From Prosumer to Prodesigner: Participatory News Consumption
Del prosumidor al prodiseñador: el consumo participativo de noticias

ABSTRACT
New democratic participation forms and collaborative productions of diverse audiences have emerged as a result of digital innovations in the online access to and consumption of news. The aim of this paper is to propose a conceptual framework based on the possibilities of Web 2.0. Outlining the construction of a “social logic”, which combines computer and communicative logics, the conceptual framework is theoretically built to explore the evolution of news consumption from a pure circulation of designed products towards a global conversation of proactive news designers. Then, the framework was tested using an empirical database built by the PEW Research Centre, which investigates the future of the news industry, through a large-scale survey with adults. Results show significant differences (by age, gender and educational level) in the forms of participation, access and consumption of news. However, whilst immersed in the culture of Web 2.0 there is a low-level of user participation in news production; far from being proactive news designers, findings suggest that citizens are still located in the lower participatory levels of our conceptual framework. Conclusions suggest there is a need for media education providers to carry out training initiatives according to the social logic possibilities through proposed guidelines.

RESUMEN
Nuevas formas de participación democrática y producciones colaborativas de audiencias diversas han surgido como resultado de las innovaciones digitales en el acceso y consumo de noticias. El objetivo de este estudio es proponer un marco conceptual basado en las posibilidades de la Web 2.0. Describiendo la construcción de una “lógica social”, que se combina con las lógicas comunicativa y computacional, se construye el marco teórico para explorar la evolución en el consumo de noticias desde una mera circulación de productos diseñados, hacia una conversación global de diseñadores proactivos de noticias. Este marco teórico se ha testado a través de una base de datos empírica del Instituto de investigación Pew, que mediante una encuesta con adultos a gran escala permite analizar el futuro de la industria de las noticias. Los resultados muestran diferencias significativas (por edad, sexo y nivel educativo) en las formas de participación, acceso y consumo de noticias. Aunque existe una cultura Web 2.0, hay un bajo nivel de participación de usuarios en la producción de noticias; lejos de ser diseñadores proactivos de noticias, los hallazgos sugieren que la mayoría de ciudadanos se sitúan en los niveles de participación más bajos del marco conceptual propuesto. Se concluye sugiriendo la necesidad de que los responsables de la educación en medios desarrollen iniciativas formativas acordes a las posibilidades de la lógica social a través de la propuesta de pautas.

KEYWORDS | PALABRAS CLAVE
Social logic, prosumers, media literacy, news consumption, participation, media skill, Web 2.0, media education.
Lógica social, prosumidores, alfabetización mediática, consumo de noticias, participación, competencia mediática, Web 2.0, educación mediática.
1. Introduction

The emergence of a digital landscape is increasing the ability of citizens to consume news in many different ways. The use of online media is also changing the way in which news is being produced. It is increasingly being argued that there is blurring of the barriers separating news producers (traditionally, news agencies and journalists) and news users (a diversity of audiences). Thereby, the activities of news production and consumption also merge together. A new set of terms is now emerging such as that of “prosumer” (Gillmor, 2006) and “produsage” (Bruns, 2014). These imply audiences having a significant role and contribution to make in the production of news content. Furthermore, users will be empowered to participate in the process of news selection, design and distribution. This change adds a democratic role for users, which in turn can be empowered via the collaborative participation means of Web 2.0.

Interestingly, there are two main interpretations of the Web 2.0 phenomenon (Kümpel, Karnowski, & Keyling, 2015; Papacharissi, 2015). On the one hand, Web 2.0 is presented as an interactive platform. O’Reilly (2005) describes the platform as an architecture of participation. Basically, it makes numerous tools and services available to promote social interaction. On the other hand, it is suggested that Web 2.0 is a social enabler, that it is creating greater cultural and societal transformation through changing the way news are being produced and consumed. Jenkins (2009) notes that the participation that characterizes the news mediatoday is cultural. As a result, new practices, norms, values and constructs are evolving into “Culture 2.0”. This includes new digital participative behaviours for managing news (Beckett, 2008). One implication is that users become news producers and/or news prosumers (García-Ruiz, 2013; Pérez-Rodríguez & Delgado, 2012; González-Fernández, Gozálvez, & Ramírez-García, 2015).

