Since the mid 2000s, Web 2.0 – or the “collaborative Web”, as it is generally referred to in France – has become a key component of discourses surrounding evolutions in the field of cultural and communication industries. The 2.0 marker is now commonly used within the media sphere, as well as in economic, academic and political circles. However, far from composing a coherent and specific category, Web 2.0 appears to be more of a nebula, a multitude of productions and devices sharing somewhat ill-defined, participatory features. Admittedly, the success of the Web 2.0 tag points to Tim O’Reilly’s tactical skills; it has also aroused the interests of a number of economic organisations and social and political institutions, not to mention numerous individual authors and experts. The development of the collaborative Web may therefore be seen as a specific evolution of contemporary capitalism, within the field of cultural and communication industries. In this respect it pertains to deeper transformations in the relations between economy, media and politics. What specific questions does Web 2.0 raise, with regard to the analysis of cultural and communication industries? Such is the key issue that this paper seeks to address, drawing from the broad conclusions of our recently published study, *Le Web Collaboratif* (Bouquillion, Matthews, 2010). Three significant points emerge from the research we conducted with North American and European Internet and media players. These findings are related, firstly, to the phenomenon of cultural industrialisation; secondly, to the renewal of relations between the media and the economic system as a whole; and thirdly to the revival of critical perspectives in the field of Internet and media studies.

**Collaborative Web and cultural industrialisation**

The development of the collaborative Web appears to be impacting modes of cultural industrialisation. These modes are specific, as Bernard Miège (1984) and other authors have illustrated (Flichy, 1991; Tremblay, Lacroix, 1991, Garnham, 1990). In order to understand more clearly these movements of industrialisation, it’s useful to turn to the work of Pierre Moeglin, concerning industrialisation of learning and training. This researcher invites us to consider industrialisation as a process; “industrialising tendencies”, according to the author’s expression (Moeglin, 1998: 22), can be clearly distinguished. Three criteria are suggested in order to evaluate the industrialisation process: “technologisation”, the progressive substitution of capital for labour; “rationalisation”, understood in a somewhat restrictive sense with regard to Max Weber’s definition, as the focus here is specifically on management and planning within a rational organisation of labour; and “ideologisation”, the development of an industrial “spirit”. By extension, although the first point seems less relevant for cultural contents, the criteria of rationalisation and ideologisation are most pertinent. Indeed, Web 2.0 cannot increase productivity *per se*. Admittedly, it allows a transfer of various costs towards consumers (notably promotional costs in the case of cultural industries that use Web 2.0 sites for their communication purposes, or content creation costs for collaborative websites themselves). However, by no means does this multiplication of human interventions amount to a replacement of the labour factor by the capital factor. Moreover, the endeavour to personalise and differentiate products proscribes reasoning in terms of sheer productivity gains. On the other hand, if one considers the two other criteria, it’s obvious that the
development of the collaborative Web is a factor of industrialisation of cultural and informational contents. Here we will mainly concentrate on rationalisation. In previous work (Bouquillion, 2008) we illustrated how the articulations between cultural industries and communication industries have led to a profound rationalisation, in other words to the reorganisation of these industrial sub-sectors in order to optimise the resources of a number of players. In fact one can observe wide-scale socio-economic evolutions towards a greater efficiency of capital. On the one hand, there is a dynamic convergence of different players – from cultural and communication industries sub-sectors, but also from the financial sphere and public regulatory bodies; under the impulse of commoditisation and financialisation, the strategies of these different players are linking up in a more or less coordinated manner. The phenomenon is all the more remarkable that one cannot clearly identify a “conductor” as such. On the other hand, it must be said that the transformations in these sub-sectors are affecting all aspects, all levels of the socio-economic chain. Rationalisation is taking place in the fields of creation, production, distribution, communication and valorisation, in conjunction with financialisation and regulatory changes. Phenomena pertaining to “economic specialisation” are at play, with the development of distinct offer segments. A generalised and profound rationalisation is therefore taking place. The sub-sectors of the cultural and communication industries are being deeply and rationally reorganised in order to face changes in their environment. As Pierre Moeglin has noted with regard to the learning and training sub-sector, applying Max Weber’s notion of rational activities, one can observe an “intensification of resources in order to optimise the means with regard to the goals” (Moeglin, 1998). How might our study of the collaborative Web lead us to revise these conclusions? Web 2.0 is indeed presented as the antithesis of industrialisation and industries, insofar as it is supposed to empower users and put right the “original sin” of cultural industries, which are seen as having separated amateur production from professional industrial production and, in fine, excluded the first from the production of culture and information. However, our observations show us that the four forms of rationalisation analysed in prior work are still taking place and, in fact, are intensifying with the development of Web 2.0, whereas a fifth form is now appearing.

Firstly, financialisation gives cultural and communication industries a financial dimension. They become objects of speculation and the basis of a complex set of purely financial profits, which financial players as well as major company managers benefit from. Financialisation is also the mandatory means of financing industrial reorganisations, including greater market concentration. The collaborative Web contributes to this tendency insofar as its development has been greatly induced by favourable anticipations by financial players. This has notably occurred through extremely high stock market valuations of Web ventures, seldom proportional to the turnover or the, often inexistent, profits of these companies. One must therefore note that in the last period, the capitalism of cultural and communication industries has found in Web 2.0 a significant field of development, generating and benefiting from the increase in the financial dimension of these activities, which supplement their industrial dimension.

