

PLATFORM INFOMEDIATION AND JOURNALISM

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In a May 2011 article on GIGAOM, Om Malik argues that the Internet has removed the monopoly of information distribution from the mainstream media, enabling everyone to distribute contents. It is a change, he tells us, that has led to the proliferation of information and, more broadly, to a 'democracy of distribution'. For journalism, the removal of the media's monopoly over information distribution has had mixed effects. On the one hand, it has undermined many large media brands, but on the other new journalistic forms and contents have come to proliferate (Malik, 2011; Ingram, 2011). And, as Jay Rosen has argued, the more people participate in journalism the better it is going to be (Rosen, 2011). Indeed, the past decade has seen some fascinating changes in journalism, including the development of ITS radical forms (e.g. Indymedia); participatory forms (with crowdsourced projects such as the *Guardian's* MP expenses story); open forms (Wikileaks); and citizen-based forms (collaborative news-blogs) (Siapera, 2012). What is more, all of these changes have come, quite literally, at the expense of big media, which have frequently seen their power diminished, their business model undermined, and their credibility questioned. Critics of the increased conglomeration and concentration of media ownership must surely feel assuaged. Indeed, this appears to be a story of David and Goliath, with the big media Goliaths brought to their knees by bloggers and engaged citizen-journalists everywhere.

However, things are not as they seem. While new media forms appear to have upset the typical business model and function of media outlets, and to have created new windows of opportunity for citizens, political and activist groups, these windows are in turn themselves closing very fast, and an even newer seems to be order emerging. In the meantime, most critical approaches have focused on the issue of production, and specifically the question of labour under conditions of cognitive capitalism (Scholz, 2012). While this

is undoubtedly a necessary and urgent line of inquiry, it is not the only one. In broader media ecologies, production is closely associated with other processes, and changes in one trigger changes in others, thereby leading to further shifts. This article endeavours to examine this wider ecology, with specific reference to the media and journalism industry. In order to provide an outline of the emerging order it argues that the new media ecosystem alters and emphasizes the process of information distribution, over and above the processes of production and consumption; and that, instead of a democracy of distribution, what we actually have is an increased concentration of distributive power in the hands of a select group of platforms, which operate with their own logic – the logic of infomediation.

The article begins with a discussion of media ecology, in which processes and agents of production, distribution and consumption are related in multiple and dynamic ways, but which is also characterized by an emerging logic. This logic is found in the purposeful, built-in or designed affordances that consolidate the power of the new dominant actors within this ecology: the infomediating platforms. In order to understand the shifts within media ecology, this article examines the classic conception and history of the political economy critique of media and journalism: the gist of this critique has revolved around the idea of the concentration of production and distribution in the hands of a few dominant corporations. The new, de-industrialized order of journalism, the result of a broader shift towards cognitive capitalism and immaterial precarious labour, is shown to involve a new set of processes. These include the dis-integration of processes that were previously concentrated, and the rise of distribution, and specifically the kind of distribution that is associated with infomediating platforms as the new dominant process and logic. On the basis of this exposition and analysis, a critique of platform infomediation is developed, based on three main arguments: that platforms distribute not only contents but also *people* into different categories; that the emphasis on distribution in this new media ecosystem ends up negating the productive tension between form and content, thereby liquidating meaning; and that the logic of infomediation opens up new gaps in the recently blurred division between producers and consumers, imposing its own criteria which are totally extraneous to those of content production. The result is that whatever gains were achieved for journalism in the early days of social media (blogging, citizen journalism et al), have been all but lost.

Media as Industry and as Ecology

One of the most influential theoretical frameworks for understanding the media has been the ‘circuit of culture’ model proposed by Stuart Hall (1973). In its original formulation, this model attempted to capture television in terms of a cycle of encoding and decoding processes, in which producers and institutions encode and distribute information or contents, on the basis of frameworks of knowledge, relations of production and technical infrastructures. Audiences/receivers decode these on the basis of their frameworks of knowledge, relations of productions and technical infrastructures. Hall sought to explain how various practices and processes within this circuit are bound together in a ‘structure in dominance’, in which production dominates but does not determine consumption or reception. Hall draws on Marx’s ideas of the circuit of production-distribution-consumption, which Marx saw as an organic whole (Marx, 1973 [1857]), with processes influencing and shaping one another – even if production emerges as dominant.

However the isolation of these elements – and especially the focus in Hall’s model on a structural separation between the various moments – ends up overlooking the ‘messiness’ of media systems, and the ways in which forms (provided by media producers as institutions and as technologies) cannot be so strictly separated from contents or substance (understood primarily in terms of their interpretations and decoding by users). The main possibility that this model engenders is one of accepting or ‘resisting’ media contents, reducing the complexity of the media-society nexus into a primarily reactive process. Matthew Fuller (2005) developed a critique of Hall’s structural model on similar grounds, arguing that media could be conceived more fruitfully as forming a broader ecology, a complex system of multiple elements which are dynamically interrelated, feeding off and challenging one another. Media ecology also takes into account the generative capabilities of media systems to give life to new medial forms.

