etc. (the means of communication of course grow at the same time). (This means that, although the total supply and demand is independent of the actions of each individual, everyone attempts to inform himself about them, and this knowledge then reacts back in practice on the total supply and demand. Although on the given standpoint, alienation is not overcome by these means, nevertheless relations and connections are introduced thereby which include the possibility of suspending the old standpoint.) (The possibility of general statistics, etc.) (Marx 1857/1858, 160–161)

Although Marx here speaks of lists, letters and the telegraph, it is remarkable that he saw the possibility of a global information network in which “everyone attempts to inform himself” on others and “connections are introduced”. Today the Internet is such a global system of information and communication, which represents a symbolic and communicative level of mechanisms of competition, but also poses new opportunities for “suspending the old standpoint”.

Tönnies’ and Marx’s notions of the social have in common the idea that humans work together in order to produce new qualities of society (non-physical ones, i.e. shared feelings, in the case of Tönnies and material ones, economic goods, in the case of Marx).

2.3. Explaining Social Media with Durkheim, Weber, Marx and Tönnies

A Model of Human Sociality

The three notions of sociality (Durkheim’s social facts, Weber’s social actions/relations, Marx’s and Tönnies’ co-operation) can be integrated into a model of human social activity. It is based on the assumption that knowledge is a threefold dynamic process of cognition, communication and co-operation (Hofkirchner 2013¹). Cognition is the necessary prerequisite for communication and the precondition for the emergence of co-operation. Or in other words: in order to co-operate you need to communicate and in order to communicate you need to cognize. Cognition involves the knowledge processes of a single individual. They are social in the Durkheimian sense because the existence of humans in society and therefore social relations shape human knowledge. Humans can only exist by entering into social relations with other humans. They exchange symbols in these relations – they communicate. This level corresponds to Weber’s notion of social relations. A human being externalizes parts of its knowledge in every social relation. As a result, this knowledge influences others, who change part of their knowledge structures and, as a response, externalize parts of their own knowledge, which results in the differentiation of the first individual’s knowledge. A certain number of communications is not just sporadic, but

continuous over time and space. In such cases, there is the potential that communication results in co-operation, the shared production of new qualities, new social systems, or new communities with feelings of belonging together. This is the level of co-operative labour and community. It is based on the theories of Marx and Tönnies.

Information (cognition), communication and co-operation are three nested and integrated modes of sociality (Hofkirchner 2013). Every medium can be social in one or more of these senses. All media are information technologies. They provide information to humans. This information enters into the human realm of knowledge as social facts that shape thinking. Information media are, for example, books, newspapers, journals, posters, leaflets, films, television, radio, CDs, DVDs. Some media are also media of communication – they enable the recursive exchange of information between humans in social relations. Examples are letters in love relations, the telegraph and the telephone. Brecht (1932/2000), Enzensberger (1970/1997) and Smythe (in his essay “After bicycles? What?”; Smythe 1994, 230–244) have discussed the possibility that broadcasting technologies are transformed from information into communication technologies.

Networked computer technologies are technologies that enable cognition, communication and co-operation. The classical notion of the medium was confined to the social activities of cognition and communication, whereas the classical notion of technology was confined to the area of labour and production with the help of machines (such as the conveyor belt). The rise of computer technology and computer networks (such as the Internet) has enabled the convergence of media and machines – the computer supports cognition, communication and co-operative labour (production); it is a classical medium and a classical machine at the same time. Furthermore, it has enabled the convergence of production, distribution (communication) and consumption of information – you use only one tool, the networked computer, for these three processes. In contrast to other media (like the press, broadcasting, the telegraph, the telephone), computer networks are not only media of information and communication, but also enable the co-operative production of information.

In discussions about the novelty, discontinuities and continuities of the contemporary WWW, one can find a lot of confusion about which notion of sociality one actually talks about. It is, furthermore, often unreflective if one

talks about continuity and changes of the technological level or the level of social relations. The latter is also the level of power relations in society, i.e. the level at which in heteronomous societies certain groups and individuals try to make use of resource advantages, violence and means of coercion (physical violence, psychological violence, ideology) in order to derive benefits at the expense of others. When talking about changes of media or the Internet, one should always specify which level of analysis (technology, power relations) and which dimension of sociality one is referring to. The question of whether the Internet and the WWW have changed in the past x number of years always depends on the level of analysis, the granularity of analysis and the employed understanding/dimension of sociality. Different assumptions about the novelty or oldness, the discontinuity and continuity of the media, the Internet and the WWW are based on different definitions of the social, different levels of analysis and different levels of granularity of the analysis. Most of these discussions are very superficial and lack an understanding of social theory and philosophy.

