


# The Politicisation of Intellectual Property: IP Conflicts and Social Change

Sebastian Haunss

*Department of Politics and Management, University of Konstanz*

 Intellectual property; Politics

In the last 15 years a remarkable string of contentious mobilisations has emerged to challenge the normative and institutional frameworks that regulate how knowledge is produced, appropriated, and used. The mobilisation for access to essential medicines,<sup>1</sup> the conflict about software patents in Europe,<sup>2</sup> the advent of pirate parties in various European countries,<sup>3</sup> the establishment of the Creative Commons project,<sup>4</sup> the struggles against “biopiracy” (i.e. the private appropriation of traditional (indigenous) knowledge),<sup>5</sup> the conflicts about file sharing in peer-to-peer networks,<sup>6</sup> and the coming together of the access to knowledge (A2K) movement<sup>7</sup> are all examples of mobilisations that question the current regimes governing intellectual property (IP).

In this article I argue that these conflicts are more than contingent phenomena of fluctuating protest patterns. They are rooted in the growing global economic and political importance of immaterial goods. On a more fundamental level, they address a set of new cleavages that originate in the social transformations of the knowledge society.

<sup>1</sup> Ellen 't Hoen, “TRIPS, Pharmaceutical Patents, and Access to Essential Medicines: A Long Way from Seattle to Doha” (2002) 27 *Chicago Journal of International Law* 39; Nathan Ford, “Patents, Access to Medicines and the Role of Non-governmental Organisations” (2004) 1 *Journal of Generic Medicines* 137; Amy Kapczynski, “The Access to Knowledge Mobilisation and the New Politics of Intellectual Property” (2008) 117 *Yale Law Journal* 804; Susan K. Sell, “TRIPs and the Access to Medicines Campaign” (2002) 20 *Wisconsin International Law Journal* 481.

<sup>2</sup> Philippe Aigrain, “An Uncertain Victory: The 2005 Rejection of Software Patents by the European Parliament” in Gaëlle Krikorian and Amy Kapczynski (eds), *Access to Knowledge in the Age of Intellectual Property* (New York: Zone Books, 2010); Julian Eckl, “Die Auseinandersetzungen über die EU—‘Softwarepatent’—Richtlinie als Testfall für demokratische Beteiligungsmöglichkeiten an der Gestaltung der internationalen politischen Ökonomie”, October 2005; Thomas R. Eimer, “Zwischen Allmende und Clubgut—Der Einfluss von Free/Open Source Akteuren in der Europäischen Union”, available at [http://www.fernuni-hagen.de/imperia/md/content/politikwissenschaft/polis\\_63\\_thomas\\_eimer.pdf](http://www.fernuni-hagen.de/imperia/md/content/politikwissenschaft/polis_63_thomas_eimer.pdf) [Accessed November 20, 2011]; Sebastian Haunss and Lars Kohlmorgen, “Lobbying or Politics? Political Claims-making in IP Conflicts” in Sebastian Haunss and Kenneth C. Shadlen (eds), *Politics of Intellectual Property* (Cheltenham: Edward Elgar Publishing, 2009); Sebastian Haunss and Lars Kohlmorgen, “Conflicts about Intellectual Property Claims: The Role and Function of Collective Action Networks” (2010) 17 *Journal of European Public Policy* 242.

<sup>3</sup> Henning Bartels, *Die Piratenpartei: Entstehung, Forderungen und Perspektiven der Bewegung* (Berlin: Contumax, 2009); Christoph Bieber, “Wahlkampf als Onlinespiel? Die Piratenpartei als Innovationsträgerin im Bundestagswahlkampf 2009” in Martin Eifert and Martin Hoffmann-Riehm, *Innovation, Recht, öffentliche Kommunikation* (Baden-Baden: Nomos, 2011); Marie Demker, “Sailing along New Cleavages”, available at <http://goo.gl/6jll2> [Accessed May 17, 2011].

<sup>4</sup> Sharee L. Broussard, “The Copyleft Movement: Creative Commons Licensing” (2007) 26 *Communication Research Trends* 3; Leonhard Dobusch and Sigrid Quack, “Epistemic Communities and Social Movements: Transnational Dynamics in the Case of Creative Commons”, available at [http://www.mpiifg.de/projects/govxborders/downloads/Dobusch\\_Quack\\_2008\\_DP\\_EpistemicComm.pdf](http://www.mpiifg.de/projects/govxborders/downloads/Dobusch_Quack_2008_DP_EpistemicComm.pdf) [Accessed October 31, 2011]; Severine Dusollier, “The Master’s Tools v. The Master’s House: Creative Commons v. Copyright” (2006) 29 *Columbia Journal of Law and the Arts* 271; Lawrence Lessig, “The Creative Commons” (2003) 55 *Florida Law Review* 763.