While Fuller’s account of the dynamism and irreducible multiplicity of media ecologies is compelling, his focus is primarily on the ‘combinatorial production’ rather than mechanisms of domination (Fuller, 2005: 24). Fuller chooses to focus on systems such as London’s pirate radio, which show precisely this multiplicity and the ways in which regulations are evaded and reshaped. Evolving regulatory and legislative mechanisms seek to impose specific forms

on radio broadcast, only to generate a field of mutations too heterogeneous to be controlled. Fuller refers to this process as a kind of 'constant arms race' (2005: 23). Nevertheless, he recognizes that this combinatorial production is not random but takes place on the basis of the particular qualities of these elements, including the technologies themselves and their affordances, or the ways in which they circumscribe their uses, or allow themselves to be appropriated (Gibson, 1986). An analysis of the relations between and within elements in a media ecology requires an analysis of the affordances and the ways in which some elements, objects and subjects, are placed and used within such ecologies. While in J. J. Gibson's original formulation, the notion of affordance comes across as neutral, with no 'sense of a will to power', as Fuller puts it (2005: 45), thinking of affordances as embedded in the purposeful design of specific media forms or applications we can more broadly identify the logics built into these specific forms.

In these terms, the shift towards media as ecologies involves primarily a shift in perspective: from looking at a set of predetermined structures towards apprehending a dynamic plane of relations of various and multiple elements, including industries, producers, users, machines (tablets, mobile phones, PCs) and so on. Relations between and within elements must be seen as dynamic and shifting. However, it must also be emphasised that the constitutive elements within media ecologies are not equivalent nor do they enjoy the same degree of power. While it has been important to identify production as a function of multiple combinations of elements, it is equally important to identify how specific elements seek and acquire power over others, and the broader implications that this power acquisition may have. This is especially important when we move from one media paradigm, namely broadcasting, to another, namely social media, as new elements and new configurations emerge which usurp, upset or undermine previously congealed relations such as those within journalism. From this point of view, a Marxist inspired analysis may prove more appropriate since it allows a focus on antagonisms – a confrontation or a juxtaposition of logics, affordances and uses rather than Fuller's parataxis or Hall's determination. In other words, we need to combine an understanding of ecology inspired by the combination and concatenation of diverse elements, while also paying attention to the juxtapositions, antagonisms, contradictions and usurpations found in the relations between these elements. The argument here is that while in traditional media industries, relations between elements were dominated by media corporations and the

logic was one of concentration or integration, this is now shifting towards a post-industrial mode, dominated by Internet platforms, whose logic is found in the purpose-built affordance of infomEDIATION.

As an entry point to such an analysis, we can use previous analyses of media systems. These can then be examined in relation to both their insights into the emerging logics, as well as their oversights and limits, which in turn can provide useful avenues of exploration of what new media systems are becoming.

The Political Economy Critique of Media/Journalism

The political economy of media and journalism understands and examines media and journalism as an industry. The genealogy of the idea of news journalism as an industry can be traced through Adorno and Horkheimer's (1944) 'The Culture Industry: Enlightenment as Mass Deception'. In this work, Adorno and Horkheimer examined the sphere of cultural production from the point of view of its industrialization, that is, its mass production, distribution and consumption. Its main characteristics, they argued, include monopoly, standardization of outcomes, and technological rationality. The mass production of cultural products is made possible through industrial technology, which is also responsible for standardization. Cultural products and artefacts are made in order to be distributed widely and consumed by all in the same manner.

A crucial insight of this work is that the contents of the culture industry are of little importance. They are unimportant because they are identical and standardized even as they are forever seeking or appealing to novelty; they are also unimportant because the emphasis within the culture industry is on the rationalization of distribution rather than on the production of contents (Adorno, 1975: 14). This is made clear through a comparison of the notion of technique in art and in the culture industry. While in the former technique is concerned with the internal organization of the work and its inner logic, in the latter it refers to 'distribution and mechanical reproduction, and therefore remains external to its object'. Indeed, 'the culture industry finds ideological support precisely in so far as it carefully shields itself from the full potential of the techniques contained in its products' (Adorno, 1975: 14-15). In the culture industry therefore it is distribution rather than production that is the focus, and moreover, its means of protection

essentially relies on bracketing out the actual contents and meanings it distributes and circulates. We will see in subsequent sections how this tendency has come into its own in the logic of infomEDIATION.

The trajectory of journalism has been clearly described by Habermas who traced its transformation into a commercial enterprise, resulting in a kind of journalism that, in the words of Bucher, 'produces advertising space as a commodity that is made marketable by means of an editorial section' (in Habermas, 1989: 184). Journalistic labour is fragmented and controlled with various specializations, its outcomes are mass produced and distributed widely, and it is run primarily in order to maximize profit. It is therefore no surprise that this labour follows a well-known pattern towards monopoly, or at least oligopolistic control of the market. Graham Murdock and Peter Golding outlined this process as early as 1973. They discussed the economic cycle of the press/media industry as involving a shift from a small scale personalized production to an increasing expansion, in which 'distribution and selling become separated and commercialised', production becomes industrialised and 'consumption becomes large scale'. This period of growth is followed by saturation, resulting in crises, involving 'rising costs, declining revenue, and a changing pattern of demand' (207). It is this cycle that leads to concentration in the industry whereby a few large firms or corporations control the market. Concentration occurs through the processes of integration, diversification and internationalisation. The typical example is News Corporation, 'a global vertically integrated media company', according to their website, that owns various media across five continents.