Secondly, concentration allows the dominant oligopolies players, in each sub-sector, to develop market power to the detriment of consumers as well as economic players who do not belong to the oligopolies and, in particular, smaller players, which are frequently in the field of production. The “oligopoly with fringes” organisation of the sub-sectors persists, but the borders of the oligopoly are extending and becoming more complex, with the intensification of links between cultural industries and communication industries. As the systematisation of these industries progresses, the position of many content providers becomes weaker. Here
again, our observations tend to show that the development of the collaborative Web increases such trends. Web 2.0 doesn’t unsettle the “oligopoly with fringes” industrial organisation; on the contrary, it fits in well with this structural model of cultural industries. From this point of view, we’ve observed that two types of sites can be distinguished. A small number of collaborative Web players, such as YouTube, MySpace or Facebook occupy central and dominant positions, whereas a multitude of smaller players provide more targeted offers to far more limited audiences. The “oligopoly with fringes” model is therefore replicated in the very field of Web 2.0, with larger sites retaining more significant market power than smaller ventures.

Thirdly, public policies and various forms of regulation play an important role in the ongoing rationalisation processes. On the one hand, public policies and regulatory actions provide a legal framework for the oligopolistic organisation of the markets. They regulate interactions between industrial players and tend to reduce conflicts that might otherwise brutally offset the balance between these last. Moreover, they legitimate oligopolistic competition in the name of economic efficiency. On the other hand, they influence the conditions of exploitation, in particular the distribution of costs and revenue redistribution among players. The entry of communication industry players within the field of contents has led to pressures in order to diminish regulatory obligations. These pressures can also come from content players whose position is more downstream. The aim is to obtain a lightening (or complete removal) of the regulatory obligations that compel such companies to participate in the financing of content production. Another aim is to induce changes in intellectual property (I.P) laws. Such players use lobbying in order to reinforce legislative measures concerning I.P. At the same time, these industrial players are asking for a lessening of “droit d’auteur” rights, in particular related rights, so that rights owners may not oppose various forms of content valorisation and to minimise the risks of negotiations with these last. Communication players are mainly in favour of a loosening of existing I.P. rights in order to develop their content strategies. To put it in a nutshell, the cooperation of policy makers has become a significant issue, as it is greatly needed by industrial players. The collaborative Web doubly intensifies this trend. Firstly, it increases the tension between players seeking to loosen I.P. regulations and those that wish to strengthen them. Smaller Web ventures, with original content offers directed towards sponsors and syndication often see their interest in reinforced I.P. laws, whereas larger players are in favour of loosening existing regulatory frameworks. Moreover, the collaborative Web adds the participative and interactive dimension to the discourses of informational abundance inherent to the network (Bouquillion, 2007). Users who participate in content production may wish to modify and adapt them. Considerable amounts of content are indeed produced this way. By placing all contents in the same league, the discourse according to which Web 2.0 reinforces cultural diversity takes on the strength of obviousness. Existing regulatory frameworks, designed to ensure cultural diversity, are therefore open to question, since this last is “naturally” guaranteed thanks to the collaborative Web.

Fourthly, content valorisation models are undergoing significant changes, which the collaborative Web contributes to. The double market is a longstanding and well documented characteristic of the contents economy; contents being valorised both by direct consumer purchase and advertising. With the so-called “club rationale” (Lacroix, Tremblay, 1991), a third valorisation model was identified, based on subscriptions. Another model can be observed with time-based charging (Miège, Pajon, 1990), which appeared with the French “télématique” services of the Minitel and was extended to mobile phone content delivery. More recently, ephemeral forms of access to contents were experimented, products being accessible either for a limited number of times or for a given period. A fifth valorisation
model appears with so-called “brokering” (Moeglin, 2004); the broker charges a commission for each transaction established between content consumers and suppliers. Web 2.0 offers a blend of brokering and advertising based revenue models. Indeed, major Web 2.0 sites provide wide audience contents and products that are of interest for certain segments of consumers liable to purchase specific types of goods. Marketing models use information available on the user’s “click path” in order to establish correlations with different consumptions. Therefore, although they were initially attracted by cultural products, users are subjected to very diverse commercial offers, some of which are wholly unconnected to the field of culture and communication. The difference with advertising resides in the fact that the commission collected by the Web player isn’t based solely on the user viewing the commercial offer, but also on an actual purchase taking place. Contents therefore become “joint” products. They’re destined to attract consumers in order to suggest buying other products, which aren’t necessarily proposed by the platform proprietor. Thus, a new content valorisation model is emerging. It resides in the extent to which cultural contents can reveal the tastes and consumption patterns of Internet users, in other words in the ability to produce marketing information. Users are lured by cultural contents, whilst their “click-path”, consumption patterns and viewings, notably of advertising, are correlated in order to produce saleable information. To sum it up, the more the articulations between cultural industries and communication industries tighten, the more the contents become valorised in various ways and incorporated within the production cycles of other goods and services. On the whole, these valorisation models appear to be contributing to a polarisation of contents, with two extremes, in terms of range, cost and number of consumers. With the collaborative Web, the frontiers between advertising, brokering revenue, or intermediation, and the sale of marketing information, are becoming more and more blurred. In any case, even if Web 2.0 sites aren’t commercially viable per se, they do represent an important link in order to develop new resources – which other players, such as Google, are now in a key position to efficiently collect.