<sup>5</sup> Arturo Escobar, “Whose Knowledge, Whose Nature? Biodiversity, Conservation, and the Political Ecology of Social Movements” [1998] *Journal of Political Ecology* 53; Sabil Francis, “Who Speaks for the Tribe? The Arogyapacha Case in Kerala” in Haunss and Shadlen (eds), *Politics of Intellectual Property* (2009); Vandana Shiva, *Biopiracy: The Plunder of Nature and Knowledge* (Boston: South End Press, 1997); Peter K. Yu, “Cultural Relics, Intellectual Property, and Intangible Heritage” (2008) 81 *Temple Law Review* 434.

<sup>6</sup> Jan Krömer and Evrim Sen, *No Copy—Die Welt der digitalen Raubkopie* (Leipzig: Tropen, 2006).

<sup>7</sup> Krikorian and Kapczynski (eds), *Access to Knowledge in the Age of Intellectual Property* (2010).

## Why now?

The institutions that govern IP are not particularly new. The Berne Convention for the Protection of Literary and Artistic Works that governs copyrights and related rights came into existence in 1886 and was last revised in 1971. The Paris Convention for the Protection of Industrial Property that governs, among others, patents, trademarks, and designs dates back to 1883. Even the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPs), which is often seen as the most important recent change in IP governance, was signed already in 1994. IP rights (IPRs) are obviously not a new political issue. They have been around internationally for more than a century and for much longer periods in national legislation.

These regimes have always been contested to some degree. There was no timeless consensus about the merits of strong IP rights among states, within national administrations, or in the scholarly community. The tension between strong patent rights and anti-trust legislation, for example, led to several shifts in US IP policies in the 20th century. In that period, strong patent right in the beginning were followed by strong anti-trust policies in the name of free competition, which were again followed by a re-evaluation of IPRs in the 1980s in light of the growing economic importance of international trade in immaterial goods.<sup>8</sup>

But these ups and downs in breadth and scope of IPRs have not been accompanied by political mobilisations that involved actors other than the immediate economic stakeholders. Conflicts like the ones mentioned above are relatively new. To understand why IP has become a contentious issue it is necessary to take into account four parallel processes:

- (1) the growing economic importance of knowledge-based industries;
- (2) the growing internationalisation of IP issues, exemplified in the growing number and reach of international treaties and trade agreements that centrally address IP;
- (3) the growing attention IP issues receive in non-specialist and high-level political fora; and
- (4) and the trend to personalise IP rules.

The growing *economic importance* and *internationalisation* of IP has been extensively discussed in the scientific literature.<sup>9</sup> The growing political importance of IP in non-specialist fora can be gauged by their changing prominence in the G8 summit declarations. In these highly symbolic political documents intellectual property rights are first mentioned in 1996—but only as a minor sub-issue. A decade later, in 2007, they have advanced to a prominent position and are addressed as a major point on fourth position after global growth and stability, financial markets, and freedom of investment, and before climate change, responsibility for raw materials, corruption, and trade.<sup>10</sup> In 2011 they are finally the top issue, when they appear in the G8 declaration prepared by the French presidency even before nuclear safety, climate change, development, and peace.<sup>11</sup>

*Personalisation* of IP finally describes the trend that IP laws increasingly affect individual citizens directly. Traditionally IPRs regulated relationships between industrial market actors and were mainly aimed at firms, corporate actors, or at least entrepreneurs. In their core they regulated the industrial production of knowledge and information. Until recently, as James Boyle has aptly noted, for an individual

<sup>8</sup> Susan K. Sell and Christopher. May, "Moments in Law: Contestation and Settlement in the History of Intellectual Property" [2001] *Review of International Political Economy* 467, 486 ff.

<sup>9</sup> Kenneth J. Arrow, "Economic Welfare and the Allocation of Resources for Invention" in *The Rate and Direction of Inventive Activity* (Princeton: Princeton University Press, 1962); Peter Drahos, "Information Feudalism in the Information Society" (1995) 11 *The Information Society* 209; Christopher May, *A Global Political Economy of Intellectual Property Rights: The New Enclosure?* (London: Routledge, 2000); Meir P. Pugatch, *The International Political Economy of Intellectual Property Rights* (Cheltenham: Edward Elgar Publishing, 2004); Peter K. Yu, "International Enclosure, the Regime Complex, and Intellectual Property Schizophrenia" [2007] *Michigan State Law Review* 1; Peter K. Yu, "The Global Intellectual Property Order and Its Undetermined Future" [2007] 1 *WIPO Journal* 1.

<sup>10</sup> "Heiligendamm Summit: Chair's Summary", available at [http://www.g-8.de/Content/EN/Artikel/\\_g8-summit/anlagen/chairs-summary;templateId=raw,property=publicationFile.pdf/chairs-summary.pdf](http://www.g-8.de/Content/EN/Artikel/_g8-summit/anlagen/chairs-summary;templateId=raw,property=publicationFile.pdf/chairs-summary.pdf) [Accessed October 31, 2011].