The two most relevant implications of this structure of the media/journalism industry are: firstly, the constriction of choice; and, secondly, the control of information and consolidation of consensus (Murdock & Golding, 1973). Similarly, for US political economists such as Herbert Schiller (1991), concentration of ownership and the increasingly globalized power of media corporations lead to less content diversity and altogether to less choice. Robert McChesney (2008) argues that the political economic structures of (US) journalism mean that it cannot act as a watchdog, be truthful, or offer a wide range of informed positions. In an interesting variant of the focus on ownership, Dallas Smythe (2006) looks at the consumption side of media and journalism, arguing that audiences rather than contents are the commodity produced and sold by media corporations to advertisers.

The dominant logic of the industrial system is therefore one of concentration and centralized control of production, which in turn ensures maximisation of profits. Media corporations couldn't have been better off: concentration and the expansion of markets through globalization, along with income generated through audiences' value to advertisers safeguarded and augmented their capital. However, as Murdock and Golding, based on Marx, had predicted, new technologies and market saturation lead to crisis. For journalism the crisis has been devastating. The next section discusses the ways in which the rise of new media has led to the de-industrialization of journalism.

The De-industrialization of Journalism

The conventional story of the encounter between the Internet and journalism begins in the mid-1990s, in the era of Web 1.0, in which newspapers mostly posted their contents online in a static format. Although by 1997 there were already more than 3,500 newspapers online (Meyer, 1998), neither editors nor publishers knew what to make of the new medium. Nevertheless, their first and foremost priority was its commercial potential. Derek Bishton, editor of the *Electronic Telegraph* in the mid-1990s, admitted that its main purpose was to explore the commercial possibilities of the new medium (Bishton, 2001). While most newspapers had created online counterparts by the mid-2000s, it was not until the rise of Web 2.0 that the untenable nature of the situation became clear. The rapid spread of broadband Internet, along with the development of user friendly applications for the production of content, initially had a two-fold effect: firstly, the overproduction of contents; and secondly, a steeper decline in the already declining circulation figures.

The production of content, once the reserve of a specific class of people, including journalists, writers, academics and advertisers, became part of everyday life for almost all Internet users. Applications such as Blogger made it possible for people to write and post their own contents, while wikis introduced new ways of collaborative authoring. Drawing on the principles of open source, Axel Bruns (2008) coined the term *produsage* to describe such collaboration with a view to improve the ultimate outcome; while Jeff Howe (2006) used the term 'crowdsourcing' to refer to the ways in which content production has become collaborative, ongoing and processual. Content producers are here no longer salaried workers

or individual artists, but everyday people whose knowledge and experiences form an important societal resource. At the same time, an accelerated news cycle means that journalists have to produce more and more content. While the news cycle had already expanded to 24/7 coverage, since the advent of satellite television and the rise of news channels such as CNN, the Internet has exacerbated the trend for 'high-speed news' (Pavlik, 2000: 232) leading to its reformulation as a 'news cyclone' (Klinenberg, 2005).

This intensification of production and ultimately the overproduction of content may to an extent be held responsible for the drop in the number of journalists' paying customers, as evidenced in the steeper decline of newspaper circulation. It is well known that, globally, newspaper circulation figures were already decreasing – a recent report calculated that while newspapers reached over 100% of Canadian, UK and USA households in the 1950s, the figure had fallen to about 65% in 1990. However, the rise of the Internet exacerbated the trend: less than 40% of households were reached by daily newspapers in Canada, UK, and USA in 2011 (Communications Management, 2011). The Pew Centre's State of the Media study reports a fall of circulation of about 11% from 2003 to 2009 alone (Edmonds et al, 2013). These declining circulations are associated with steep decreases in advertising revenues, as advertisers received less return for their investments. In fact the loss of advertising revenue for newspapers is much steeper than the loss of circulation: in the US, ad revenues fell by 53% in the decade 2000-2010 (Edmonds et al., 2013).

However, this under-consumption of newspapers is not associated with an overall decline in the appetite for news. 2010 marked an important shift in news consumption in the USA: for the first time in history more people said they got most of their news online rather than from a newspaper – 41% as opposed to 31% (Edmonds, et al., 2013). Moreover, they spend more time online (13 minutes per day) as opposed to reading a newspaper (10 minutes) (Edmonds et al., 2013). Although overall, television still remains the news medium of choice, these numbers point to the ascendancy of the Internet over the press.

The emerging situation is paradoxical: on the one hand we have an overproduction of news, while on the other hand there is no under-consumption as such, but rather a shift in the ways in which people consume news. For the news industry, this has been devastating. Overproduction, according to Marx (1894), is the inevitable

tendency of capitalism: capital can either stay idle, and thus not profitable, or produce constantly, eventually leading to excess production. This, for Marx, is at the heart of capitalist crises. Applied to the case of journalism, we see that the industry still needs to produce as much news as possible in order to be able to compete with others within and outside the news industry, all the while seeing its consumers moving away. The highly concentrated model failed to provide any help because it is focused on print/broadcast media: it can protect some corporations from other players in the field, but not from those who completely changed the game. A reversal is already in motion, with corporations moving fast towards disintegration. Indeed, News Corporation has recently announced a split between its newspaper and entertainment sectors (Chozick, 2012).