One hypothesis of this book is that in order to maintain the inequality of the power relations of capitalism and capital accumulation, capitalism needs to change its productive forces, which includes the change of its informational productive forces. Therefore the technological and informational structures of the Internet have to a certain degree changed in order to guarantee the continuity of commodity culture, exploitation, surplus value generation and capital accumulation. The changes of the media and the Internet are shaped by complex, dialectical and contradictory continuities and discontinuities.

Web 1.0, Web 2.0, Web 3.0

If the web (WWW) is defined as a techno-social system that comprises the social processes of cognition, communication and co-operation, then the whole web is social in the Durkheimian sense because it is a social fact. Parts of it are communicative in the Weberian sense, while it is the community-building and collaborative part of the web that is social only in the most concrete sense of Tönnies and Marx. The part of the web that deals with cognition is exclusively Durkheimian without being Weberian, let alone Tönniesian–Marxian. The part that is about communication is Weberian and Durkheimian. And only the third, co-operative, part has all three meanings.

Based on this distinction we can say that web 1.0 is a computer-based networked system of human cognition, web 2.0 a computer-based networked system of human communication, web 3.0 a computer-based networked system of human co-operation (Fuchs 2008a; Fuchs et al. 2010). Table 2.1 gives an overview of the application of the different concepts of sociality to the WWW. The distinction between the three dimensions of sociality is not an evolutionary or historical one, but rather a logical one. The use of the discourse of versions expresses the dialectical-logical connection of the three modes of sociality:

- Communication is based on and requires cognition, but is more than and different from cognition.
- Co-operation is based on and requires communication, but is more than and different from communication.
- Communication is a Hegelian dialectical *Aufhebung* (sublation) of cognition, co-operation is a dialectical *Aufhebung* of communication. *Aufhebung* means a relation between entities, in which one entity is preserved in the other and the other entity has an additional quality that is different from the first one (for a detailed discussion see Fuchs 2011b, Chapters 2.4 and 3.3). This difference also eliminates the first entity within the second, the preservation of qualities is at the same time an elimination – the two entities are different.

One, two or all three forms of sociality can (at a certain point of analysis) to a certain degree shape the WWW or any other medium. The task of empirical studies that are based on theoretical conceptions of the social is to analyze the presence or absence and the degree of presence of the three types of sociality in a certain medium.

The three forms of sociality (cognition, communication, co-operation) are encapsulated into each other. Each layer forms the foundation for the next one, which has new qualities. Figure 2.3 visualizes the encapsulation of the three dimensions of sociality on the WWW.

It is unlikely that the web (understood as a techno-social system that is based on the interaction of technological computer networks and social networks of power) has not changed in the years since 2000 because capital has reorganized itself as a result of the capitalist crisis in 2000 so that it can

survive and find new spheres of accumulation. It is also unlikely that the web is something completely new because, as we have seen, the Internet is a complex techno-social system with different levels of organization and sociality that have different speeds and depths of change within capitalism.

Table 2.1 Different understandings of sociality on the web

Approach	Sociological theory	Meaning of sociality on the WWW
1 Structural Theories	<i>Émile Durkheim:</i> Social facts as fixed and objectified social structures that constantly condition social behaviour.	All computers, the Internet and all WWW platforms are social because they are structures that objectify human interests, understandings, goals and intentions, have certain functions in society and effect social behaviour.
2 Social Action Theories	<i>Max Weber:</i> Social behaviour as reciprocal symbolic interaction.	Only WWW platforms that enable communication over spatio-temporal distances are social.
3 Theories of Social Co-operation	<i>Ferdinand Tönnies:</i> Community as social systems that are based on feelings of togetherness, mutual dependence, and values. <i>Karl Marx:</i> The social as the co-operation of many humans that results in collective goods that should be owned co-operatively.	Web platforms that enable the social networking of people, bring people together and mediate feelings of virtual togetherness are social. Web platforms that enable the collaborative production of digital knowledge are social.
4 Dialectic of Structure and Agency	<i>Émile Durkheim:</i> cognition as social due to conditioning external social facts <i>Max Weber:</i> communicative action <i>Ferdinand Tönnies, Karl Marx:</i> community-building and collaborative production as forms of co-operation	The Web as a dynamic threefold system of human cognition, communication and co-operation.