Fifthly, one must consider another way the collaborative Web is contributing to the industrialisation of contents, which has been somewhat overlooked until now. This point is related to the life span of production factors and draws from the work of Fernand Braudel. The historian refers to a hypothesis put forward by Simon Kuznets, according to which modern societies assign a smaller proportion of their reserves and savings to the reproduction of capital. In this respect, the difference between the formation of gross capital and the formation of net capital is supposedly lesser in modern societies than it was in earlier societies. Fernand Braudel therefore remarks that “perhaps the very concept of fixed capital is a unique product of the modern economic epoch and of modern technology” (Braudel, 1979: 287). He adds: “One might as well say, with some exaggeration, that the industrial revolution was first and foremost a transformation of fixed capital, a capital that became more expensive thereafter, but which was also far more durable and refined, and which radically changed rates of productivity” (Ibid). Hence it is suggested that industrialisation, and the related formation of fixed capital, allows to rationalise and secure the investments which are at stake. In other words, capital acquires a durability and a fixity, which interests industrial players for obvious reasons. Can one consider that within cultural and communication industries, and especially in the field of Web 2.0, perhaps more than in other activities, it is possible to optimise the durability of capital? This proposition may seem somewhat paradoxical, given that the uncertainty of product valorisation is one of the structural specificities of these industries. However, durability of capital and unpredictable valorisation are two separate phenomena. Indeed, the notion of capital within these industries takes on a particular meaning. The notion of capitalistic intensity is somewhat irrelevant for these industries and, as we have already
stated, the introduction of new technological means only rarely leads to capital substituting labour. Moreover, the notion of capital refers less to technological means of production than to other durable elements that contribute essentially to the production and distribution processes. These elements must also be differentiated, according to whether one is considering the cultural industries or the communication industries. In the field of contents, anything that contributes to creating a brand or generating reputation can be considered as fixed capital. For instance, many decades after its inception, the *Mickey* character constitutes an essential part of *The Walt Disney Company’s* fixed capital. Web 2.0 can play a significant role in increasing capital durability, through its alleged capacity to build brands and secure the loyalty of consumers by reinforcing brand communities. This is precisely the reasoning developed by numerous marketing specialists and summarised by Henry Jenkins, when the academic suggests that contents players should seek to integrate fans more within their industrial strategies.

**Web 2.0 and socio-economic systems**

The collaborative Web intensifies and reinforces systematisation between, on the one hand, cultural industries and communication industries, and on the other hand, between these two and wider consumer industries.

Firstly, one must consider the role of Web 2.0 with regard to the links between the sub-sectors of cultural industries and communication industries; these last depend on each other for the creation, production, distribution, promotion and valorisation of their products. The Web is at the very heart of this system, as well as cultural and informational contents. Admittedly, this systematisation process began before the advent of the collaborative Web. For instance, *iTunes* has become a key link for the distribution of musical products; it now has a significant impact on their valorisation, not only with regard to the amount of sales, but more notably through its ability to establish a reference sales price for online recorded music and, by extension, for the price of physical products. This Web application plays a central role in the development of mainstream audience electronic equipment sales, such as the *iPod* (or the *iPad*). It provides a legal means of access to musical files, hence minimising the fact that a vast amount of music listened to on *iPods* is actually accessed without respect for I.P. rights. It’s interesting to note that at the moment *iPod* sales increased to reach a significant proportion of *Apple’s* turnover (approximately 40%), the company’s share valuation increased considerably more than the turnover itself. In fact, *Apple’s* share valuation reached a level, with regard to turnover and even results, that was far higher than those of its main competitors on the mainstream audience electronic equipment market. Admittedly, the collaborative Web should be no means be seen as the origin of this systemisation, but it significantly reinforces the phenomenon insofar as it is becoming a key arena for the promotion of both cultural products and communication services. Beta versions of these offers are tested via the collaborative Web, the purpose of these tests either being usage analysis in order to adjust the offer or product promotion, by letting the user believe that he or she is participating in the design. Moreover, Web 2.0 sites make an important contribution to the economy of illegal file exchanges, which benefit communication industry players, such as collaborative sites, Internet service providers and electronic equipment producers. Some Web 2.0 players avoid hosting contents that do not respect I.P. rights, but others are less selective and often stress that they lack the technical means to filter illegal contents. Some players may consider that the risks of legal sanctions are rather limited. Indeed the copyright rationale leads to protecting I.P. rights holders against commercial uses of copies of products. However, proof of commercial advantages pertaining to a specific content is difficult to uphold, and even
when this can clearly be demonstrated, the penalty is seldom high, considering the fact that Web 2.0 sites are rarely profitable enterprises. In brief, the high cost of legal prosecution can act as a deterrent for I.P. rights owners. Lastly, and somewhat paradoxically, with regard to what we have illustrated, the collaborative Web can offer valorisation opportunities, at least on the long term. These opportunities can concern cultural industries and I.P. rights owners, as a number of sites – for instance Daily Motion in France – agree to share advertising revenue with cultural industries players. Expectations of reaching profitability in the field of the collaborative Web can be based on traffic volumes and the purportedly captive nature of audiences. In an article on the French Internet Actu website, summarising discussions that took place at the 2008 Web 2.0 summit in San Francisco, a significant professional event organised by O’Reilly media, Hubert Guillaud noted how YouTube had become the number two search engine in the world according to Comscore, surpassing Yahoo, with over 340 million unique visitors. He added that in July 2008, 75% of American internet users had accessed 5 billion on-line videos, in other words an average of 54 videos per person per month. What’s more, this traffic is supposedly becoming more exclusive: “youngsters tend to use YouTube as a search engine, accessing Web contents solely by means of video, as if textual contents no longer existed. For them, a significant part of their Internet experience comes entirely from videos. (...) Just as it was with Google, if you’re not on YouTube, you don’t exist”, Hubert Guillaud concludes. (Source: http://www.internetactu.net/2008/12/11/quand-youtube-remplacera-google, accessed December 29th 2008). Although one should consider these statistics with caution, bearing in mind both the fact that we don’t know how they were calculated, and the apparent generalisation and extrapolation regarding teenage practices persisting in adulthood, it’s nevertheless clear that the collaborative Web is becoming an electronic marketplace. One should also note that the distinction between supposed Web 1.0 and 2.0 sites is often difficult to establish, precisely because non-collaborative sites are also following this trend. For instance, iTunes allows exchanges between users and commentary following a supposedly collaborative rationale, without this hindering Apple’s control of the site. Our research has clearly shown how the main Web 2.0 sites are integrated within the commodity sphere; the collaborative dimension is therefore designed in order to maximise valorisation potential.