On the other hand, for journalism as practice and as public service, these developments created a new window of opportunity. For thinkers such as Yochai Benkler (2006), the 'wealth of the network' is located in collaborative communicative structures. Radical developments such as Wikileaks (see Beckett & Balls, 2013) take journalism to a different level, while the sheer diversity of online contents couldn't be in sharper contrast to the standardized homogeneity of newspaper information. If the problem outlined in the classic media political economy is indeed the lack of choice and diversity in opinions and information, then the Internet appears to address this.

This excitement, also in evidence in the GIGAOM articles, is tempered by critical work looking at the role of digital labour in the shift towards cognitive capitalism. Specifically, the de-industrialization of journalism has to be understood within its concrete historical context. This is that of a shift from industrial to cognitive capitalism (e.g. Dyer-Witheford, 2004), in which the dominant mode of production changes from one focused on mass produced commodities to the accumulation of immaterial assets, such as information, developed and produced through digital, cognitive and/or immaterial labour (Lazzarato, 1996). Immaterial labour, defined as the kind of labour that 'produces the informational and cultural content of the commodity' (Lazzarato, 1996: 132), was initially seen as the integration of social and communication processes into the commodity, in a manner that added to its exchange value. Subsequently, the term became more loosely linked to all kinds of intellectual labour, which lead to the production of information. Parallel to this scholarship, and as the

new media became more integrated in everyday life, digital labour became a term that captured all sorts of (primarily online) activities that end up producing information or data. This includes activities that begin life as leisure activities but which end up generating surplus value, operating essentially as free labour (Terranova, 2000).

One person's produsage is therefore another's surplus value generator. Why hire people to do something when you can have it crowd sourced? In fact, this model of labour has become so successful as to form the basis of the business model of Internet giants such as Google. Value is extracted through the appropriation of data and information produced, contributed and assessed by a host of unpaid users/labourers. Google's model, as described by Matteo Pasquinelli (2009), relies exclusively on users, whose work it then appropriates through the PageRank algorithm; it subsequently uses the data generated in order to sell advertisements through AdSense. Similarly, Facebook's model is to sell user data to third party advertisers (Scholz, 2012), while Twitter sells its analytics and has now developed an ad API, which means it makes available to advertisers its full database (comprised of users' tweets and metadata), allowing advertisers to insert ads when relevant keywords appear. Recent work (Dyer-Witford, 2010; Fuchs, 2012; Scholz, 2012; Lovink & Rasch, 2013) has developed a new robust critical political- economy of this kind of capitalism and digital labour.

Yet this debate has focused primarily on the question of production, and more specifically on labour and use/consumption-as-labour, overlooking shifts in the interrelated processes and elements of the emerging media ecology. Thus, the suggestion here is that the changes in the production process, and the new antagonisms that have arisen in turn, have led to a shift of the dominant moment within the media ecology towards distribution. Since in social media platforms production is ensured through widespread produsage this implies that distribution is becoming more and more dominant, with rather ambiguous results for digital life in general and for journalism in particular. Distribution is in turn characterised by the logic of infomediation, as found in the practices and designs of Internet platforms. The next section will discuss this in more detail.

Platforms as Infomediaries

To a significant extent, the success of the traditional news industry can be attributed to its tight control of the product and the production process: owning the means of publishing and hiring journalistic labour has meant news industries could exert almost total control over contents, while even professional ideologies, such as news values, closely conformed to journalism's business model. Since the new/social media opened up production to everyone with access to the relevant technology, this monopoly over production was lost. As a result, the process of distribution, of efficiently disseminating information from producers to users and vice versa acquired an increased importance, precisely because this process could be controlled and managed more than the process of production. The ability to control and manage distribution depends on access to the contents themselves. This privileges Internet platforms, because they offer services to users/content producers and therefore already have a foot in the distribution market.

While in computer science the term platform is taken to mean any kind of programmable system (Andresen, 2007), Internet platforms are here taken to refer to large scale applications that mediate between the Web-at-large and users in specific ways. Most Internet users have little understanding of the technical backbone of the Internet and/or its programming languages. Users' experience of the Internet is mainly through its main platforms, such as Google, Facebook, YouTube, Yahoo and so on. The term platform is significant as it retains from its original, computer-science definition the idea of programmability. However, for most users, this programmability takes the form of a rather limited customization and circumscribed interactivity. While it is beyond the scope of this essay to show how such platforms condition users' experiences, this section will discuss how they have become inextricably bound to news and journalism, and the increasing dominance of the logic of platform infomEDIATION. (InfomEDIATION is here understood as the purposely built-in or designed affordance of Internet platforms.)