This paper suggests that participative behaviours may be part of a new logic, which is entitled as: “social logic”. This is part of a wider digital landscape movement crucially altering the traditional ways of producing and consuming news. Social logic confronts us with the innovative possibilities of increased connectivity and participation that presupposes a major involvement of the audience in the use of the news media. We investigate the extent to which the social logic is leading citizens to become more involved in the design and production of news content. The aim of this paper therefore is to investigate the influence of this emerging social logic on the news industry production. In meeting this aim, we first develop a conceptual framework of news “prod-design”. Then, using the framework as an analytical tool, it was tested with empirical data drawn from different socio-economic cohorts of users. The intention is to theoretically advance categories of the framework and provide more detailed understanding of the social logic paradigm. It is here believed that this will make it possible to discover whether the theory of social logic has been implemented in the news industry. Are citizens actually in practice designing their news content with professional media organisations? If not, are there still barriers erected by the news industry preventing pro-design? Or is it simply a case that different groups (by age or education level) have little motivation or interest in participation? From the analysis and discussion, we conclude with important guidelines to be included in the educational agenda on social logic and media literacy.

2. Social Logic: a conceptual framework

As stated by Jönsson & Örnebring (2011), Web 2.0 offers an unprecedented range of possibilities encouraging much greater levels of user involvement in the news production process. However, if the audience is to change its role from purely a consumer to that of a news producer, then there are still many barriers and challenges to be overcome. In the 2.0 context, it is necessary to find a more sustainable framework that enables users to function as a genuine news producer. They would be central to value adding activity. Furthermore, this would work beyond their current peripheral role as a User Generated Content supplier (Kaplan & Haenlein, 2010; Susarla, Oh, & Tan, 2012). Therefore, a clearer understanding of news sharing and producing needs to be developed if educators are to keep up with their evolving social media ecology (Kümpe, Karnowski, & Keyling, 2015).

There is a constant improvement on the Web 2.0 news channels and innovative interacting tools. This includes the dimensions for understanding the participatory processes in online environments. We have gone beyond the period of media convergence. As stated by Siapera (2011), this period was the result of a convergence between the characteristic of a “computational logic” –the logic of the computers– and the characteristic of the “communicative logic” – the logic of the media.

This study proposes that together with these two logics there is a third logic, the “social logic” (Hernández-Serrano, Greenhill, & Graham, 2015), which is the logic for the Web 2.0. The innovative possibilities offered by
Web 2.0 places the user at the beginning of a new logic. There is a strong emphasis on the social component and how we are connected online with other users. This is a new logic from which some societal practices can be translated while other new practices and interpretations of the practices are being altered. In the context of the treatment of news, the social logic impacts into the everyday experiences of the audience. This is done by introducing innovative ways of interacting with news producers and with other news users. As stated by Nel & Westlund (2013), participation within the social logic is challenging the traditional logics of “professional” journalism and control. Essentially, the social logic creates opportunities for news media plurality and it is paving the way for a much more innovative era in the news media sector.

2.1. What social logic adds to news production?

The social era calls the ownership of news production into question. Considering that journalists and citizens are closer than ever before in being able to report the news, theoretically we now all have the means of production to be newsmakers (Gillmor, 2006). This is contributing to strategic tension between professional control and levels of open participation in news production (Lewis, 2012). The informative authority of new companies is at stake, as it was based on a centralised and hierarchical framework. “We select and we write, you only read”; now shaped by the participatory possibilities of altogether “… we select, we write, we read”, and “… we share”. Emerging new roles, functions, actors, practices and scenarios are generated in the area of news production in order to approach the democratisation of news production where the social era is an enabler for citizens to publish news online with the aim of benefiting a community (Carpenter, 2010). In this amalgam of cross-connections, newspapers that use stories and videos or photos reported by citizens can create personal blogs to publish their opinions. At the same time, news content is being (re)tweeted through mobile phones. Facebook groups are being generated under the positive or negative judgment about a news story. Finally, this new social logic is challenging traditional power and control of news production. It does this through creating user owned distribution mechanisms, and questioning traditional journalistic values. Consumers are increasingly turning to non-mainstream producers for their news supply (Greenhill & Fletcher 2015). This is leading to a new phenomenon, in which credibility is being shared across different news related sources. This in turn may influence the decision of news consumption. In contrast to a “hierarchy of credibility” (Paulussen & Harder, 2014), the term “distributed credibility”, as stated by Burbules (2001), reinforces the social logic. It suggests that like-minded people may collectively evaluate the truthfulness and believability of an information source. Thereby, it is further legitimizing audience leadership in news production.