Empirically Studying Changes of the Web

If and how the web has changed needs to be studied empirically. Such empirical research should be based on theoretical models. I want to give an example for testing the continuity and discontinuity of the WWW. We want to find out to which degree cognition, communication and co-operation, the three modes of sociality, were featured in the dominant platforms that made up the technical structures of the WWW in the USA in 1998 and 2011. The statistics are based on the number of unique users in one month of analysis. According to the claims made by O'Reilly (2005a, 2005b), 2002 was a year in the era of 1998, and 2013 one in the era of web 2.0. By conducting a statistical analysis, we can analyze the continuities and discontinuities of the technical structures of the WWW. Table 2.2 shows the results.

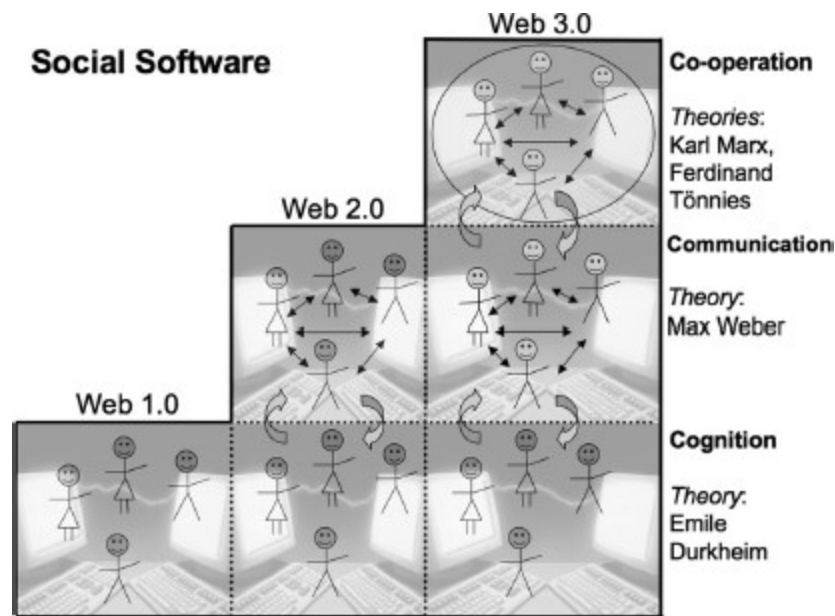


Figure 2.3 Three dimensions of the web's sociality

The analysis shows that there are continuities and discontinuities in the development of the dominant platforms of WWW in the USA if one compares the years 2002 and 2013. In 2002, there were 20 information functions, 13 communication functions and one co-operation function available on the top 20 websites. In 2013, there are 20 information functions, 16 communication functions and four co-operation functions on the top 20 websites. The number of websites that are oriented towards pure cognitive tasks (like search

engines) has decreased from seven in 2002 to four in 2013. In 2013, the number of websites that also have communicative or co-operative features is larger than the one of the pure information sites (four). This shows that the technological foundations for communicative and co-operative sociality have increased quantitatively. The quantitative increase of collaborative features from one to six has to do with the rise of Facebook, Google+, Wikipedia and LinkedIn: collaborative information production with the help of wikis and collaborative software (Wikipedia, Google Docs) and social networking sites oriented towards community-building (Facebook, Google+, LinkedIn). There are continuities and discontinuities in the development of the WWW in the period 2002–2013. The changes concern the rising importance of co-operative sociality. This change is significant, but not dramatic. One novelty is the rise of social networking sites (Facebook, LinkedIn, Google+, MySpace, etc.). Another change is the emergence of blogs (Wordpress, Blogger/Blogpost, Huffington Post), microblogs (Twitter) and file-sharing websites (YouTube), which have increased the possibilities of communication and information sharing in the top 20 US websites. Google has broadened its functions: it started as a pure search engine (in 1999), introduced communication features in 2007 (gMail) and its own social networking site platform (Google+) in June 2011.