SmyrnaioS (2012) discusses those platforms that operate in the space between news producers and the public. Drawing on relevant work in economics, information science and management, he refers to them as infomEDIARIES, as they mediate between information producers and consumers. For SmyrnaioS, the importance of these infomEDIARIES lies in this mediation between information production and consumption. It can take place either through automatic

systems such as the algorithms used by Google, or through social filtering, tagging and sharing, as with Facebook and Twitter. But in entering and more or less controlling the field of online news distribution and circulation, infomediaries end up imposing their own rules and values on content producers, such as news media. Moreover, since they are in competition with them for advertising income, they undermine the viability of the traditional journalistic business model.

Similar, if less critical, arguments have been pursued in the economics and management literature. For instance, Aguila-Obra, Padilla-Melendez and Serarols-Tarres (2006) discuss infomediaries from the point of view of value creation. Following the idea of a value chain in which a product or service becomes enriched through other processes, thereby adding to its value, they hold that news infomediaries add value by entering into the packaging, reproduction and distribution stages - alongside traditional news media, alternative news media and new media.

While for Aguila-Obra et al. this infomediation takes place alongside other news players, more recent work shows an increasing domination of the distribution of news and related contents by intermediaries. In a study for the Reuters Institute for Journalism, Newman (2012) reports that in the US 36% of news is accessed through social media, while Facebook is by far the most important network for news, accounting for 55% of all news sharing in the UK. Specifically for the UK, while 55% of the sample use an online news site for news, 30% use search engines, 22% news aggregators, and 20% social media. Significantly, 43% of younger people (16-24 year olds) only ever access news on social media sites.

In another Reuters report, Foster (2012) uses the term 'digital intermediaries' to refer to what we call here infomediaries. He then goes on to divide them into four types: news aggregators, such as Yahoo News; search engines such as Google; social media such as Facebook; and digital stores/devices such as Apple. Foster discusses the different implications of these intermediaries in terms of their impact on news plurality. For Foster this impact may take four different forms: firstly, in terms of control over the news they carry; secondly, in terms of editorial-like decisions regarding news content they link to or carry; thirdly, in terms of the economic impact they have on the news market; and finally, in terms of the political influence they yield. Foster discusses some of the dilemmas and openings created when private companies are responsible for the

distribution and dissemination of information and news related content. Their practices, he holds, must be a matter of public debate and policy. In addition, their business model, which is identical to that of news companies (i.e. it relies on advertising), has made it harder for news suppliers to make money. On the other hand, these infomediaries have allowed some news suppliers to reach wider audiences/readers. Some findings, for instance, indicate that both *The Guardian* and *The Daily Telegraph* have experienced increased traffic since they partnered with Facebook (Smyrniaios, 2012). This relies on the use of an Open Graph application that allows users to share (on Facebook, Twitter, Reddit etc.) an article they have read. Finally, given the increased importance and economic power enjoyed by corporations such as Google and Apple, it is likely that they will become important political players, at least as important as News Corporation and other traditional media organizations were and to an extent still are.

More recent online traffic statistics shows the clear dominance of infomediaries. Table 1 below shows the top ten sites on the web and their traffic statistics. The striking thing about this list is that only one, Wikipedia, produces its own content. All others package and distribute content by third parties, including the Chinese QQ, which is a Yahoo type portal, and the two e-market sites, Amazon and Taobao, an e-Bay style site. The first actual news site is CNN interactive at no. 72.

Website Name	Percentage of estimated global internet users in a three-month period
Google	44%
Facebook	43%
YouTube	34%
Yahoo!	20%
Baidu	12%
Wikipedia	12%
Windows Live	8%
QQ	8%
Amazon	7%
Taobao	5%

Table 1 - Top ten Internet sites by traffic. Source: Alexa.com, April-May 2013. Twitter comes in at number 13.

Although in statistics differentiated by country these observations are slightly different, with news sites making an appearance typically around the numbers 15-20, the trend here is clear: the distribution of online news and related content is increasingly dominated by search engines and social networking sites. Moreover, as content increases online, the role of infomediaries in mediating between content and news supply and consumption is likely to be even more important. Algorithmic or social filtering will be necessary in order to be able to sift through the masses of news related information and similar data on the web. Table 2 offers an idea of how much content is produced daily – and as this information is based on 2011 usage, it is likely that numbers have increased since then.

Website	Contents produced/uploaded daily
Twitter	140 million tweets
Facebook	1.5 billion pieces (status updates, links, video, photos, comments etc)
Tumblr	10 million posts
Blogs	1.6 million posts
YouTube	2 million videos
Flickr	5 million images

Table 2 - Web contents in 2011. Source: The Content Strategist.

This over-production of content, which includes news and related information, creates serious issues for traditional news producers, because while they still can and do produce news, they cannot distribute it as efficiently to readers. The processes of both packaging and distribution have been taken over by infomediaries who circumscribe and reproduce contents in their own way. Thus, content on Twitter must have 140 characters, while on YouTube it must contain video and audio material. Korinna Patelis (2013np) has analysed Facebook's interface as text revealing its underlying tactics, which include 'archiving and unifying content in order to then separate, index, and categorize it'. For Patelis, Facebook is standardizing content at the level of metadata, and while it is ostensibly offering customization tools to users, these are limited and already standardized.

