

# Capabilities in the information era

Philippe Aigrain

20 March 2006

©Philippe Aigrain, 2006. Use of this work is submitted to the terms of the Creative Commons Attribution ShareAlike 2.5 license <http://www.creativecommons.org/licenses/by-sa/2.5/>. The original text can be found at <http://www.publicdebate.net/Members/paigrain/TACD-200306.pdf> and its LYX source at <http://www.publicdebate.net/Members/paigrain/TACD-200306.lyx>.

## **Rhetoric and ideology**

This opening session is about rhetoric and ideology.

Rhetoric is the art of eloquence. It used to be oral, but it is now widely accepted that rhetoric can also develop in writing. Rhetoric is a very valuable thing. We sometimes use the word rhetorical to qualify a argument that is useful to make a case, but in reality is not substantiated. However, even when one's reasoning has substance, it needs rhetoric to be properly conveyed to others. Rhetoric is so essential that nobody can do without it. When my company designs software to represent arguments in a public debate, we use Rhetorical Structure Theory (or RST), a valuable scientific endeavour to capture how people argue for or against something.

Ideology is quite a different matter. Even if it used to have other meanings, the word is used today mostly to depict how a predetermined world view can be so invasive that it actually prevents those afflicted from reasoning or even simply recognizing facts. Ideology gives prestrained answers. Its extreme form is fundamentalism, where it is no longer a world view, but one single principle, belief or revelation that constrains thinking. Apart from being highly contagious because it provides simple answers to complex questions, the

big trouble with ideology is that it is quite hard to argue with someone who swallowed an excess quantity of it. One is then tempted to simply dismiss the other -thus tearing off the fabric of debate- or to adopt a contrary -and often equally harmful- ideology.

So here is some rhetoric, which I hope that you will find useful to serve substance rather than hide its absence. It is also designed to give some basic tools to protect oneself against the contagion of ideology and fundamentalism.

## **Information does make a difference**

“We had been through this countless times”. Well, I have been through hearing this mistaken argument countless times: “The patent system has adapted to many technology changes and each time it was able to tune itself so it could apply to a new domain of technology”. “The copyright system was able to adapt to new modes of distribution so that the rights of authors and producers were still protected”. Even my friends - or should I say my accomplices - often stress that the present debates echo those of the 19th century, or of the tape recorder introduction times. I am sorry to say that they are wrong. Of course they are not factually wrong in stating that the arguments exchanged in these debates are similar. The rhetorics are alike. But not substance. Not consequences. That’s because of information. Information can not be thought as technology in the patent sense, though there is definitely technology to process and exchange it, and this technology is part of what gave birth to the information era<sup>1</sup>. In the copyright domain, the consequences of making information and what it represents either an object of *property-like rights to restrict* or to make it rather part of *information commons* can no longer be analysed properly in terms of balance between producers, creators and consumers as was done in the era of publishing and broadcasting. Such changes may be brutal but they don’t get understood fast. It took several centuries to adapt to a minor change like printing, as to invent freedom of expression, and give a new meaning to democracy. So I expect to hear the mistaken argument many more times. But why and how is it mistaken?

---

<sup>1</sup>This term was coined in parallel by Jacques Robin and Manuel Castells, though other thinkers such as Daniel Bell, Ivan Illich, and René Passet have described some key facets of the information era much earlier.

## **Information?**

By information, I mean any symbolic entity that can be processed in the information domain using methods that are themselves represented by information. This includes for instance scientific or statistical data, informational representations of works in any media, software, biologic information (genomic, proteomic, immunological), etc.

There are 2 handles to grasp the information era. The first one is that :

### **It is not about digitization and copying**

**It is about perception, analysis, comparison, production, creation, exchange, distribution, evaluation, assessment, recommendation, criticism, quotation, reuse, representation, ...**

The second one is that:

### **Information has a dual nature**

Information can be processed in the information domain independently of what it represents, but it can be acquired or projected in the physical, perceptive or social world, and of course this explains why most of us care about information even though we are not all fans of Chaitin-Kolmogorov complexity<sup>2</sup>. The relative importance of what happens in the information domain and what happens in the physical world differs among types of activities.