Table 2.2 Information functions of the top 20 websites

December 9, 2002 (three-month page ranking based on page views and page reach)			February 26, 2013 (one-month page ranking based on average daily visitors and page views)		
Rank	Website	Primary information functions	Rank	Website	Primary information functions
1	yahoo.com	cogn, comm	1	google.com	cogn, comm, coop
2	msn.com	cogn, comm	2	facebook.com	cogn, comm, coop
3	daum.net	cogn, comm	3	youtube.com	cogn, comm
4	naver.com	cogn, comm	4	yahoo.com	cogn, comm
5	google.com ¹	cogn	5	baidu.com	cogn, comm
6	yahoo.co.jp	cogn, comm	6	wikipedia.org	cogn, comm, coop
7	passport.net	cogn	7	live.com	cogn, comm
8	ebay.com	cogn	8	qq.com	cogn, comm
9	microsoft.com	cogn	9	amazon.com	cogn
10	bugsmusic.co.kr	cogn	10	twitter.com	cogn, comm
11	sayclub.com	cogn, comm	11	blogspot.com	cogn, comm
12	sina.com.cn	cogn, comm	12	linkedin.com	cogn, comm, coop
13	netmarble.net	cogn, comm, coop	13	google.co.in	cogn, comm, coop
14	amazon.com	cogn	14	taobao.com	cogn
15	nate.com	cogn, comm	15	yahoo.co.jp	cogn, comm
16	go.com	cogn	16	bing.com	cogn
17	sohu.com	cogn, comm	17	msn.com	cogn, comm
18	163.com	cogn, comm	18	google.co.jp	cogn, comm, coop
19	hotmail.com	cogn, comm	19	ebay.com	cogn
20	aol.com	cogn, comm	20	yandex.ru	cogn, comm
		cogn: 20 comm: 13 coop: 1			cogn: 20 comm: 16 coop: 4

Data source: alexa.com.

¹Google's main communicative feature, the email service gMail, was launched in 2004.

The statistics indicate that the rise of co-operative sociality supported by social networking sites and wikis, and the differentiation of cognitive and communicative sociality (the emergence of file-sharing sites and blogs, including microblogs like Twitter), have to a certain degree changed the technical structures of the WWW in order to enable new models of capital accumulation and the maintenance of the capitalist character of the WWW. Another significant change is the rise of the search engine Google, which has pioneered the web capital accumulation models by introducing targeted

advertising that is personalized to the interests of users and monitors their online behaviour and personal interests on the Internet. The change of the technical structures of the WWW has enabled the continuity of the logic of capital accumulation on the Internet after the dot.com bubble. Wikipedia, which is a non-profit and non-commercial platform funded by user donations, has entered the scene. It is the only successful WWW platform thus far that is not based on a capital accumulation model.

2.4. Conclusion

Analyzing continuities and discontinuities of the web requires social theory foundations. The WWW is not social in a simple sense, but to certain degrees on certain levels of analysis that are grounded in sociological conceptions of sociality. If one compares WWW use in the late 1990s to the end of the first decade of the second millennium, one finds the use patterns of the WWW are shaped by continuities and discontinuities. Information is continuously present, communication has been transformed, web technologies of co-operation have become more frequently used and important, but are certainly not dominant. The web is neither purely old nor purely new; it is a complex techno-social system embedded into power structures of capitalism that has to change to a certain extent at certain levels in order to enable the continuity of Internet-based capital accumulation.

This chapter dealt with the question: What is social media? Its main results are as follows:

- Dealing with the question “What is social media?” requires an understanding of what the social is all about. It is, in this respect, helpful to look at social theory for engaging with concepts of sociality in society. Relevant concepts of sociality include social facts (Émile Durkheim), social relations/social action (Max Weber), co-operative labour (Karl Marx) and community (Ferdinand Tönnies).
- Claims about the novelty and opportunities of “web 2.0” and “social media” like blogs, social networking sites, wikis, microblogs or content-sharing sites originated in the context of the dot.com crisis of the Internet economy and the resulting search for new business models

and narratives that convince investors and users to support new platforms. The ideology of novelty intends to attract investors and users.