<sup>11</sup> *G8 Declaration—Renewed Commitment for Freedom and Democracy*, May 26–27, 2011, available at <http://www.g20-g8.com/g8-g20/root/bank/print/1314.htm> [Accessed October 31, 2011].

citizen “it used to be relatively *hard* to violate an intellectual property right”.<sup>12</sup> With digitalisation and the proliferation of the internet, this has changed fundamentally so that IP laws now increasingly target individual citizens who do not profit economically from their incriminated activities of file-sharing or from otherwise using or providing IP protected content.

Taken together these macro and micro processes have facilitated the politicisation of IP. Politicisation means that, on the one hand, more and more diverse actors are getting involved in IP issues. Industry, legal specialists, national administrations, patent and trademark offices, and specialist courts are being joined by academics, farmers, indigenous people, consumers, political activists, and NGOs. On the other hand, the range of issues is expanding, and the forms of action are getting more diverse. The issues that are being raised include biopiracy, health, *access to medicines*, fair use, access to knowledge, and the limits of patentability. Conflicts are carried out in various arenas, ranging from international organisations, national parliaments, and courts to the public sphere, where actors try to influence the policy process by exerting political and economic power, by lobbying and petitioning decision-makers, or by organising street demonstrations, boycotts and other tactics from the repertoire of contentious politics.

This politicisation of IP is embedded in more wide-ranging processes of social change associated with the transformation of industrial societies into knowledge societies. The current conflicts about IPRs are harbingers of a new class of conflicts addressing new cleavages. They reveal a number of underlying conflict lines specific to the type of society that authors have variously labelled information society,<sup>13</sup> network society,<sup>14</sup> post-industrial society,<sup>15</sup> knowledge society,<sup>16</sup> risk society<sup>17</sup> or programmed society.<sup>18</sup>

In the recent IP conflicts mentioned above, new collective actors emerge to challenge the current order of the knowledge society and to establish an alternative version of a knowledge society based on democratised access to knowledge and far-reaching limits to the propertisation of ideas, knowledge and cultural goods. In the remainder of this article I will briefly discuss the four most important mobilisations—important in terms of mobilisation strength or the number of involved actors. I will then show which new cleavages of the knowledge society are addressed in them.

## Conflict constellations

The conflict about software patents in Europe, the worldwide mobilisation about access to medicines, the creation of pirate parties, and the establishment of Creative Commons are the largest, most visible, and thus most important contentious mobilisations around IP issues in the last two decades.

The conflict about software patents in Europe turned out to be one of the most conflictual issues that the European Parliament has seen so far.<sup>19</sup> From its beginning in 1997 to its end in 2005, more and more actors became involved in a conflictual mobilisation that brought the former specialist issue into the TV evening news. The conflict started in June 1997 when the European Commission published a Green Paper on the Community patent and the patent system in Europe.<sup>20</sup> It ended eight years later on June 6, 2005

<sup>12</sup> James Boyle, “The Second Enclosure Movement and the Construction of the Public Domain” (2003) 66(1–2) *Law and Contemporary Problems* 33, 40.

<sup>13</sup> David Lyon, *The Information Society: Issues and Illusions* (Worcester: Polity Press, 1988).

<sup>14</sup> Manuel Castells, “Materials for an Exploratory Theory of the Network Society” (2000) 51 *British Journal of Sociology* 5.

<sup>15</sup> Daniel Bell, *The Coming of Post-industrial Society: A Venture in Social Forecasting* (New York: Basic Books, 1999).

<sup>16</sup> Nico Stehr, *Knowledge Societies* (London: Sage, 1994).

<sup>17</sup> Ulrich Beck, *Risikogesellschaft: Auf dem Weg in eine andere Moderne* (Frankfurt: Suhrkamp, 1986).

<sup>18</sup> Alain Touraine, *Die postindustrielle Gesellschaft* (Frankfurt: Suhrkamp, 1972). In this article I will use the term “knowledge society” because it is the most generic term, capturing the central element that distinguishes these societies from earlier forms. The social and economic structures of these societies are organised around the creation, valorisation and use of knowledge.

<sup>19</sup> Taken from the author’s interview with Michel Rocard in Strasbourg, January 17, 2007.

