### On rights and competition

Citizen's rights and business' rights in a progressively more immaterial world

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Sept. 18Th, 2014

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#### Abstract

The Internet represents the immaterial dimension of existence, which complements and acts in continuity with the material dimension rather than being an alternative to it. Immaterial relationships are mediated by the on-line platforms that have developed rapidly and with little control largely because the European e-Commerce Directive of 2000 exempted them from liability. On-line platforms are now determining factors in the use of the Internet, and become not only the principal means of interacting with the immaterial dimension, but also the most important interfaces for the material dimension. However, they are not neutral: as a matter of fact, the ways in which on-line platforms are conceived and user experiences are shaped are capable of orienting and modifying user behaviours. And that is not all because the platforms are designed to produce the effects of lock-in (which make it very difficult for users to abandon an adopted service) and the absence of interoperability, as the laws governing intellectual property rights are used to assure their closure in various ways.

The widely deregulated and rapid immaterial dimension is often characterised by increasing returns that tend to give rise to global monopolies and oligopolies which, in a few years, have created (and are still creating) positions of dominance in intermediating the services of the material dimension without any of the guarantees or restrictions foreseen for their predecessors. They are replacing local intermediaries operating in the material dimension with multinational intermediaries operating in the immaterial dimension: in other words, allowing the presence of gatekeepers in the immaterial dimension. In order to defend the market (and, with it, public rights), the present gatekeepers should be subject to specific pro-competitive regulation and the entry of the new gatekeepers wanted by those (who would like to eliminate the neutrality the Internet) should be prevented. It is therefore to be hoped that *ex ante* provisions are introduced in order to protect the rights of consumers and economic operators who are currently only protected *ex post*. Europe, in its dimension as a market of consumers, should decide whether to accept the *status quo* or intervene in order to ensure a different future.

## A preface, from the past

This is the most important antitrust case which has been before the Court in years.

*It is important because it reveals the way of growth of monopoly power -- the precise phenomenon at which the Sherman Act was aimed.* 

*Here, we have the pattern of the evolution of the great trusts. Little independent units are gobbled up by bigger ones.* 

At times, the independent is driven to the wall and surrenders. At other times, any number of "sound business reasons" appear why the sale to or merger with the trust should be made. If the acquisition were the result of predatory practices or restraints of trade, the trust could be required to disgorge.

But the impact on future competition and on the economy is the same though the trust was built in more gentlemanly ways.

We have here the problem of bigness.

Its lesson should by now have been burned into our memory by Brandeis. The Curse of Bigness shows how size can become a menace -- both industrial and social.

It can be an industrial menace because it creates gross inequalities against existing or putative competitors.

It can be a social menace because of its control of prices. Control of prices in the steel industry is powerful leverage on our economy. For the price of steel determines the price of hundreds of other articles.

Our price level determines in large measure whether we have prosperity or depression -- an economy of abundance or scarcity.

Size in steel should therefore be jealously watched.

In final analysis, size in steel is the measure of the power of a handful of men over our economy.

That power can be utilized with lightning speed. It can be benign, or it can be dangerous.

The philosophy of the Sherman Act is that it should not exist.

For all power tends to develop into a government in itself. Power that controls the economy should be in the hands of elected representatives of the people, not in the hands of an industrial oligarchy.

Industrial power should be decentralized.

It should be scattered into many hands, so that the fortunes of the people will not be dependent on the whim or caprice, the political prejudices, the emotional stability of a few self-appointed men.

The fact that they are not vicious men, but respectable and social-minded, is irrelevant.

That is the philosophy and the command of the Sherman Act. It is founded on a theory of hostility to the concentration in private hands of power so great that only a government of the people should have it.

United States vs. Columbia Steel, 1948.

#### The Internet: the immaterial dimension of existence

A few years ago, a journalist asked me how I would define the Internet. I said that it's a dimension of our existence.

Today I'm even more convinced it is: the Internet is a dimension of our existence in which we have relationships and perform economic and social activities.

Obviously it's not the only dimension in which we keep these relationships, but it's not an even *alternative* dimension of our existence, like length is not an alternative dimension of height.

In some cases, the material dimension can be mostly non existent, in others it's the immaterial dimension that can be almost non existent.

In most cases, activities are performed in both dimensions.

More and more so, for most of us, these activities tend to be performed in the immaterial dimension.

Certainly many activities and relationships have been immaterial for a while (telex, fax; for many of us, these have been collapsed into the Internet (or they are doing so rapidly).

For these reasons, the Internet has become *the* immaterial dimension of existence.