2.2. What social logic adds to news consumption?

The second modification brought by the social logic emphasises the way in which we relate to the news. With the social logic, it significantly changes the way we think about news consumption and how we are informed by the mass media. In a printed newspaper, it is the sub-editor who controls the lineal organisation and layout of editorial and advertising content. They also control the quality of editorial content. Conversely, the reading of online news is “multi-medial” and “intertextual” (Erdal, 2009). This is because the content is supplied through a network of hyper-connected links. In the online space, there are no restrictions of space, content quantity or production time.
Therefore, online news can now be changed and updated in seconds. Online news sites because of legal pressure have to maintain their product quality. The most frequent changes occurring in the industry are consumer patterns and the participatory possibilities brought about by the social web. News are copied, cut and reframed in order to be shared through multiple networks and platforms. The process of consumption is extended by news sharing and website linking (Costera & Groot, 2014). This type of participation, which is named indirect participation (Splendore, 2013), influences the news making process, with incoming news trends calculated by the total number of re-tweeters, hashtags or followers.

The perspective of gratification is modernising news consumption, based on user’s selections from an online “supermarket of news” (Schrøder, 2015). This is a major change in news flow, from which content is no longer static but depends on fluctuating trends. These trends determine the longevity of the news. It is important to consider that this movement in online news flow impacts in terms of market reach and readership scale, as online audiences can access the content more easily, either global or local news. With an ever-expanding access to information sources, point of production no longer singularly determines the pattern of consumption. As Hermida & Thurman (2008) argue, the advance of social media is eroding away fixed parameters of news timeliness, relevance and utility. The incessant online searching practices let the users go straight to the news that are leading their interest by simply typing a keyword in a search engine (Olmstead, Mitchell, & Rosenstiel, 2011). Likewise, information aggregator systems enable the user to choose and personalise their news domain (Nel & Westlund, 2013).

2.3. What social logic implies for the news prod-usage?

The proactive role of the audience is at the very heart of the social logic. As stated by Hermida (2012) social media reinforce the value of the audience to the media. New channels and new interacting tools expand the dimensions for understanding the participatory process. The participatory practices of social media have the potential not only to bring stakeholders, journalists and audiences together, but they also facilitate a more extensive version of the news production process. Those users can take part in the redefinition of news production practices and stages. Through the use of diverse participatory formulas, news are evolving into a dyadic service conversation rather than a mass-produced product for transactional consumption (Kunelius, 2001; Gillmor, 2006). The online space is enlarging the spread of news towards a global debate and in so doing is expanding its market reach. While the news content circulates around virtual spaces, with the Web 2.0 this product circulation is being converted into a social process of service conversation.

However, this process of online collaborative participation is a complex phenomenon also, known like an experience in co-creation between people (Pavlíčková & Kleut, 2016). In order to progress from technological interaction with news product to effective participation in a co-designed news service it requires major rethinking. Without forgetting the many barriers associated with personal factors, technological facilities and opportunities, online participation requires a major change in news media agendas and the training of future journalists. The curriculum needs to be designed to take advantage of the Web 2.0.

Several authors (Domínguez & al., 2008; Jonsson & Ornebring, 2011; Singer & al., 2011) have already started to differentiate stages regarding their online participatory practices in the news process. These approaches have been reviewed a conceptual framework has been designed. This was tested and advanced with empirical data. Then, there was an assessment with empirical evidence about the extent to which there is prod-usage in the news industry.