<sup>20</sup> Commission of the European Communities, *Promoting Innovation Through Patents: Green Paper on the Community Patent and the Patent System in Europe* (Brussels: 1997).

when the European Parliament rejected the directive with a majority of 648–14 votes. Between these dates lies a contentious mobilisation in which new collective actors emerged and entered the area of IP politics in Europe. Such mobilisation has lastingly altered the power relations in this field.<sup>21</sup>

On a global level, the broadest and most prominent conflict about IPRs certainly was the conflict about access to (essential) medicines. In its core it was, and still is, a conflict about the effects of patents for pharmaceutical products on access to drugs for patients living in countries of the Global South. It was fuelled, in particular, by the issue of access to HIV/AIDS medications. The coordinates for this conflict were set by the dual dynamics of an accelerating rate of HIV infections in a number of developing countries in Africa, Asia and South America and a ratcheting up of IP protection that culminated in the 1995 TRIPs agreement.<sup>22</sup> It is a prime example of a truly international mobilisation, involving several hundred core activists, supported by tens of thousands of people engaged in local mobilisations. Like in the software patents case, actors not previously known in the field of international IP politics have stepped on the stage of international IP politics, and a remarkable coalition of NGOs and government actors from developing countries has been formed.

The pirate parties are an important case because they have contributed to bring IP issues closer to the centre of the parliamentary system. Their electoral campaigns not only bestowed on them an elected representative in the European Parliament, but also forced other parties to position themselves in relation to the issues raised by the pirate parties.<sup>23</sup>

Creative Commons is the smallest mobilisation in terms of immediately involved activists, ranging in the area of hundreds, but not the thousands or tens of thousands in the other mobilisations. But its importance is reflected not mainly in the number of activists engaged in the project, but in the remarkable adoption rate of its alternative license by millions of internet users, who in a very short time have already created a sizable pool of creative works that are free for everyone to use.<sup>24</sup>

The radiance far beyond the core activist group that these transnational mobilisations developed, together with the diversity of the mobilised actors, are an indicator that they address more general cleavages that are relevant to much wider constituencies than those immediately affected by the concrete problems from which the mobilisations started. This does not mean that the mobilisations are really about something else; it only means that they have a second dimension beyond the respective concrete policy issue. Just as protests for women's rights to legal abortions have also been struggles for women's rights in general as well as struggles against the patriarchal order of societies, the campaign for access to medicines is also a struggle about the limits of private appropriation of knowledge, whose aim does not facilitate the provision of AIDS medications to poor people in developing countries.

The more general social conflict lines in which the four conflicts are embedded are:

- (1) the mode of innovation;
- (2) the rules governing access to knowledge; and
- (3) the limits of anonymous markets.

<sup>21</sup> Haunss and Kohlmorgen, "Lobbying or Politics? Political Claims-making in IP Conflicts" in Haunss and Shadlen (eds), *Politics of Intellectual Property* (2009); Haunss and Kohlmorgen, "Conflicts about Intellectual Property Claims" (2010) 17 *Journal of European Public Policy* 242; Philip Leifeld and Sebastian Haunss, "Political Discourse Networks and the Conflict over Software Patents in Europe" (2011) 50 *European Journal of Political Research* (forthcoming).

<sup>22</sup> Hoen, "TRIPS, Pharmaceutical Patents, and Access to Essential Medicines: A Long Way from Seattle to Doha" (2002) 27 *Chicago Journal of International Law* 39; Susan K. Sell and Aseem Prakash, "Using Ideas Strategically: The Contest Between Business and NGO Networks in Intellectual Property Rights" (2004) 48 *International Studies Quarterly* 143; Sell, "TRIPs and the Access to Medicines Campaign" (2002) 20 *Wisconsin International Law Journal* 481.

<sup>23</sup> Bartels, *Die Piratenpartei* (2009); Demker, "Sailing along New Cleavages: Understanding the Success of the Swedish Pirate Party in the European Parliament Election 2009", available at <http://goo.gl/6jll2> [Accessed May 17, 2011].

<sup>24</sup> Lessig, "The Creative Commons" (2003) 55 *Florida Law Review* 763; Kembrew McLeod and Peter DiCola, *Creative License: The Law and Culture of Digital Sampling* (Durham: Duke University Press, 2011).

### *Mode of innovation*

The software patents conflict, the access to medicines mobilisation, and the Creative Commons project directly address the issue of the appropriate mode of innovation. A mode of innovation is a set of social mechanisms that determine how and where innovation is to be produced. In the industrial era industrialised mass production is accompanied by industrialised mass innovation—innovation that is concentrated in large industrial units. This centralised mass production of innovation is reflected in the patenting patterns in industrialised countries. In her empirical analysis of Australian and US patent ownership, Hazel Moir shows that the distribution of patents among patent owners follows a power law: a small number of firms are frequent patenters, owning several hundred or even thousands of patents, while the large majority of firms and a small number of individuals and non-profit organisations own only a small number of patents each.<sup>25</sup> Patent-protected innovation is thus strongly centralised and dominated by a small number of powerful corporations.