## **Which difference?**

Equipped with these two handles, how can we characterize the radical difference introduced by the information era? It opens two perspectives, and forces one choice upon us. The perspectives are :

---

<sup>2</sup>For the curious, Chaitin-Kolmogorov complexity is as close as one can get to a theory of pure information. Jean-Paul Delahaye published a remarkable introductory text in French : *Information, complexité et hasard*, Hermès ,1999.

**We can build a many-to-many information society rather than a few to many one.**

Note that I speak of information society and not society overall. A many-to-many information society is a condition for building a free, just and inclusive society, but certainly not a sufficient condition.

**People can become praticians rather than just receptors or professional producers.**

Sorry to say so in an event organized by consumer organizations, but if we keep alive the potential of the information era, there won't be consumers anymore at least in the information sphere. Of course each of us will still be often occupied in consumption, in reception of what others have produced. However, each individual and societal group can -already- move into a continuum of positions ranging from reception to professional production through being a critical receptor, a prescriptor, an amateur pratician, a semi-professionnal, etc.

Both of these perspectives are not wild dreams. They are already there. There is an increasingly "few-to-many" world in some domains and at the same time another world hosts an incredible growth of the number of people people and groups who are sources of creation, innovation, knowledge and involvement in the public debate. For a while these 2 opposite trends have developed in parallel. That was before centralized media noticed the Internet. The many-to-many continuum world first developed in new media, new territories where the few-to-many tittytainment was not installed. Software, blogs or remix music of course, but also poetry or digital photography. However the 2 worlds are now colliding because the many-to-many pro-am world is expanding to all media, and because the few-to-many world is afraid to lose its grip on human time. This collision is forcing a choice upon us. That's precisely the choice of where we draw the lines between information property-like restrictions and information commons<sup>3</sup>. How can we tackle

---

<sup>3</sup>Notice that I don't speak of knowledge commons. Knowledge has become also dual : an increasing part of is embodied in information artifacts, the other part, the one we call in French "savoirs" remains embodied in human beings. This remaining part is the one that gives meaning to the other. Knowledge that can be represented as information is fully non-rival and freely transferable. However knowledge that is embodied in people remains hard to build and transfer. Knowledge, and access to knowledge is one more reason for which we need (hu-

this issue ?

## **Positive intellectual rights**

### **that is capabilities**

Just like Amartya Sen told us to do in the economic and social sphere, we must think from and towards capabilities, concrete possibility for people to conduct activities and obtain results. That's a first and essential step to move away from ideology. Ability to criticize and create, to make things public and reach out for a public, to be recognized and rewarded, to access everything that has been made public. And we must take a fresh new look at how various mechanisms serve these capabilities. We must because there is no way we will keep in the information era the so-called balance that existed before.

### **will either become effective or disappear**

Prior to the information era, a number of rights that are key to capabilities were recognised, but they were not effective. The ability to exert these rights in practice was extremely limited. A particularly wild form of rhetoric today retroactively denies the existence of these rights. Already in the era of technical reproduction, there was a restriction of these positive rights but this restriction was mostly limited to redistribution and public performance uses, even if an early form of the takings doctrine (the claimed loss of business due to the recognition of rights of the public) was already present. The "balance" was complex and already distorted, but the adverse impact on capabilities was limited, because capabilities were themselves limited by other factors. The many-to-many world suffered a lot in the times where mass reproduction was already there, but the information era was not. However positive rights were still there. Today, there is simply no way the present form of the few-to-many producer / consumer world will survive without engaging us in an infinite trajectory of eradicating positive intellectual rights. So if

---

manity needs) rich information commons. So beware when people say "of course knowledge should be freely accessible but information can be an economic commodity". That should ring an alarm bell]

you are not ready to lose the potential of a many-to-many information society, forget about balance defined in terms of the former monopoly rights retroactively labelled as property, think new social contract, on the basis of which intellectual rights will be progressively tuned and evolved.