### The immaterial reality

I consider profoundly wrong to talk about *new* technologies to describe digital technologies which have been with us for the past twenty years, and for various similar reasons I consider semantically wrong to talk about real world and virtual world.

First, they're not worlds, otherwise they would be alternate ones.

For this reason I talk about dimensions.

Second, virtual means "potential", or that could eventually be, but it's not. To illustrate this concept, I use to say that the money we keep in a bank is real, even if it's not material.

For this reason I put a special emphasis in using terms like "material dimension" and "immaterial dimension" and not like "real world" and "virtual world".

Seeing things this way helps understanding that a teenager does not spend most of his time with his phone or on WhatsApp, but he spends it with his friends and schoolmates. Even when he's materially away.

This concept doesn't say anything about the quality of their relationship when they also meet materially, but instead only that the relationship is immaterially possible for a much longer duration as compared to when I was a teenager, when I used to spend a lot of time on the landline phone, limiting my family in its use.

## Regulatory light touch

Online platforms and tools that handle our immaterial relations have grown – or better, have exploded – in just a few years, and have enjoyed a regulatory framework with very few constraints.

The so-called "eCommerce European directive" from year 2000 explicitly guaranteed an exemption from responsibility to the owners of the communication platforms being used.

The legislator was well aware that the technological platform used by people to communicate was just that: a platform; content was provided by users and therefore users had responsibility over it.

Different is the case for those who upload content on those platforms and therefore have responsibility over it, publishers in particular, as they're organized as large scale players, with a hierarchical structure that determines the editorial direction and which content should be published.

Exemptions were introduced for these systems that simply transmitted (mere conduit: like a pipe where content flows through), for those who would host content uploaded by others (hosting providers: like a table that provides support to those who deposit and withdraw content) and for a mix between the two (caching: like a reclined plane on which content tends to slide and eventually disappear).

Platforms have evolved, and with the first forums and online discussion systems, a question arose: are these platform services, and therefore they can benefit from the exemptions of responsibility as per the directive, or not?

It was concluded that, being those platforms merely a software, without human activity, they could be considered part of the platform and therefore they could benefit from the exemption of responsibility available for "hosting" services.

## Static regulation and technological evolution

Is it still coherent with the idea that inspired that European directive, to consider that the absence of human activity is enough to exclude an editorial activity from these responsibilities?

Facebook's social experiment emerged in recent news<sup>1</sup> just days ago, in which, algorithmically, rules with which messages are presented have been altered for millions of people, to understand to what measure favoring negative and critical messages tends to stimulate negative reactions and, instead, favoring positive messages tends to stimulate favorable reactions.

What is this, if not proof that it is possible to make editorial choices technologically, without human intervention?

If the system were programmed to favor messages with positive reactions with respect to some Fascist propaganda, would it be enough to say that, since no humans are taking part in the decision, the system is exempt from any responsibility related to the crime of "advocacy of Fascism<sup>2</sup>"?

Is it enough that TV programming is being done by an automatic system, to consider the "audio / visual" media (new juridical name for "TV") exempt from responsibilities in editorial choices, in opposition to what happens if these choices are made by a human? (who, to be explicit, certainly has less information to support his decisions as compared to software)

Since the directive for the exemption of responsibility has been introduced, roughly ten years have passed and technologies have evolved dramatically. Maybe it's time to review these conditions for such exemption of responsibility in more depth.

 $<sup>1 \</sup>qquad http://blog.quintarelli.it/2014/07/epic-epic-challenges-facebooks-manipulation-of-users-files-ftc-complaint.html \\$ 

<sup>2</sup> A crime, in Italy

## User interfaces in an immaterial dimension

In the meantime, even while benefiting from this favorable regulation framework, several of these platforms have grown and become the main interfaces for the immaterial dimension: the main system with which we interact in the immaterial dimension, which however is rapidly becoming (for some of us, has already become) the main user interface of the material dimension.

It is in fact evident to all of us that, more and more, to complement and sustain our socio-economic relations in the material dimension, we use tools for the immaterial dimension.

A system is characterized by its user interface: if a feature is not accessible in the user interface, for the user that feature doesn't ezist.

As a consequence, if we are excluded from the user interface of the immaterial dimension, we would be more and more penalized and marginalized even in the material dimension.

It is from just a few weeks ago<sup>3</sup> the news that a change in Google's search algorithms resulted in a profit reduction for Ebay of about 200M \$.

For this reason, Venture Capital companies invest several billions in companies operating in the immaterial dimension, young companies that rapidly scale to become the leader in a sector of new intermediation for the material dimension: the more people use tools in the immaterial dimension to nurture socio-economic relations in the material dimension, the more these new intermediaries obtain a position of extreme relevance.