The logic of platform infomediaion is one of bringing together information producers and information users, through providing them with the space to congregate and communicate (exchange

contents). This kind of mediation operates at two levels: at the first level, infomediaries collect or gather as many producer-users as possible; while at the second level they harvest the data and information generated in order to sell it to interested parties – advertisers or data processing companies. The terms producers and users of information subsume two very different categories: primary and secondary content producer/users. The former produce content and information in their everyday usage of such platforms; the latter then buy and use this information as raw material in order to produce secondary data and information (e.g. reports on consumption patterns, combinations of demographics and use patterns, marketing reports and so on). Infomediaion can be seen as a recruitment strategy for the production of more information by others for free: infomediaries rely on the primary producers, and the more they are the better the process works. As Pasquinelli (2009) has shown with respect to Google's PageRank, the system of dynamic hierarchies on which Google operates is viable only insofar as producer/users do in fact use it constantly. In order to get people to keep on using their platforms, infomediaries rely on the constant production of new content, which they then distribute, recruiting more primary and secondary information producer/users and the cycle goes on. Infomediaion is the reification of distribution, in which platforms that do not produce any contents at all sell the information and contents produced by their users, thereby making their reach a highly valued commodity.

While at a first glance the outsourcing of distribution and the resulting disintegration of the traditional news concentration model may not be seen as necessarily negative, the effects of dominance of infomediaion, real and potential, need to be discussed and understood. Moreover, unlike what commentators have written until now (i.e. mainly that the potential impact of infomediaion is located at the levels of gate-keeping and content plurality), the argument to be made here is that their impact is more fundamental because they alter the process of news and content production, producing a ripple effect across all related processes.

A Critique of Platform Infomediaion

We have seen in the above discussion that online news and related content tends to be over-produced by, amongst others: professional journalists; citizens; interested parties; and politicians. This has triggered a set of responses in the other elements of this media

ecology; specifically, the contents produced must somehow reach their consumers, who cannot consume all of these in an equal manner. This leads to a prioritisation of the process of distribution, as the main determinant of which contents will reach which audiences. While in the traditional business model of the news industry the process of distribution was controlled by the producers themselves (the news companies) through vertical integration, the Internet has disrupted this control and new players have moved in, acquiring top billing in the process of news (and other) content distribution.

Now if the process of distribution is controlled by a handful of platforms acting as infomediaries, it is likely that both processes of production and consumption will be affected. Firstly, Marx (1973) has made the argument that distribution is not only the distribution of the goods and services produced, it is also the distribution of resources and the resulting distribution of people into classes. Infomediaries must therefore be seen as involved not only in the distribution of news contents, but also in that of news-related resources that may then introduce new hierarchies of news and other information use, literacy and absorption. Moreover, these hierarchies are likely to be related to the ways in which infomediaries 'value' and monetize their audiences: since not all users are of equivalent value to advertisers, new segments are created and managed in ways that allow infomediaries to extract more value. This kind of segmentation is likely to impact on the actual distribution of news contents, which is then customized to fit the appropriate kind of audiences. A recent study by Evans et al. (2012) segmented Facebook users into six types (see Table 3). Other studies and marketing-based reports use different categorizations, but the common assumption is that not all users are the same, and that their activities matter in terms of the value that is produced for the infomediating platforms. Thus, one of the issues involved in occupying the space of news and related content distribution is that it imposes, and operates on, a set of divisions of users. Moreover, the main division on which infomediating platforms operate is between primary producer-users, who can be professional or amateur content producer/users and who are providing all the labour, and the secondary producer/users who are in fact the platforms' paying customers.

Facebook User Types

1. **Fans** join interest groups based on politics, art, and music, and they often link their Facebook account to other websites.

2. Branders prefer public to private networking, and they often use Facebook as a tool for business, building a personal brand, or accumulating social capital.
3. Social-Searchers employ Facebook to learn about news, media, and entertainment, but they show little interest in apps and games.
4. Influencers share videos, links, and good deals with others, and they rarely use the private forms of messaging or sharing available on Facebook.
5. Gamers are motivated by games, apps, and coupons; they interact with strangers as often as acquaintances, and though fewer in number they log the most time on Facebook.
6. Neutrals are unmotivated by most of Facebook's features including status updates, and they report being members only to keep connected to the events of family and friends.

Table 3 – Facebook User Types. Source: Evans et al. (2012:37)

A second issue is that, given the main function of these platforms is to distribute and disseminate news and other information, but without producing it, they have a parasitic relationship to news production. They rely on it, but they do not really contribute to it. An indication of this fraught relationship is provided by the war of words between Rupert Murdoch and Google. Murdoch, who at one point had blocked his newspapers' pay-walled content from appearing on Google searches, referring to Google as a 'parasite' and 'content kleptomaniac' (Rushton, 2012). The reversal of News Corporation's decision to block their content from Google is an indication of the increasing power over Internet visibility enjoyed by infomediating platforms such as Google.