- Most social media technologies originated before 2005, when Tim O'Reilly established the concept of web 2.0. Wikis, blogs, social networking sites, microblogs and content-sharing sites have, however, become really popular since the middle of the first decade of the second millennium. It is both unlikely that in the years 2000–2010 the WWW has not changed at all and unlikely that it has radically changed. The capitalist Internet economy needs to change and innovate in order to guarantee the continuity of capital accumulation.
- The two concepts of participation and power have been used for characterizing social media (participatory culture, power and counter-power of mass self-communication). Class is another concept that is particularly suited. Great care should be taken to avoid techno-deterministic thinking, techno-centrism, techno-optimism, techno-pessimism and naturalization of domination in conceptualizing qualities of social media. Engaging with social theory, the history of concepts and the philosophical groundings of the Internet can provide help for developing concepts that describe structure, agency and dynamics of social media.
- Media are techno-social systems in which technological structures interact with social relations and human activities in complex ways. Power structures shape the media and the social relations of the media. When analyzing social media, one should be clear about and should explicate the level of analysis.

RECOMMENDED READINGS AND EXERCISES

Making sense of social media requires a theoretical understanding of what it means to be social. Sociological theory offers different concepts of the social. The following suggested readings introduce

you to various concepts of the social by thinkers such as Émile Durkheim, Max Weber, Ferdinand Tönnies and Karl Marx.

Durkheim, Émile. 1895. The rules of sociological method. In *Classical sociological theory*, ed. Craig Calhoun, Joseph Gerteis, James Moody, Steven Pfaff and Indermohan Virk, 139–157. Malden, MA: Blackwell.

In “The rules of sociological method”, Émile Durkheim introduces some basic foundations of a functionalist social theory, such as the notion of social facts. Discuss in groups and compare your results:

- What is a social fact?
- Make a list of economic, political and cultural examples of social facts that can be found in contemporary society.
- Each group can choose one web platform (such as Google, Yahoo, Facebook, Twitter, Weibo, Wikipedia, etc.). Think in your group about how this platform works and what kind of activities it supports. Make a list of social facts that can be found on the platform.

Weber, Max. 1914. Basic sociological terms. In *Classical sociological theory*, ed. Craig Calhoun, Joseph Gerteis, James Moody, Steven Pfaff and Indermohan Virk, 139–157. Malden, MA: Blackwell.

In “Basic sociological terms”, Max Weber introduces foundational categories of a sociological action theory, such as action, social action and social relations. Discuss in groups and compare your results:

- How does Max Weber define social action?
- Make a list of examples of online activities that correspond to Weber’s theory of the social and non-social. Compare how Durkheim would characterize the sociality of these platforms.

- Try to find examples of the four types of social action that Weber identifies.
- Try to find examples of four types of online social action according to Weber.

Tönnies, Ferdinand. 2001. *Community and civil society*, 17–51. Cambridge: Cambridge University Press.

Rheingold, Howard. 2000. *The virtual community: Homesteading on the electronic frontier*. Cambridge, MA: MIT Press. Chapter 11: Rethinking virtual communities.

Ferdinand Tönnies first published *Community and Civil Society* in 1887. In this work, he draws a distinction between *Gemeinschaft* (community) and *Gesellschaft* (society). It is interesting to read this text in combination with Howard Rheingold's *The Virtual Community*, where he discusses the logic of community in the age of the Internet and how it is limited by the logic of commodities that Tönnies considered specific for what he termed society. Discuss in groups and compare your results:

- Identify basic characteristics of a community according to Ferdinand Tönnies. Construct a list of features of a community.
- Try to identify different groups that you are in contact with on Facebook or another social networking site. Which of these groups are communities according to Tönnies, which are not, and why? Try to test the applicability of all community features that you have identified.
- What are, according to Howard Rheingold, the basic features of a virtual community? In which respects is Facebook a virtual community, and in which respects not? What does Howard Rheingold mean by “commodification of community”? Having read his chapter, how do you think he assesses Facebook?
- Additional exercise: Organize a conversation with Howard Rheingold or another well-known Internet scholar about

what s/he sees as the positive and negative features of social media.

Marx, Karl. 1867. *Capital. Volume I*. London: Penguin. Chapter 13: Co-operation.

Capital. Volume I is one of the most influential books in economic thought. It contains a chapter that discusses the phenomenon of collaborative work and its role in the modern economy. Discuss in groups and compare your results:

- Try to give a definition of what co-operation and collaborative work are (this requires that you also define the concept of “work”).
- How does Marx see the role of co-operation in capitalism?
- How does co-operation work on Wikipedia? Try to identify commonalities and differences between the co-operation brought about by capitalism that Marx describes and co-operation on Wikipedia. What are the differences and commonalities?

1 See also Fuchs and Hofkirchner 2005; Hofkirchner 2002.