This centralised, industrial model of innovation is directly challenged in three of the conflicts and criticised in the pirate parties' manifestos. In the software patents conflict, this challenge was most obvious. The opponents of software patents argued that the "real" innovators of the European high-tech sector would not be the handful of large transnational corporations, which extensively make use of the patent system; rather, they are the many thousands of small- and medium-sized software and technology companies, which would suffer, rather than profit, from patent protection in the software area.<sup>26</sup>

In the access to medicines conflict, the industrial innovation model was challenged from a different angle. The core criticism here was not so much that the big pharmaceutical companies would not be the "real" innovators, but that the innovation they produce would be driven by the wrong incentives. The access coalition argued that in the area of medicines, the aim of innovation should be providing drugs for those who need them the most.<sup>27</sup> Because the current model directs innovation to the needs of those able to pay the most, public authorities should be able to intervene and redirect innovation processes and make existing drugs available according to human needs, but not according to the patients' wallets.<sup>28</sup>

Creative Commons poses a fundamental challenge to the centralised, industrial model of innovation, even though it is an initiative in the copyright area, rather than in the patent area. By offering tools to protect access to knowledge and cultural goods, Creative Commons has greatly enhanced the visibility of dispersed and distributed innovation processes that build upon each other and make use of a growing pool of shared resources.<sup>29</sup> The existence of millions of Creative Commons licensed works also helps build a consciousness that the centralised, industrial mode of innovation is only one model among many. The rules governing the production and use of knowledge therefore should not account for only this model.

The focus on political priorities in the access to medicines campaign and the strategy of the opponents of software patents to politicise the conflict further challenge the industrial innovation model on another level. In both cases the social movement actors insisted that knowledge policies should not be shaped by business actors and the patent community, but by the people and/or accountable and democratically legitimised institutions.

<sup>25</sup> Hazel V.J. Moir, "Who Benefits? An Empirical Analysis of Australian and US Patent Ownership" in Haunss and Shadlen (eds), *Politics of Intellectual Property* (2009).

<sup>26</sup> Haunss and Kohlmorgen, "Conflicts about Intellectual Property Claims" (2010) 17 *Journal of European Public Policy* 242; Leifeld and Haunss, "Political Discourse Networks and the Conflict over Software Patents in Europe" (2011) 50 *European Journal of Political Research* (forthcoming).

<sup>27</sup> Ruth Mayne, "The Global Campaign on Patents and Access to Medicines: An Oxfam Perspective" in Peter Drahos and Ruth Mayne (eds), *Global Intellectual Property Rights: Knowledge, Access, and Development* (Basingstoke: Palgrave, 2002), p.248.

<sup>28</sup> Sell and Prakash, "Using Ideas Strategically: The Contest Between Business and NGO Networks in Intellectual Property Rights" (2004) 48 *International Studies Quarterly* 143, 153.

<sup>29</sup> Yochai Benkler, *The Wealth of Networks: How Social Production Transforms Markets and Freedom* (New Haven: Yale University Press, 2006); Lawrence Lessig, "The Architecture of Innovation" (2002) 51 *Duke Law Journal* 1783; Lessig, "The Creative Commons" (2003) 55 *Florida Law Review* 763.



### *Access to knowledge*

The second meta-conflict to which the empirical conflicts speak is a conflict about general rules that govern access to knowledge. All four contentious mobilisations challenge the notion that privatisation and propertisation of knowledge are economically the most efficient and politically the most desirable solutions to encourage innovation and creativity. In the software patents conflict, the open source business model is offered as an alternative to the closed, proprietary model of large information technology corporations. In the access to medicines conflict, compulsory licenses are propagated as a tool to enforce better access, and alternative research financing models (prize funds or patent pools) are offered as measures to combat the propertisation of knowledge on a more general level.<sup>30</sup> The pirate parties demand drastically shorter protection periods for knowledge goods, broad exceptions to enable general access for private and non-commercial use, and—in the case of the Swedish *Piratpartiet*—even the complete abolishment of the patent system.<sup>31</sup> And Creative Commons provides tools to enable access to knowledge and to broaden the pool of available non-proprietary knowledge goods.

Within the mobilisations the issue of access to knowledge is raised on four levels: First, the general norms that allow patent holders to exclude others from using their propertised knowledge are challenged. Secondly, the specific problem of access to knowledge caused by the “digital divide”<sup>32</sup>—the gap between the affluent countries of the Global North and the poor countries of the Global South is addressed.

On a third level, limits to access rooted in individual privacy and personality rights are demanded. And fourthly, transparency and access to public records and to information held by authorities, are demanded, in order to enable citizens to hold decision-makers accountable. The overarching questions on all four levels are: Who should be able to access which knowledge and information? On which norms should the limits to access be based? And who should be able to set these norms?

These four aspects describe in essence two sides of the same coin. On the one side, the open access perspective asserts primacy of public over private interests, where public means the population at large while private means corporate, economic interests. This perspective questions the neoliberal assertion of private property as an essential precondition of freedom. It highlights the need for state intervention to balance inequalities and secure social standards.