We have also sought to stress that systematisation does not equate to the phenomenon of convergence, as it was predicted in the 1980s. As Henry Jenkins correctly remarks, no technical tool, whether a computer, a mobile phone or an Internet access box, can lead to a monopoly position and control of sub-sectors. By the same token, despite the importance of the Internet and Web 2.0, none of the historical players has reached a monopoly position via systemisation. The situation of Apple, a company that wasn’t formerly an Internet player, clearly illustrates this. The different sub-sectors all retain their specificities, with their players, their socio-economic rationales, and moreover, their specific regulatory frameworks. No single player is able to dominate and integrate other sub-sectors; there is no “central player” of cultural and communication industries. The notion of a central player, stemming from the work on socio-economic rationales (Miège, 1984, Miège, Pajon, Salaün, 1986, Tremblay, Lacroix, 1991, and Mœglin, 2004), refers to an industrial player’s ability to organise and control all the various steps in the process of creation, production, distribution and valorisation, even if this player doesn’t directly participate in each of these tasks (such as a publisher in the book sub-sector or a television channel in the commercial TV sub-sector). Typically, the central player controls collecting of revenue from direct financers (end-consumer) or indirect financers (sponsors and advertisers), as well as redistribution of revenue towards other players taking part in the production process. This function allows the central player to capture a significant proportion of these resources. Indeed, players such as Google or Apple are in a position to collect a large part of the added value derived from contents, but
most of this consists of “indirect” added value, or externalities; the simulation of iPod and iPad sales in the case of Apple. These resources are generated in each player’s own specific sub-sector – Web based advertising for Google; electronic equipment sales for Apple – and not by taking control of the revenue sources of historical contents players, such as the sale of recorded film and music, or advertising via pre-existing media, like radio or TV. Admittedly, companies like Apple, but also Yahoo, Microsoft or mobile phone operators, are able to generate income from the direct sale of dematerialised contents to end-users, but this revenue represents a smaller segment of their turnover, in comparison with historical content players that hold distribution rights of premium contents and which are therefore well positioned on these markets. Therefore, the key question isn’t that of a merging between the sub-sectors, but the relations between the sub-sectors and their various players. On the one hand, with systemisation, contents generate important externalities, which don’t directly benefit content producers. On the other hand, the integration of contents within the economic processes of other sub-sectors – equipment sales, Internet access provider triple-play subscriptions or Web based advertising – impacts the business conditions of historical players. Seeking to optimise their competitive position on their main market, communication industry players utilise cultural and informational contents. As a result, their content offers are considered too low-priced by historical content players that nevertheless must comply with them, both for online and physical formats. Moreover, the strategies of communication industries players encourage illegal file exchanges. Some of our previous work (Bouquillion, Matthews, 2010) illustrated how, in the four main contents sub-sectors, these impacts contribute to a reduction in the resources collected by historical players from contents on existing formats, whereas the resources collected from new formats remained very limited. In this increasingly difficult situation for historical content players, a new question arises: that of the resources allocated to the production of original contents, for these players as well as for communication industries. This question is all the more important that we do not endorse the common view – notably expressed by Henry Jenkins – according to which the collaborative Web should be seen as a vector or an instrument of convergence due to the diversity of information, film and musical content on offer (a diversity supposedly owing to interactive production and distribution processes). Indeed, such contents are all linked to specific aesthetic and economic models, and extremely limited valorisation models arise, according to the length and specific modes of creation and production of these contents. They cannot therefore be mistaken for the products of historical cultural industries players, except when Web 2.0 sites “pirate” them.

Secondly, the development of the collaborative Web is both an indicator and a vector of deep shifts in the relations between culture and economy. Along with other key areas of the Internet, such as online advertising with Google and e-commerce sites like eBay, Web 2.0 contributes to new associations between cultural productions and the economy at large. Admittedly this systemisation isn’t as tightly knit as the linkage between cultural and communication industries. However, cultural contents, in particular those exploited via Web 2.0 sites, are now fully integrated within the creation, distribution, promotion and valorisation processes of a large number of goods and services belonging to the wider consumer industries. Indeed, our research has confirmed that new modes of production are being developed within the consumer industries. This is not to say that the production rationales of the cultural industries are spreading to the rest of the economy; such a hypothesis could only be discussed in the case of activities where the creative dimension is a key element, and by studying possible analogies between creative procedures applied in these various activities. What can however be shown is how consumer industry players now systematically suggest a direct link between their field and that of entertainment, with regard to their marketing and promotional policies. The main intention is to build or reinforce brand identities in order to
seduce clients via social distinction strategies, hence making objectively similar products less substitutable and avoiding price competition between industrial players for the same market segments.

From a socio-economic perspective, the collaborative Web may therefore be seen as an externality; this hypothesis implies that, as a socio-economic phenomenon, it is best apprehended by considering its ability to reinforce the cultural and communication industries system, on the one hand, and by its ability to generate and contribute to a vast electronic marketplace along with other Web industries. The collaborative Web plays a central role within this marketplace, due to the strategic importance of marketing for the industries of consumer goods and services. As externalities, many Web 2.0 companies will indeed have difficulties reaching profitability, as we have already noted; by extension, however, the strategic merit of capitalistic associations such as the one existing between Google and YouTube, is plain to see.