## **Can we come to our senses without a major crisis ?**

### **I hope so**

I am not very keen on crisis. So I did look a lot for a way of adapting to the information era without going through a major crisis, for a not too painful transition path towards recognized positive intellectual rights.

### **Here is how it could be done**

It all boils down to 2 things<sup>4</sup>.

#### **Positive recognition of the information commons**

Things are not faring too bad in respect to the positive legal and policy recognition of information commons. Great people such as Jamie Boyle and Yochai Benkler gave us a good start in this respect. And the group of people that sits in today's meeting did more than that : it started injecting this positive recognition in the debates of international organisations, in alternative proposals fed to them, and it started building some strange alliances around these proposals. Alliances where one finds public interest minded governments<sup>5</sup>, NGOs, individuals and even companies. It is going to be a long process in which we must invent or derive new legal concepts so that information commons are no longer a residue,

---

<sup>4</sup>I listed 4 points in my Cause commune book, but the third is consequential from and the fourth is a means to reach the first 2.

<sup>5</sup>No government is public interest-minded forever and on all subjects, but given governments can be so on given topics and / or at a given moment. That depends a lot on the existence of a "public" in John Dewey's sense, citizens and public officers who care about the interest and well-being of a greater community.

a left-over but a valuable common asset of humanity. I am now thinking about training lawyers and policy makers in these matters from nursery school age, since it seems that starting any later is not safe due to heavy adverse propaganda in primary school<sup>6</sup>.

**Rejection of those very few property-like restriction rights or execution modes for such rights that are incompatible with the continued development of information commons and a many-to-many continuum information society.**

When I started writing on positive intellectual rights in 1999, I had to list only information patents (software, information processing methods and gene sequence patents) and technical protection measures that are protected against circumvention even when they block the exercise of legal rights so that they transfer in practice to technology the judgement on what is or not a legitimate usage. However the list is getting longer at a worrying pace. Extreme preventive measures for imminent alleged infringement of uncertain rights have been included in the 2004/48/CE directive. A new proposal last July would create criminal sanctions including for non-commercial inciting to claimed infringements of a “commercial scale”. Compulsory DRMs have made an initial step towards becoming part of French law, though it is in a form that will have trouble to survive constitutional scrutiny. A WIPO Proposal for webcasting execution rights implemented by legally “protected” technical measures worsen the picture. These are the last hickups of a world view that knows its days are counted and aims at installing as much irreversibility than it can.

**Here is why time is short**

To mature new tools, the knowledge or using them for socially beneficial aims, one needs a world where creation, innovation, criticism are not underground activities, where they can find their path by free experimentation, in the open, and recognized as valuable. That's why time is short to make sure that the potential of the information commons can be explored joyfully. Our many-to-many

---

<sup>6</sup>This is unfortunately not a joke. Governments are spending public money in public-private partnerships to make property-like restrictive rights ideology part of primary school curricula.

continuum world differs from the present few-to-many world on one key point : we can live with the other world, we even like some of it, we just have to make sure that it finds a way to live with us. It will, if sufficiently many of us tell it that it has to.

## **About the speaker**

Philippe Aigrain: Dr. Philippe Aigrain was trained as a mathematician and computer scientist. He is the founder and CEO of Sopinspace, Society for Public Information Spaces, a small company providing free software solutions for the public debate and collaboration over the Internet. He acts at international and National level for the promotion and the sustainable development of the information commons. He is the author of “Cause commune : l’information entre bien commun et propriété”, Fayard, 2005, a contribution to the political philosophy of the information commons and intellectual rights, and one of the first mainstream publisher book in French to be distributed under a Creative Commons license. He has authored around a hundred papers on technology, mathematics, sociological or economic issues.

Prior activities : He conducted research on software, information access and interaction with media for 20 years, before joining DG Information Society of the European Commission from 1996 to 2003, where he initiated and coordinated the free / open source software policy and worked at the interface with intellectual rights regulation. Dr. Aigrain’s personal page is at:

<http://www.publicdebate.net/Members/paigrain>