On the other side, the privacy perspective defends the primacy of the private in terms of personal integrity and autonomy against state and corporate control. This perspective highlights what Isaiah Berlin has called “negative freedom”,<sup>33</sup> the freedom from interference. Together these four aspects illustrate that the issue of access to knowledge goes beyond the question of private ownership and exclusive property rights. The question of access is ultimately a question of power—of corporations and states—and its limits.

Theorists of the knowledge society have largely neglected the aspects that a central conflict line of the knowledge society is about controlling access to knowledge and that the core gatekeeping mechanism is the creation of IP. Stehr briefly mentions IP as an area of conflict dating back to the 19th century.<sup>34</sup> But because he claims that knowledge would replace property as the defining characteristic of society, he does not see major conflicts related to the IP issue. Nor does the control of access to knowledge by IPRs play a significant role in either in Castells<sup>35</sup> or Bell’s<sup>36</sup> account of the knowledge society. Moreover, the aspect

<sup>30</sup> James Love and Tim Hubbard, “Prizes for Innovation of New Medicines and Vaccines” (2009) 18 *Annals of Health Law* 155.

<sup>31</sup> Piratpartiet, “Principprogram version 3.4 [Declaration of Principles 3.4]”, available at <http://www.piratpartiet.se/principer> [Accessed October 31, 2011].

<sup>32</sup> Pippa Norris, *Digital Divide: Civic Engagement, Information Poverty, and the Internet Worldwide* (Cambridge: Cambridge University Press, 2001).

<sup>33</sup> Isaiah Berlin, *Two Concepts of Liberty: An Inaugural Lecture Delivered Before the University of Oxford on October 31, 1958* (Oxford: Clarendon Press, 1959).

<sup>34</sup> Stehr, *Knowledge Societies* (1994), p.256.

<sup>35</sup> Castells, “Materials for an Exploratory Theory of the Network Society” (2000) 51 *British Journal of Sociology* 5; Manuel Castells, *The Rise of the Network Society*, 2nd edn (Oxford: Blackwell, 2010).

<sup>36</sup> Bell, *The Coming of Post-industrial Society* (1999); Daniel Bell, “Welcome to the Post-industrial Society” (1976) 28 *Physics Today* 46.

of regaining autonomy over one's own personal data is absent in all three theories. The three authors' ignorance of the conflict dimension embedded in the access to knowledge issue is not just an empirical oversight but a theoretical shortcoming. The access dimension of the conflicts addresses the question of digital citizenship in its dimensions of individual freedom and social inclusion.

Privacy rights and demands for accountability and access to information on which administrative decision-making is based are contentious, because they circumscribe an area of liberal freedoms in the virtual realm of the knowledge society. Like their counterparts in the material world, these freedoms have to be won in struggles against authorities and private corporations wishing to curb these rights.

The conflict about the limits of IPRs and the rules and norms governing access to knowledge is the knowledge society's pendant to the struggle about limits of individual and corporate property rights in the industrial age. Castells has claimed that the industrial order in which power was based on property will be superseded in the network society by a power based on controlling the network and the information flows.<sup>37</sup> That claim, however, has to be modified in light of the recent IP conflicts. The same is true for Bell's claim that skill and education are becoming new bases of power.<sup>38</sup> The enormous expansion of IPRs in terms of protected subject matter, protection length and geographical coverage show that property has far from ceased to be an important base of power. Skill and education do not replace the old bases of power. Instead property is redefined to include knowledge and information, which are the preconditions for skill and education.<sup>39</sup>

The struggles of the industrial age to limit power based on material property have led in some countries to more- or less-encompassing welfare systems and redistributive policies, limiting the rights and expanding the obligations of property owners. Their success depended to a significant amount on the strength of the workers' movements. In the conflicts about access to knowledge, various actors rally for the establishment of similar limits to immaterial property rights. Their success again will likely depend on their ability to become a collective actor.

### *The limits of anonymous markets*

The third conflict line that the four mobilisations address is about the limits of anonymous markets. None of the actors involved in the conflicts question the view that anonymous markets are extremely efficient institutions to solve certain information and allocation problems. But the conflicts question the neoliberal assumption that anonymous markets are in general superior to social forms of organisation. They question this assumption of superiority of market mechanisms on two levels. First, they contradict the assumptions that markets would lead to an optimal allocation of resources and that economic incentives would most effectively solve the problem of underprovision of public goods on the market. Secondly, the conflicts contradict the idea that the production of knowledge goods (and possibly also material goods) would necessarily be driven by cost-benefit calculations.