Moreover, for industrial players, the collaborative Web offers a supplementary cost transfer towards users. This transfer leads to a tighter integration of consumers within the valorisation process. One might argue that it also contributes to the production of a new global “subject”, wholly adapted to contemporary dominion of so-called market economy. Indeed, even when the prosumer is materially unproductive, he produces himself, contributing to the emergence of this new “subject”, which is intrinsically engaged in his own domination (Bendor, 2007). The discourses of Web 2.0 appear to consecrate user communities as a model for “new societies”, where autonomous subjects interact freely via the network, hence providing evidence of the viability of a socio-economic system based on economic liberalism and denial of a collective political dimension. Embodying the potential complete integration of the public sphere within the commodity realm, Web 2.0 appears to be a vast arena for social and human experimentation, a sort of materialised utopia. For Web 2.0 players, it would seem that their aim is to nurture, capture and valorise this new global “subject”, whose exchanges and contributions to the flow (both cultural, social and economic) supposedly represent the basis of a sort of “post-political” society. As a trial zone, Web 2.0 attempts to prove the efficiency of this new societal model. In this respect, it contributes to structural ideological production. As Fernand Braudel has shown, ideology and capitalism are historically inseparable; the development of capitalist strategies always requires wide social acceptation. “Privilege of a minority, capitalism is unthinkable without the active complicity of society. It is necessarily a reality of the social order, even a reality of the political order, even a reality of civilisation. Because, to a certain extent, the whole of society more or less consciously accepts its values.” (Braudel, 1985: 67). Ideological productions actively contribute to this acceptation. It is crucial, for instance, that the extremely high degree of concentration, which characterizes the communication industries, should not be questioned by political action. This goes hand in hand with forging the very framework that social agents use to make sense out of their daily actions.

Metaphorically speaking, one can conceive of Web 2.0 based exchanges between users (for instance, on social networks) as the multitude of passage points which must remain operational in order to maintain a smooth and constant flow. These contacts appear to vitalise a network, which is indeed crucial for the aforementioned externalities to function adequately. In particular, these flows are necessary to ensure the (often merely symbolic) valorisation of cultural productions and, on a second level, the (more directly economic) valorisation of consumer goods and services, as well as advertising. Therefore, one is tempted in fine to consider Web 2.0 as one vast externality; this in turn points to the Frankfurt School hypothesis of deliberate integration of consumers within a technical, administrative and
economic system, based primarily on the effective articulation of the various branches of the cultural industries. In hindsight, it is interesting to consider the following propositions which Theodor Adorno expressed in the early 1960's: “Ultimately, the culture industry no longer even needs to directly pursue everywhere the profit interests from which it originated. These interests have become objectified in ideology and have even made themselves independent of the compulsion to sell the cultural commodities, which must be swallowed anyway. The culture industry turns itself into public relations, the manufacturing of ‘goodwill’ _per se_, without regard for particular firms or saleable objects.” (Adorno 1975: 15).

**Critique renewed**

Our research leads us to believe that the position of social sciences with regard to the collaborative Web must be seriously examined. Many of the discourses of Web 2.0 promoters and experts, which we have studied, imply that critical thought may no longer be necessary, insofar as the putative former separation between the realms of economy and culture is now being overcome; as Henry Jenkins, for one, puts it, participatory culture represents a chance of reconciliation between commodity and community. According to a widely held view, collaborative cultural and informational productions necessarily generate differentiation, in the same way that brand communities are supposedly at the heart of the production cycle itself, guiding it in the interest and according to the tastes of users. Moreover, our research reveals a meta-discourse regarding the “historical course” of the cultural and communication industries, which are deemed to be “converging” around the collaborative Web. This discourse is closely linked to the rhetoric of cultural diversity, Web 2.0 being, in essence, a sheer expression of diversity. In actual fact however, we have shown that the collaborative Web leads to a dilution of the creative act, cultural and informational contents that are characterised by brevity, lack of respect for I.P. rights, and poor technical quality. Moreover, professional artistic and technical skills appear to be less used, which results in a polarisation of cultural and informational contents. Elements such as these show precisely how important it is to retain a certain level of critical vigilance.

Our study takes a clear stand against these dominant representations; our analysis is based upon the theoretical body derived from the political economy of communication, and more specifically upon the theories of cultural industries. Two key points bind together the different works that refer to the political economy of communication. (For an overview of the political economy of communication, see David Hesmondhalgh, 2002.) Firstly, Marxist economic theory and the Frankfurt school theses constitute references from which these works originated, striving to critically re-examine and renew these last. Secondly, these analyses consistently relate communication phenomena to the question of capitalism – its modes of reproduction and forms of regulation, its historical evolutions; the analysis of communication phenomena takes place within a wider study of the social, economic and political transformations of capitalism. And yet, it is evident that the political economy approaches to communication studies are nowadays frequently misconstrued or attacked by other currents in social sciences. By the same token, in the name of technological developments – in particular digitalisation – the theories of cultural industries have been either disputed or, more commonly, plainly ignored by researchers from the field of industrial economy and networks economy. Fixated upon the analysis of contents sub-sectors, these last consider that the theories of cultural industries are unable to grasp precisely what’s at stake with the expansion of communication networks. When taken into consideration, the political economy approach is illustrated as suffering from a triple blindness. First of all, it has been claimed that the
emphasis on the industrialisation and commoditisation of contents impedes these works when it comes to the analysis of contemporary network based industrial offers and services which are associated with them, notably the Web. Secondly, analytic models that were essentially developed in the 1980s and 1990s are supposedly inoperative with regard to recent evolutions in the economy of contents – especially Web 2.0. Thirdly, these critically orientated theories are deemed unable to apprehend societal changes linked to the Internet, for instance new relations between users, contents and networks, or the benefits of globalisation for cultural diversity. (For an overview of the attacks against political economy of communication, see Tristan Mattelart, 2010)