<sup>3</sup> http://searchengineland.com/google-ebay-penalty-cost-197031

## Interfaces with very different rules (material/immaterial)

As opposed to what happens in the material dimension, where every operation has an above zero marginal cost and requires time, in the immaterial dimension information moves at the speed of light with a null marginal cost.

In the immaterial dimension, the world is a dot: everything, everywhere, now. In the material dimension, instead, locality and time/cost to reach a citizen/user/client has great relevance.

In the material dimension, returns tend to decrease over time, as we have learned from Malthus onwards. In the immaterial dimension returns tend to grow over time, as explained to us by Brian Arthur, favoring the birth of oligopolies, if not monopolies.

## Heavy rules and light rules

Since the deregulation of telecommunications, network rules for operators (which have a very localized and large material footprint, being mainly underground cables and poles) have been designed to guarantee the fundamental rights of the users, and to favor competition.

As an example, we can recall:

- Rules regarding universal access and service, to make sure that nobody is left behind;
- Interoperability rules, to minimize network effects and guarantee that customers of smaller operators are not in disadvantage;
- Rules pertaining the conservation and protection of personal data, and to exclude other uses.
- Rules to prevent from using utility bills to pay other goods and services.
- Asymmetric regulations, to favor new entries against preexisting monopolists
- Rules to favor the possibility f contending customers, allowing for number portability from one phone operator to another in just one day (something that was technically unfeasible when the rule was introduced)
- Norms pertaining user functions to guarantee that, no matter which operator, users didn't have to learn new behaviours.

Venture Capital companies reward, with valuations north of one or several Billion dollars, those new immaterial intermediaries which have exponential growth (showing that they can take advantage of the growing returns described by Brian Arthur) also thank to network effect and, more than anything else, if they introduce a lock-in for users/citizens/clients in their business model.

"Lock-in" is a mechanism similar to a lobster pot, in which there's only one lane, almost automatic, to acquire a user, and it's impossible for such a user to leave the system.

#### Interoperability and business models

When we think about the Internet, we think about a world of freedom, a bit anarchic, in which we can use any service, with any device, in any part of the world.

In fact, the Internet was structured differently than the large services that people use today; 5-6 of which constitute the vast majority of services used and time spent online by users, and then there's a fragmented periphery, almost invisible if compared to these giants.

The idea of the Internet that many of us have is linked to distributed systems, like email and web.

But this is way different than the actual situation in which few large services provide functions in a centralized manner, not interoperable with protocols and standards.

If today email didn't exist and we had to invent it, we would build a centralized service in which users would need to register on a platform and only these users would be able to exchange messages.

Then we would make huge investments in marketing to attract users and, once the virtuous cycle has started, other users would come. If everybody is there, if I want to message somebody I'd better get there too (network effect). Once everybody is there, how can I leave? I couldn't message anybody if I left. (Lock-in).

Instead, since the birth of the Internet, for decades we have had a system that allows anybody to setup his own server that interoperates with other people's servers and therefore to send and receive email in an integrally distributed system.

But then, we should ask why email was born as a distributed system, and not a centralized one? The answer lies in its origin. Email was born in an academic environment, to foster exchanges between researchers and non researchers, and not for business reasons.

And the same was true for SMS, as compared to a closed system such as WhatsApp, which had a tremendous growth thanks to a very compelling user experience (very important factor in the growth of a service).

SMS were created in a context with rules from the "estabilished" telecommunication services, which had interoperability in their DNA.

Email and SMS show that the lack of interoperability in current services is not due to a technical limitation, but rather to a choice, allowed by the absence, for Internet services, of pro-competition rules, imposing interoperability.

## **Rules and politics**

(in a world where the relevance of immaterial dimension vs. material dimension increases)

This pro-competitivity for telecommunication rules has not always been around.

At some point, politics decided to introduce them.

Rules for the material dimension have evolved in 10,000 years of history, since mankind has settled down with the invention of agriculture.

In the immaterial dimension, permanent links to the Internet have started in 2001 (a dozen years ago) and, for the online service providers, a specific exemption of responsibility for intermediaries has been created – a "light" regulation approach.