The first claim is made most explicitly in the access to medicines conflict. The core argument of the access coalition was that market mechanisms may well spur innovation and lead to the production of the most profitable medications, but those mechanisms will not necessarily lead to a sufficient provision of the most needed drugs to save human lives. For this, political governance that imposes priorities based on normative considerations is needed. In this aspect, the access to knowledge conflict is another iteration of the much older conflict between market liberalism and state intervention.

<sup>37</sup> Castells, "Materials for an Exploratory Theory of the Network Society" (2000) 51 *British Journal of Sociology* 5, 20.

<sup>38</sup> Bell, *The Coming of Post-industrial Society* (1999), pp.358 ff.

<sup>39</sup> Peter Drahos with J. Braithwaite, *Information Feudalism: Who Owns the Knowledge Economy?* (New York: New Press, 2003); Lessig, "The Architecture of Innovation" (2002) 51 *Duke Law Journal* 1783.

The second claim is more specific to the knowledge society. It undermines the idea that the rational, utility-maximising actor would be the appropriate model to understand the mechanisms that lead to the creation of cultural and knowledge goods. Classical economic theory assumes that rational economic actors would have no incentive to produce knowledge goods. Their non-rivalrous nature would make it irrational for anyone to produce them because everyone would try to forgo the costs of producing them by free riding on the goods produced by others.<sup>40</sup> Knowledge goods therefore should either be provided by the state or through additional incentives in the form of monopoly rights created to spur private production.

The success of Creative Commons and open source software fundamentally challenges this assumption. Obviously the millions of internet users, who have made the products of their creative activities freely available under Creative Commons licenses did not need additional economic incentives to create cultural goods. While one might object by noting that the majority of these goods was created by individuals and never intended to generate profits, this is certainly not true for open source software, which is produced by large for-profit corporations (like Google, IBM, Oracle, MySQL, or even Microsoft), SMEs, individuals in their spare time, or academics as part of their research. The important insight is that knowledge goods are produced for a variety of reasons, and digitisation and the internet have dramatically altered the conditions under which these various motives can become relevant.

The internet offers the possibility to coordinate distributed collaboration on a previously unknown scale and with minimal costs. It enables peer production—that is, “effective, large-scale cooperative efforts”<sup>41</sup>—on a global scale and under conditions of abundance. In pre-knowledge societies innovation and the creation of knowledge was always hampered by conditions of scarcity. Education and expertise were limited to a small section of the population. Geographic distances and different languages made the exchange of information costly and slow. The transaction costs of creating knowledge were high. In the 21st century this scarcity is in some areas being replaced by abundance. Coupled with rapidly decreasing costs for transmitting, storing, and acquiring information, this fundamentally alters the conditions for the creation of knowledge.

The Creative Commons project, along with the other mobilisations with their claims about the importance of values and norms in the governance of innovation and knowledge, thus questions the logic of the current IP system, which is based on the assumption of isolated, utility-maximising economic actors. All of these conflicts highlight the fact that innovation or the creation of knowledge and cultural goods is a social process. They do not deny that this process is driven by utilitarian incentives, but they claim that the process is *also* driven by other incentive structures. That these other incentives—based in the social norm of sharing, for example—have already become significant in some areas. They should become dominant in other areas as well.

This conflict line adds another dimension to the theory of the knowledge society that has been overlooked so far. The theories of the knowledge society are all centred around core processes of change that first and mainly affect the economic order of societies and then have wider effects in other sectors. The idea that knowledge production may be driven by other than economic reasons is present in Bell’s and Stehr’s writings, but only in the form of an internal logic of knowledge production. Bell describes the incessant branching of science,<sup>42</sup> and Stehr stresses the self-reflexivity of theoretical knowledge.<sup>43</sup> What is missing is the idea put forward by Yochai Benkler, who provides a theoretical explanation for the rise of Wikipedia

<sup>40</sup> Arrow, “Economic Welfare and the Allocation of Resources for Invention” in *The Rate and Direction of Inventive Activity* (1962); Jeremy Bentham, “A Manual of Political Economy” in John Bowring (ed.), *The Collected Works of Jeremy Bentham* (Edinburgh: W. Tait, 1843); Garrett Hardin, “The Tragedy of the Commons” (1968) 162 *Science* 1243; William D. Nordhaus, *Invention Growth, and Welfare: A Theoretical Treatment of Technological Change* (MIT Press, 1969).

<sup>41</sup> Benkler, *The Wealth of Networks* (2006), p.5.

<sup>42</sup> Bell, *The Coming of Post-industrial Society* (1999), Ch.3.

<sup>43</sup> Stehr, *Knowledge Societies* (1994), Ch.5.



and other instances of peer production. He claims that in “networked information economies”, knowledge production is essentially a social process, driven to an important degree by decisions based on social norms, and not only by utility-maximising economic decisions.<sup>44</sup>

### The relationship between IP conflicts and social change

The general conflict lines, along which the four conflicts about software patents, access to medicines, pirate parties and Creative Commons have developed, are related to a number of processes of change. These processes of change have enabled or at least accelerated the development along the lines mentioned above.