In addition to these critiques, a number of philosophical currents stemming from works on post-modernity (for an overview, see David Hesmondhalgh, 2002) have contributed to the denigration of political economy of communication, as have economic studies based on the analysis of bureaucracy and “public choice”, since the 1980’s. Pertaining to the economy of theatre, arts and the cultural industries, these works attempted to illustrate the counter-productivity of public intervention, both for cultural diversity and from an economic perspective. Without openly referring to the theoretical body of political economy of communication, these studies fundamentally contradicted its key hypotheses. In France, they benefited from significant political support, justifying important evolutions in the field of public intervention and regulation. Within European Union institutions and in the United States, as well as within international institutions such as the W.T.O. and during the G.A.T.T. negotiations, telecommunications represented a key point of interest for the economic analyses of bureaucracy. The objective was to justify the liberalisation of telecommunications, in the first place, followed by the opening of cultural and communication industries such as television to the “free market”, in the name of industrial convergence. With the deregulations of the 1980s, competition and the “free market” were indeed hailed as preconditions for a widespread economic and social progress, and as an essential step for the development of the budding Internet sector. Academic productions and expertise discourses surrounding Web 2.0 stem from this same intellectual background, which objects to the political economy of communication approach referred to above. They reiterate a number of its key propositions and convey a vision of society according to which the market and creative freedom are one and the same, whilst networks – seen as factors of emancipation – are opposed to industry and to the national representational political system, both seen as alienating factors or, at best, as social institutions that are no longer needed in the new “historical course” that the development of the Internet is steering.

These discourses must also be considered in relation to a wider doctrinal entity, which seeks to dispute former theoretical contributions based on Marxist analysis and Frankfurt School propositions, on the basis of a hypothetical merging of base and superstructure. For Scott Lash and Celia Lury, the ubiquity of culture is now so great that it escapes from the realm of superstructure; according to these authors, culture is now infiltrating and taking control of the infrastructure. In what they call the “global culture industry”, the mediation of representations gives way to the mediation of things. Formerly, they argue, it was possible to distinguish between cultural goods with a symbolic, representational dimension, and purely operational objects that perform a specific function. Today, this is supposedly no longer the case, and it is pointless to consider whether industrialised culture is a source of domination or resistance; critique as we knew it becomes equally unnecessary insofar as the objects of the “global culture industry” necessarily produce differentiation, thanks to brands. Thus, according to these authors, there no longer is any difference between culture and capitalism. These assertions are directly related to the theses of Henry Jenkins, for whom user participation
renders critique equally pointless, since the users are at the heart of the production process, which they guide according to their own interests. Faced with this vision of a great historical shift in the relations between culture and economy, we believe that a somewhat more cautious appreciation is called for. Doesn’t this thesis amount to concealing the social relations that contribute to the production of contemporary capitalism? The question of relations between base and superstructure – or between economy and culture – remains essential, but such an issue requires one to clearly define the terms used.

Firstly we wish to point out a certain confusion surrounding the very notion of culture, in the works of Scott Lash and Celia Lury, and numerous other authors, such as Jeremy Rifkin, which seem to amalgamate three distinct levels and hence blur the significant articulations existing between, on the one hand, “business cultures” or “brand cultures”; on the other hand, culture in the anthropological sense; and lastly, cultural productions such as artistic works or the contents of cultural industries. Although this confusion is found in many contemporary research papers and essays, it also appears to constitute an essential characteristic of the Web 2.0 devices and discourses, which similarly encompass three dimensions: culture as intellectual and artistic productions; everyday life, with regard to the representational and emotional sphere; and the commodity sphere, which the collaborative Web provides a direct access to, and for which it constitutes one of the three new catalysts, alongside online advertising and electronic commerce, in competition or in partnership with other marketplaces, such as consumer retail and shopping malls. Web 2.0 devices and applications can therefore be seen as producers of ideology themselves, although their task in this respect is facilitated by numerous essayists such as Henry Jenkins or Tim O’Reilly, whose – often explicitly defined – aim is to reconcile culture and commerce, or participatory culture and the market. An interesting example of this endeavour can be found in the words Tim O’Reilly used at the 2010 San Francisco Web 2.0 expo, to describe what he now coins the “co-operative Web”: “Ecology teaches us that it takes a Web of co-operating species to create a truly rich ecosystem. Each of us depends on thousands, millions (…) of other organisms, each pursuing it’s own selfish goal, but somehow weaving a co-operative Web. And I think we need to think that way about the Web (…). So my advice to all the players is to think about O’Reilly’s model, which is to create more value than you capture. (…) If you ask ‘Am I creating more value than I capture?’ then you can start to quantify and you can say ‘Yes, I am building new value for users’ (…). It’s paradoxical: when you create more value than you can capture, you do create more value for yourself. (…) As you build your apps, think about being part of this co-operative Internet operating system, not one where you own it all, but one where you gain strength by working together.” By attempting to provide a “meaning” to the collaborative Web, such authors complete the ideological production that helps to design a new “subject”, adapted to the globalised, neo-industrial era.