Given the changed relevance in the relationship between the immaterial and material dimensions of our lives, and given the high penetration level of the Internet in our social relations, I think that it's time to start asking ourselves some – in my view, essential – questions, such as:

- If a social network, diffused everywhere, is one of the main mechanisms used by a teenager, can the choice of whether to exclude him or not from such platform be left exclusively and without appeal in the hands of such private company that runs the platform?
- If an immaterial tool, in an oligopolistic or monopolistic regime, is the main way to acquire customers for a business entity in the material world, can such a business' penalization or exclusion from the immaterial interface be left exclusively and without appeal in the hands of the private operator that operates the platform? (even more so if the operator, besides being the interface for the immaterial, can also direct consumers' behavior gaining a direct advantage over a competing material activity)

Or, would it be preferable instead that such subjects, weaker than the service provider, could have some defenses?

Recently, the state of New York<sup>4</sup> has declared Lyft (a service similar to UberEx, in which if you need a car ride you can get it from a car owner even if he doesn't have a license for public transportation) illicit.

Previously, the city of New York agreed on a settlement with AirBnB obtaining an economic compensation for reduced tax revenues from people renting their homes (without a license to do so) to others in search for a place to stay.

But who has the burden to verify and ensure, for example, the hygiene or security or accessibility for disabled people with these new forms of immaterial intermediation, which allow the aggregation of "atomic" offers, previously impossible to be put together in the material dimension?

We could decide that it's socially desirable to eliminate these control and guarantee frameworks that we have introduced in the past decades, guaranteed by the public. Or, that these burdens are to be offloaded to these new intermediaries.

<sup>4</sup> http://www.nyc.gov/html/tlc/downloads/pdf/industry\_notice\_14\_30.pdf

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The whole point that I want to highlight is that, in the immaterial dimension, vastly deregulated, extremely fast, characterized by growing returns, and which tends to grow into global monopolies or oligopolies in just a few years, positions of dominance in service intermediation of material dimension have been (and are being) created, without guarantees or obligation envisaged for analogous "former" intermediaries operating in the material dimension.

I think that politics should urgently think about the subject, with an open and inclusive approach.

#### Platforms: "everything you might ever want, selected by us"

In this scenario, the evolution of the role of hardware manufacturers should be considered.

When we think about computers, we imagine a world in which we write the software we want, the way we want it, then we distribute it through the channels we want, and give it to whoever wants it, at the economic conditions that we decide. Same for services.

Analogously, we think that we can obtain software from any channel, any provider, at the economic conditions that he has set, and that we can install or uninstall it on any computer that we want.

As for the Internet, even in this case this idea is naive and romantic.

Even if this is reality for "traditional" computers, it is not the case for most of the devices that people use to connect to the Internet.

Freedom of choice and installation that computers have known from the beginning has been interrupted by the introduction of the iPhone, which limits installation only to software available on Apple's app store.

Certainly, the catalog of available software for iOS (the operating system for iPhones and iPads) is huge, but applications that don't adhere to Apple's standard are not admitted.

Apple exerts control on all applications that are installed (and an even tighter control where installation trends suggest a potential interest from users); it exerts censorship on content available on these applications, limits prices to a few pre-set values and, last but not least, keeps a 30% commission on the final sale price. (being this a completely immaterial distribution, Apple executes it from a selected country, with obvious fiscal effects)

It is not possible to install an alternate "store", because the "store" program should be first installed through Apple's app store, and rules related to apps that can be published specifically forbid alternate app stores.

It is impossible to install an alternate store in any other way, since the iOS platform allows to install only through Apple's own app store.

To install alternate software it is necessary to remove this restriction, through a very complex procedure called "jailbreak" (moreover not always available, such is the case for Apple TV 3), contractually forbidden by the user license for iOS.

Users that have performed a jailbreak on their device in order to install software chosen by them have been judged guilty of copyright violation by courts.

Copyright, born to protect authors of cultural products, is being used to ensure the closure of a system, limiting the users' traditional rights and freedoms, limiting competition in a fundamental aspect of software (app stores), reducing content and available software, forcing an economic transaction on the main (immaterial) user interface of the material dimension. If you want that these contents or services are accessible, you should let Apple sell them.

## User experience and market control

This innovation introduced by Apple has been subsequently borrowed by Amazon, Microsoft and Google (who moreover obtain this effect by leveraging ergonomics and the simple user experience, rather than the absolute technical barrier).

For a long time, Apple's license ruled that any commercial product/service consumed on an Apple device was to be sold by Apple, who would keep a 30% commission (plus VAT in Luxembourg).

Now the restriction has been loosened by including a "most favoured nation"-like option<sup>5</sup>, which essentially allows to sell on alternate systems, but it should also be present in the App Store at the same price.