The most fundamental of these changes is the one lying at the base of Manuel Castells’ network society: the establishment of a *networking logic* that displaces the hierarchical organisation of economic and social relations and permeates all aspects of current society. Castells claims that power in the network society depends ultimately on the ability to program the network.<sup>45</sup> Given the centrality of controlling the networking logic, it is no wonder that the conflicts are all related to this process of change.

The conflict about digital civil rights, on the one hand, is an attempt to limit the reach of the networking logic and to regain some space for personal privacy. On the other hand, it is a struggle for democratic control over dispersed decision-making structures where governance networks are replacing government institutions. In the other conflicts, the collective actors strive to establish alternative networking logics of distributed innovation, collaboration and sharing. These conflicts are not just the consequences of the processes of social change; the actors involved in these conflicts are also trying to modify the processes of change while the processes are happening. These actors offer alternative versions of the knowledge society, but not an alternative to the knowledge society.

This is most explicit with regard to digitisation—the technological process of change. The digital revolution was clearly a necessary precondition for the development of current knowledge societies. Only in digital form can information in today’s quantities be stored, transferred, and processed in a global information network. This technological change is directly related to the changes in the property structure of the knowledge society—the increasing propertisation of knowledge and other immaterial goods. The Conflicts react to this technological change by embracing its possibilities. The attempts to foster a culture of sharing, to strengthen access to knowledge, and to develop models of distributed open innovation all built upon the potential of more egalitarian access to knowledge and information. Only in the conflict about digital civil rights does a cautionary perspective prevail to broach the issue of surveillance and privacy.

The growing “propertisation of knowledge” is opposed in all recent conflicts of the knowledge society. This process of change was certainly the immediate source of the conflicts about software patents and access to medicines in which the more general conflicts of the modes of innovation and access to knowledge have been addressed.

It should be noted though that the conflict lines that surface in the four contentious mobilisations are not directly connected to a number of other processes of change that appear prominently in the theoretical literature on the knowledge society. None of the conflicts has resulted from the transition from manufacturing to service, the core process of change in Bell’s description<sup>46</sup> of the knowledge society. The transformation in the economy that Castells associates<sup>47</sup> with the displacement of the hierarchical industrial corporation by the network enterprise is also not at the root of the current most visible contentious mobilisations. The detachment of cultural production from local experience that Castells identifies as a

<sup>44</sup> Benkler, *The Wealth of Networks* (2006), Ch.3.

<sup>45</sup> Castells, “Materials for an Exploratory Theory of the Network Society” (2000) 51 *British Journal of Sociology* 5, 20.

<sup>46</sup> Bell, *The Coming of Post-industrial Society* (1999).

<sup>47</sup> Castells, *The Rise of the Network Society*, 2nd edn (2010).

major process of change in the cultural realm has also not yet become a source of conflictual action.<sup>48</sup> Neither do the current conflicts immediately reflect the changes in gender relations, women's roles in society and production that Castells identifies as one of the core processes of social change in the network society.<sup>49</sup> This does not mean that these changes have happened without conflicts. It only means that these processes of change have not immediately influenced the trajectories of the most prominent contentious mobilisations of the knowledge society so far.

Nevertheless, what this rough sketch of the relationships between processes of change and conflicts in the knowledge society tells us is that a new set of conflicts has emerged that is no longer rooted in the cleavages of the industrial area. While the changes in the economic and occupational structures may still be addressed in a slightly modified framework of conflictual interaction developed in the industrial era, the conflicts that have been addressed in the contentious mobilisations discussed in this article seem to warrant new frameworks of interpretation and collective action. The unusual coalitions of actors that characterise all four conflicts are an expression of this. The analysis of the empirical conflicts thus reveals an area of contention that existing theories have largely ignored. But without accounting for these conflicts any understanding of the social dynamics of the knowledge society would be seriously flawed.

In the conflicts an alternative version of the knowledge society is proposed. In this alternative version of a knowledge society knowledge still remains the base for profit-driven economic activity. But it will be a knowledge society in which this economic activity is based on social production and on shared knowledge resources, and no longer on maximal exclusion. If this vision should see any chance to become a reality, then it will have to be backed by a strong collective actor able to establish it as the hegemonic version of the knowledge society. Clearly no such collective actor exists today, but traces of a social movement that may at some point become the agent of such an alternative version of the knowledge society can be seen in the current contentious mobilisations.

<sup>48</sup> Castells, "Materials for an Exploratory Theory of the Network Society" (2000) 51 *British Journal of Sociology* 5.

<sup>49</sup> Manuel Castells, *The Power of Identity* (Oxford: Blackwell, 1997), Ch.4.