However, this kind of relationship has further implications: in relying on content but without any kind of production norms, guidelines or principles they completely empty or negate the actual meaning carried by these contents.¹ This is in fact an extension of the argument made by Adorno in *The Culture Industry Reconsidered* (1975). His contention was that the standardization of production processes in the culture industries resulted in the standardization of all contents, which now had no form or technique but were only distributed and mechanically reproduced. This appears to be part of the dynamic deployed by platform infomEDIATION: it relies on linking content producers to users or consumers. It has minimal if any involvement in these contents and their meaning – its focus is on the data/information produced by users, their habits and demographics. So any gains resulting from the shift toward produsage and the

engagement of more and more diverse people in the process of producing news and related content are negated insofar as they rely on a handful of infomediating platforms, which 'mechanically reproduce' contents removing any uniqueness, 'aura' or technique in the sense of innovation in the form taken by news and related information.²

To elaborate further on this idea, Adorno located the power of the artistic work in the dialectic between the artist's unique take and artistic techniques of his or her time (2005). Art is constantly renewed through this ongoing tension between its forms (which are the result of art's history) and contents (which are selected from current empirical reality), and because of this its meaning is always contemporary and relevant (Adorno, 2004). It is also because of this tension that art can stand critically both within and outside society. Now journalism is not high art, but insofar as it too exists in a state of tension between its various forms (news, editorials, analysis, but also infographics, wikis, blog and microblog posts) and its contents (drawn from the world), it can have meaning and remain contemporary. However, in the age of digital reproduction and continuous distribution and the pressures they exert on production and consumption, this tension is resolved in contents that mix and match forms without reflecting on either, ending up in the liquidation of all meaning. The rise of affective news (Papacharissi & Oliveira, 2012), which mix opinions and facts, news and sentiments, data and misinformation is an illustration of this point: everything is mixed and it all becomes equivalent or alternatively ranked on the basis of its reproduction (e.g. through likes or retweets). As a result of this basic equivalence, all meaning is emptied. Lolcats and infographics sit side by side, or one after the other, in timelines, subjected to the same processes of 'like' and 'share'.

Just to be clear, it is not that journalism requires clarity of form; but it does require this tension and reflection between forms and contents, because this is essential in maintaining the ability to mean (i.e. to distinguish between different events, approaches, data, opinions, sentiments and so on). But since the emphasis is on the continuous reproducibility and distribution of contents, which lead to the treatment of all content as equivalent, this tension can no longer be maintained. The only distinctions placed on content distributed by infomediaries are those that reflect their internal processes of user segmentation or their calculations and algorithmic functions. This is not a democracy of distribution that allows journalism to flourish, but the imposition of a hegemony of

distribution infused by the logic of infomediation effectively removing any efficacy that journalism could have.

These arguments on meaning echo Jodi Dean's critique of communicative capitalism and her ideas on the endless circulation of content as foreclosing politics and removing political efficacy from political communication (Dean, 2005). However, while for Dean the emphasis is on political discourses and political action, the current argument is more concerned with how platform-based distribution, as the purposive and instrumental process of collecting and shifting very large amounts of contents, not merely circulation as the random linking and sharing between people, leads to a broader liquidation of all meaning. Thus, even innovative journalistic forms, existing outside of infomediating platforms, such as data journalism and infographics, collaborative and participatory writing found on crowd-sourced journalism and so on, are stripped of their meaning because of the dynamics of platform infomediation (algorithms or networked-based, grafting persons onto the mechanics of distribution) which collect and distribute all these indistinguishably. Any significance they carry, any tensions or contradictions between their forms and contents that would both make and advance meaning, are therefore liquidated.

A final element in the critique of platform infomediation concerns the very practice of mediation itself. The genealogy of the concept of intermediation and intermediaries can be traced through the work of Pierre Bourdieu (1984: 359), who spoke of the rise of a new class, a *petite bourgeoisie* emerging from occupations such as marketing, fashion and public relations. This new class provides a bridge between the high and lowbrow tastes of the middle and working class respectively, but also helps to create new symbolic values. In subsequent work, the concept of cultural intermediaries came to refer to the cultural work of this class of people in mediating between creative artists and consumers, and more broadly between production and consumption (Negus, 2002). The actual work of these people is to help shape both use and exchange values, through using the techniques of their trade. Building on an argument made by Nicholas Garnham (2000), Keith Negus argues that the insertion of this class between production and consumption ends up widening rather than bridging the distance between them. Instead of filling in gaps, cultural intermediaries have been instrumental in reproducing and often exaggerating this distance.

While in cultural production more broadly there is a clear distinction between producers and consumers, in online production this is blurred. But platform infomEDIATION comes in-between producers and user/consumers who rely on them for distribution. In so doing, it places a wedge between production and consumption, which ends up negating the gains of produsage, crowdsourcing and other collaborative forms of production. As with cultural intermediaries, rather than bridging and bringing together producers and consumers of information, infomEDIATION opens up new gaps into which it inserts itself. Moreover, in doing so, and to the extent that infomEDIATION is also involved in the production of use and exchange values, it creates new hierarchies and re-orders such values on the basis of its own criteria, and hence is heteronomous to the actual cultural products (contents). Thus, rather than horizontal produsage in Bruns' normative sense of constant improvement, infomEDIARIES insert new hierarchies drawing on criteria completely extraneous to these contents. These criteria often involve processes internal to the distribution of information itself. Google's PageRank relies on counting backlinks to webpages and by weighing these links differently; this, Pasquinelli (2009) has argued, is a kind of value condensation feeding on attention and reflecting the broader regime of spectacle and visibility. But in essence this means that the more a particular content is distributed (thereby soliciting more attention) the more value it will have. For instance, the more a tweet is retweeted (i.e. redistributed), the more 'important' or 'influential' it is considered to be – distribution therefore stands in for the actual value or worth of a particular piece of content. It is no accident that there are many tactics concerning how to get more visibility, that is more distribution, for your contents, and all of them are unrelated to the actual contents themselves (and/or to their form).