Secondly, it’s worthwhile reconsidering various older propositions regarding the relation between base and superstructure, notably those formulated by Raymond Williams in Problems in Materialism and Culture, where the author suggests that the two concepts should be re-examined, by considering the superstructure as a “range of cultural practices” and the base as “specific activities of men in real social and economic relationships, containing fundamental contradictions and variations and therefore always in a state of dynamic process.” (Williams, 2005: 34). In another of his works, Raymond Williams provides an equally enlightening proposition, stating that the phenomena and activities that are generally attributed to the superstructure (legislation, entertainment, public opinion, etc.) are necessarily set in the material realm. The analysis of advanced capitalist societies must therefore take into account “the material character of the production of a cultural order” (Williams, 1977: 93). In
this respect, superstructural phenomena are situated within material productions, which are essential for social and political reproduction: “The social and political order which maintains a capitalist market (...) is necessarily a material production. From castles and palaces and churches to prisons and workhouses and schools; from weapons of war to a controlled press: any ruling class, in variable ways though always materially, produces a social and political order. (...) The complexity of the process is especially remarkable in advanced capitalist societies, where it is wholly beside the point to isolate ‘production’ and ‘industry’ from (...) ‘entertainment’ and ‘public opinion’” (Williams, ibid: 92-93). Following this proposal, a critical analysis of Web 2.0 – and the cultural and communication industries at large – implies combining a socio-economic study of the material conditions of creation, production, distribution and valorisation, with the study of the ideological and political dimensions of culture. It’s this requirement that distinguishes our work from the research of cultural economists and approaches inspired by idealist philosophers, for whom culture is seen from a purely aesthetical perspective, or as an expression of spiritual realities. Moreover, taking into account material realities implies understanding the relations between “formats” and “contents”. In the case of Web 2.0, the analysis should therefore take into account the sheer materiality of data centres, severs, cabled networks, optic fibre, and even the integrated circuits and processors of the computers and cellular devices that make possible the equally material practices of “content generating users”. This insertion within the material realm can be observed both with regard to the “real social and economic relationships” that bring about the production of the aforementioned goods, as well as in the so-called “immaterial labour” of Internet users, insofar as this activity is incorporated within the capitalist valorisation process. As our research shows, a great number of discourses surrounding the collaborative Web equate the phenomenon to some sort of pure and immediate communication, a virtual dimension lacking either weight or density. Raymond Williams’ words provide a clear reminder of the utopian nature of these representations and underline an elementary characteristic of the relation between base and superstructure, which is clearly hidden (or at the very least “overlooked”) in the somewhat fanciful merger thesis put forward by Scott Lash and Celia Lury. For these last, indeed, the material dimension of culture is presented as a groundbreaking transformation, as is the notion of culture contributing to wider economic activity, whereas both these phenomena have been observed ever since the development of industrial societies. Neither can be correctly understood as new phenomena, and even if they may have intensified in the recent period, by no means should this be interpreted as the basis of a wholly new socio-economic organisation superseding that of the industrial society. Moreover, it’s worthwhile remembering that the idea of a fusion between base and superstructure isn’t at all new. Theodor Adorno and Max Horkheimer evoked this hypothesis as early as the 1940s, in the sense that the culture industry can be understood, metaphorically speaking, as a form of colonisation of the superstructure by the base.

The fundamental theoretical question raised by numerous studies regarding the collaborative Web and its position with regard to cultural and communication industries appears therefore to be that of the relevance – or irrelevance – of the very categories of base and superstructure. In order to grasp the terms of this debate, it’s useful to turn back to an explanation provided by Nicholas Garnham, based on the propositions of Raymond Williams that we outlined above, concerning the essential materiality of the production of a cultural order: “Insofar as historical materialism is materialist, it is based upon the postulates that Williams outlines. But insofar as it is historical, it is concerned to analyse the specific and shifting modes of this fundamental material relation, all of which are forms of that relation” (Garnham, 2006 [1986]: 208). For Nicholas Garnham, this proposition is itself based on the key Marxist tenet according to which all form of “extended social relationship” (in other words all form of
society) is based on the extraction and distribution of a material surplus, which depends on specific relations between owners of capital and workers. The intrinsic inequality of these relations is institutionalised by “social forms”, which in turn are legitimised by spiritual, cultural and intellectual productions, i.e. the “cultural forms” of these relations. According to Karl Marx, in the capitalist age, these real relations operate first and foremost on an unconscious level (based on assimilation of the exchange principle and of the fetish character of commodities – as Alfred Sohn-Rethel clearly demonstrated in his essay “Intellectual Labour and Manual Labour”, first published in 1970). Therefore, one can consider that two levels of abstraction exist in capitalism: the first is located in the “social forms” of material relations, i.e. the forms that human relations take on in a social organisation dominated by commodity exchanges; the second is located in the “cultural forms” of these relations, which are only indirectly related to the material reality. In this respect, “cultural forms” may question, confirm, transfigure or occult the “social forms”, in an ideological mode. For Nicholas Garnham, “cultural forms” enjoy a relative autonomy with regard to the material base of society, but only in return for a loss of real material effectivity. The more autonomous the “cultural form”, the less it is able to legitimate (or to counter) the “social forms”: “Cultural forms only become effective when they are translated into social forms which do have material effectivity. Thus there is a constant dialectic between autonomy and effectivity (…)”. (Garnham, ibid).