If a user wants to buy a fiscal manual by Sole24Ore (a major italian publishing group), he could do it on Sole24Ore's website too (where he will pay about 2% commission for the credit card), but it should also be available on Apple's app store (where Sole24Ore pays a 30% commission to Apple).

What will users do? Will they obtain the product through a deceitfully disadvantageous procedure (complex for the user, but favorable for Sole24Ore), or will they buy it on Apple's app store through a very simple procedure (but economically very unfavorable for the publisher)?

<sup>5</sup> such contractual conditions are present in other sectors too, such as tourism. Booking and Expedia (the two oligopolists of hotel bookings who account for most of the incoming bookings in Italy) rule that prices published by hotels on their platforms be the lowest among all of the hotel's published rates and require between 20% and 30% intermediation. Any hotel that that violates the rule is punished resulting in the loss of most of their clients.

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## From enablers to intermediaries

As said above, a right that de facto existed, such as the right to install any software, not subject to regulation, has been "taken away" from the users and used to consolidate, in a very short time, oligopolystic positions in the immaterial dimension, which is the main user interface for economic and social exchange in the material dimension.

Hardware manufacturers, as enablers, have benefitted from lack of pro-competition and pro-user regulation to quickly become intermediaries.

From that moment, everything has to go through them, and they have become the immaterial gatekeeper of the material dimension; the ones that decide which services and applications to favour, thwart or block.

The current, very relevant, debate on loss of tax return by the Italian government, caused by the offering of digital goods and services from offshore locations by international players, is only the epiphenomenon of a more radical transformation happening.

The epiphenomenon is the loss of tax return. The broader phenomenon is the substitution of local intermediaries operating in the material dimension with multinational intermediaries operating in the immaterial dimension and imposing their rules.

Allowing gatekeepers in the immaterial dimension produces the loss of governance for most of the material dimension, of which the loss of tax return is only one aspect, and not even the most relevant.

An aspect that I believe requires deep and profound thought.

#### Telco's envy

Telco operators are the big losers in this profound transformation: they were dreaming of becoming intermediaries, but the regulation that protects the banking payment systems prevented them from becoming THE payment intermediaries, and the personal data regulation prevented them from taking advantage of the data they had on users (social graph, location) to become marketing intermediaries.

All has happened while the pro-competitive and pro-user regulation sparked competition in their core business, reducing their margins.

It is not by coincidence that now they continuously ask politicians and regulators to allow them to do business on the only resource left, traffic flowing through their pipes, to reposition themselves as intermediaries instead of enablers, to demand differentiated tolls to service providers that can afford them.

They would also like to become gatekeepers, custodians of the Internet access, because it's from that toll station that you control the presence in the immaterial dimension, the user interface of material dimension.

Personally I think that we don't need more gatekeepers, but fewer. And if there's a direction in which to set our thinking, it's on platform and application oligopolies, not on reducing these few rules<sup>6</sup> that in Europe allow us to have landline access to the Internet which is generally neutral.

<sup>6</sup> related to wholesale access offers by ex incumbent operators

#### Ex post antitrust, or ex ante warranty rules?

In all cased previously described, there are legal instruments with which to intervene, in the form of antitrust measures.

But antitrust cases require several years to bringh through and, as I highlighted multiple times, these dominant positions have been built very rapidly, and much faster than justice can react.

A noteworthy exception, because of its promptness, was the measure of then Commissioner Monti who forced Microsoft to host alternative software because he believed that offering pre-loaded software in every copy of Windows would have altered the market of applications. In that case, the distortion was limited to the economy of the immaterial dimension.

In my view, we are way beyond this behavior, and with much more profound effects, regarding the economy of the material dimension, and not just the economy of the immaterial one, because today, unlike then, with the always-on connection to the network, the immaterial dimension is THE user interface of the material dimension.

As said, I believe that we should hope for the presence of less gatekeepers and more market, and therefore we should hope for measures which ratify the rights of consumers and of economical operators *ex ante*.

Not *ex post*, when the damage is done and an intervention is much more difficult.

Someone might think that it is impossible to go back and that nothing can be done. But in addition to the previously cited case against the then extremely powerful Microsoft, let me remind you that the then almighty AT&T decided to split to avoid an antitrust intervention which, it helps to remember, was feared not mainly because of illicit behaviors, but just for the fact that the excessive dimension of the company wasn't considered socially desirable.

I believe that at the European level, with it's market size, a consideration is in order, to decide whether to accept the *status quo* for the future or to intervene, even in a creative way<sup>7</sup>.

<sup>7</sup> Like, for example, forcing a geographical localization? Or a regulation similar to the one in force for financial services ?