For journalism, this aspect of infomEDIATION represents another loss: while the new forms of journalism, especially those found in re-connecting producers and users, may have involved some gains for journalism as a public service more broadly (Siapera, 2012), the increasing reliance on infomEDIATION subsumes and co-opts these gains. Moreover, while in the print/broadcast model, journalism was seen to retain some of its values (Kovach & Rosenstiel, 2001), what we see here is a completely different logic – that of distribution – applied to journalistic contents. The value of journalistic contents is therefore re-signified as the value of their distribution. This is why individual journalists, whether in contracted work or as freelancers, are now building their own secondary distribution networks within

social media platforms: their value and worth as journalists is equated with the extent of their distribution network.

Conclusions: Reflections on Journalism in the Emerging Media Ecology

Returning to the opening discussion on the democracy of distribution and its regeneration of journalism, it is clear that however this situation is apprehended, the term 'democracy' is the least appropriate. The emerging media ecology involves an antagonism between media corporations and Internet platforms. This antagonism is currently forming a kind of platform hegemony, which imposes its own logic on all kinds of contents. The rise of platform infomediaion is the result of a complex set of processes, which include the increased possibilities for content production and the actual user/producer practices. This overproduction, which means that contents produced cannot be consumed or absorbed by users in their entirety, has prioritized distribution, firstly as a means of hosting or supporting contents, and secondly as mediating between information producers and users. Both overproduction and platform infomediaion have undermined the traditional business and production model of journalism and the logic of concentration and control of production. But platform infomediaion may prove more pernicious for journalism for three main reasons: firstly, because it inserts itself between journalism's producers and consumers, re-distributing news resources and literacies on its own bases, drawing on market-based segmentation; secondly, because it diffuses the tensions between journalistic forms and contents, emptying both traditional and more recent and innovative journalistic forms of their meaning; and thirdly, because it re-creates recently abolished gaps between producers and users, and in doing so, imposes its own logic and criteria for success, which are primarily based on further distribution.

For most those working in or close to the erstwhile journalism industry, the future of the profession lies in finding new successful ways of generating profit. Typically, these are to be found in creating some sort of synergy between the distribution platforms and news producers. There is a lot invested in the development of relevant apps for smartphones and tablets (Reuters Institute Report, 2012). Other thinking in this area follows the logic of 'don't hate the platforms, be the platforms', urging (large) media companies to incorporate their own platform-based distribution alongside their

content production (Picard, 2012). A more thoughtful line of argument urges journalism to respond to the changing environment by more thoroughly incorporating the logics of social and digital media, thereby evolving more organically and replenishing their power in this manner (Anderson et al., 2012). The future of journalism, according to this line of thought, lies in its ability to adapt to the current environment by adopting social media practices.

However, none of these positions addresses the fundamental shift in the media ecology, associated with the overproduction of content, and which has given prominence to content distribution and the logic of infomediation. For journalism to have a future it must address the three inter-related problems created by the rise of platform infomediation: the distribution and reordering of news producer/users and news-related resources; the liquidation of meaning; and the imposition of an extraneous logic and criteria of success. This is by no means an easy feat. But it could begin with a more thorough and focused understanding of the emerging media ecology, with the role of platforms as agents of distribution, and with a critique of the contradictions involved.

The positive take is that there is a plane of new possibilities, which the logic of infomediation may be only temporarily foreclosing. New patterns can emerge from unexpected alliances and combinations. New research could usefully point to such combinations and the ways in which they recruit or graft platforms to their objectives. Already new and radical forms of journalism are emerging – for instance, the pirate ERT in Greece, broadcasting online as the government shut down transmitters, and using platforms to advertise its new sites and programmes (Siapera & Papadopoulou, 2013). These re-direct attention from distribution networks to substantial matters and in doing so they recruit people found in and through platforms. But for these new practices to have an impact on journalism and to compete with the logic of infomediation, they must be the outcome of purposeful and conscious collective action aimed at countering the logics of accumulation of capital and profit extraction which underlie infomediation. Journalism's future depends on it.

Notes

¹ Some social infomediators such as Facebook impose controls mainly on material seen as obscene or offensive. Algorithmic infomediators such as Google do not impose any control on contents (in most countries), but the actual algorithms they use in order to produce search results are secret.

² While it may be argued that for instance Twitter has introduced innovation in the form taken by contents, there is no possibility for innovation within Twitter, unless it is introduced by the corporation itself. Formally, therefore, all content on Twitter is the same: it consists of a maximum of 140 characters. On the other hand, Twitter users have to an extent imposed their own form on Twitter as they exchanged news contents leading to the well-known shift from 'What are you doing' to 'What is happening'. Since then however Twitter normalized this new form and made it part of its brand.

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