If one takes into account these propositions, it becomes obvious that actually verifying the hypothesis of a merger between base and superstructure – or between the “real social and economic relations” and their “cultural forms” – is an altogether more complex affair than it is suggested by Scott Lash and Celia Lury’s attractive yet simplistic assertions. Stating that the objects of the “global culture industry” are invading the economic infrastructure is all very well, and Scott Lash and Celia Lury clearly seem enthralled by this representation of “brands becoming brand environments, taking over airport terminal space and restructuring department stores, road billboards and city centres” (Lash, Lury, 2007: 8); nevertheless, perhaps they ought to explain, firstly, precisely what changes are brought about in relations of production, behind the dazzling windows of these same airport terminal shops, in the goods warehouses and stocking centres that surround them, in the suburbs of redeveloped city centres, or even further afield, in the factories where men and women assemble the mandatory digital gadgets of informational capitalism’s supposedly “highly reflexive subjects”. A contrario, it seems worthwhile investigating to what extent Web 2.0 – or the cultural and communication industries system that surrounds it – may constitute an effective “cultural form”, which in many cases is being translated into a “social form” that guarantees its material effectivity. In other words, how does the development of the collaborative Web allow industrial players to generate specific consumer patterns, to force Internet users to adhere to their offers, for a predetermined tariff, and moreover, to take part in the production process itself? Admittedly integrating the consumer within the production process isn’t a novelty per se; relational marketing has been preoccupied with the notions of “servuction” and “prosumers” for a long time, just as the notions of “consumer empowerment” and “customisation” have been extensively reviewed. Services economics has studied these phenomena since the early 1980s (Gadrey, 1996). Marie-Anne Dujarier’s research extends these perspectives, distinguishing seven forms of collaborative labour: informing databases; designing saleable and profitable goods and services; promoting and selling goods; designing and conceiving adverts; building trust in markets; collaborative production; observation and monitoring (Dujarier, 2008: 97-118). In this respect, should one consider that Web 2.0 amounts to a “cultural form” of new relations of production (user-generated production / “free labour”)? Might one consider that the collaborative Web constitutes a new type or translation
of “cultural forms” into “social forms”, and if this is the case, does it put an end to the
dialectics of autonomy and effectivity of “cultural forms”, which Nicholas Garnham refers to?
In this case, does Web 2.0 contribute to a decline in the relative autonomy of the
superstructure and therefore, to a further decline in the material effectivity of “cultural
forms”? In this case, does our own analysis suggest that the current evolutions in the field of
cultural and communication industries are leading to the end of all symbolic representations
of social relations, that these last have reached a petrified form in the shape of a “2.0
system”? Surely not, for our research doesn’t cover the diversity of socio-economic
configurations contributing to the world-economy. Nonetheless, by developing this analytic
perspective, our aim is to focus on an essential phenomenon of contemporary capitalism, and
to show how it may be wholly reassessed, and therefore taken somewhat more seriously than
in the laudatory essays which crowd mainstream media studies. Our objective therefore is to
observe how the systemic rationale at play is potentially able to “neutralise” the fundamental
contradictions that underlie the material relations of men, all the while emptying cultural
practices of their subversive and oppositional potentialities.

For the authors of *Global Culture Industry*, culture is represented as being one of the central
vectors of capitalistic accumulation and reproduction. However, according to them, there is
no longer any difference between culture and capitalism, insofar as this last expands by means
of brands: “The paradigm of indeterminacy and difference in global culture industry is less a
question of resistance than a way in which capital successfully accumulates.” (Lash, Lury,
2007: 5). It’s hardly surprising therefore that they simultaneously rebuff both cultural studies
and the Frankfurt School; the initial projects carried by Raymond Williams and Richard
Hoggart, on the one hand, and Walter Benjamin, Max Horkheimer and Theodor Adorno, on
the other, were unquestionably motivated by the will to transpose class struggle into the
superstructural realm (even if the emphasis was later placed on the sheer possibility of such a
transfer). In this sense, both were inherently “resistant” intellectual currents. The fatalism of
*Global Culture Industry* and many other putative attempts to make sense of current evolutions
in the field of cultural and communication industries is perhaps most finely encapsulated in
Brian Holmes’s assessment of Manuel Castells’s “network society”: “(Castells) conceives
subjective and collective agency in terms of a primary choice or rejection of the network,
followed by more or less viable paths within or outside the dominant system. The network
itself is not a form, but a destiny. Any systemic change is out of the question.” (Holmes,
2001). In hindsight, it’s profitable to remember that over thirty years ago, the authors of the
seminal work of the French political economy of communication approach, *Capitalisme et
industries culturelles*, emphasised the ability of the socio-economic system to integrate
cultural and informational productions “emerging in contradictory conditions”. Moreover,
they observed how capitalist editors and producers prospect and invest in productions
stemming from various ideologies, “including that of class struggle and oppressed peoples”,
in “the resurgence of minority national cultures”, “the blossoming of ‘wild’ or
‘nonconformist’ ideologies within layers of the working-class youth or the intellectual and
artistic petit-bourgeoisie”, as well as in “the outburst of oppositional ideologies” (Huet,
*et alii*, 1978: 7). In this respect, the notion of a simultaneous neutralisation and valorisation
of resistance is by no means a discovery. It is also undoubtedly one of the key merits of Luc
Boltanski and Eve Chiapello’s study, *Le Nouvel Esprit du Capitalisme*, to have finely
illustrated the complex mechanisms that contribute to this phenomenon. In conclusion, we
end this paper with an exert from their work, which clearly illustrates the inherent danger of
Web 2.0 practices and discourses, and of which we wish to stress the importance for critical
research on cultural and communication industries: “If it is no longer proper to believe in the
possibility of a more ‘authentic’ life, at a distance from capitalism, and if it is fashionable to
mock those who remain attached to this project; if one doubts that there can be goods, exterior to the sphere of commodity exchange, endowed with a value that cannot be reduced to an equivalence with the commodity and which would be destroyed by their inclusion within the sphere of commodity exchange, what can possibly stop the commoditisation process? Thus capitalism has conquered a freedom of action and of commoditisation, which had so far never been reached, for in a world where all differences are admissible but where all differences equate to one another precisely as such, nothing deserves, on the basis of its existence, to be protected against commoditisation and henceforth everything will be able to become an object of commerce.” (Boltanski, Chiapello, 1999: 567).
References


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In this perspective, the “social forms” specific to the capitalist age are “economic forms”; unlike during the feudal age, when “social forms” of relations of production were based on direct control of property (human, livestock, land and resources alike), capitalist “social forms” – first and foremost the wage form – are based upon the exchange of commodities, notably the particular commodities that are money and labour power.

The notion of petrified social relations is borrowed from Theodor Adorno, expressing the idea that capitalist class antagonisms could be definitively neutralised by the interiorisation and reinforcement of the ideological control exerted by the “cultural industry”. In the hypothesis of petrification, Marxian historical movement basically ceases.