Our three-level conceptual framework suggests that participation in the processes of news consumption and production can take many different forms. Depending on user participation and contribution this can be unplanned, solicited or user oriented (figure 1).

The conceptual framework follows a participative continuum, from low to medium and also from medium to high participation. This evolution states the question of: what drives the participation of users in digital enabled social spaces? The first level assumes that users are only entities from whom news producers record and extract data. They do this in order to select and personalise their consumption of news. Some studies (Denenn, 2008) reported that even ‘lurkers’ are participating and receive benefits from this kind of indirect participation.

The second level implies an expansion of participation to other stages of the news production process, despite this stage is still driven by the news industry and a range of possibilities offered to users for news consumption and/or production. The user as prosumer ensures a possibility that news production is hierarchically organised. It is the news organisation that decides what is newsworthy and what is a mere story from a citizen. Audience participation is high, news users are invited to become active, but journalists control and dominate the stages of production.
The third level refers to more advanced participation with users as pro-designers. Bruns (2014) developed the term “prod-user” to emphasise users as being authentic producers. It is observable that participation goes beyond the stage of prod-user—the user contributing news in the production system—into the user actually news pro-designing. They are related to creating or modifying news content, distribution and circulation. News content is an evolving conversation via social media and the collaborative content generation tools that are available. With pro-designers, they stimulate a more democratic form of news production and curation. The narrative of the news is contingent on social media disruptive capabilities that dislocate the stream and permanence of news. The contributions of a pro-designer therefore are not always to create a new product but also to curate worthy content (Bruns, 2015).

This framework and the three levels were tested, as it is explained in the next section, by analysing the differences in user levels of participation at each stage of the production process. Our aim is to provide a theoretical assessment of opportunities and challenges of pro-designing news content.

3. Research method

Since the beginning of the 21st Century, The PEW Internet and American Life project has been conducting extensive, consistent and long-term representative random surveys on general and specific aspects of Internet users. The value for this study in using this wide-ranging data of PEW is that it provides the only comprehensive “neutral” dataset available on news consumption and production patterns. Whilst we were able to access other data sets and studies produced by the news industry, in other countries or contexts, these were not used as they were partially biased towards defending the online strategy of news organisations.

The data we analysed were obtained during the last five years through telephone interviewing. This was collected using stratified regional random sampling and digital dialling conducted by PEW in USA. The survey was administered among a regionally representative sample of 8,248 adults aged eighteen and older on landline and cell phones. The survey had an overall margin of sampling error of plus or minus 2 percentage points and a significant level of 95%. Using the Shapiro Wilk Normality test provided in the KNIME analytics software we found that it did not differ significantly from a normal distribution (W value of 1,595 p = <0.03) (Green & al., 1977). Furthermore, we explored the normal distribution curve of one of the most critical sample characteristics, which is “age”. The sample data for this variable is normally distributed with a minimum age of 18 rising to a maximum of 99. The Mean is 51.88, Variance is 392.67, Skewness is 0.21, Excess kurtosis is -0.547.

4. Results

Using this PEW database, we explored patterns of users’ news consumption and production by examining the influence of variables such as: age (by six conglomerates of generational age breaks), gender and education level (by four groups of grade completed) as described in table 1. The analysis we conducted consisted of basic descriptive statistics and cross-tabulations.
4.1. News consumption and production patterns

The results showed significant differences in the ways the audience engages with the news. Figure 2 illustrates the news consumption (news following) patterns of the audience studied based on age, gender and education. The table shows that the Matures (66-74 yr. old) consume the most news with 82% of them consuming local news closely followed by the Lead Boomers (57-65 yr. old) with 80% consuming national news.

Gen Y (18-34 yr. old) consume much less news that their older peers, with only 49% consuming international news as compared to 67% of After Workers (aged 75+) consuming international news. If we look at news consumption in relation to gender both males and females consume much less international news (57 and 56% respectively) when compared to local news; and females consume more local news (75%) than males (67%) with both genders following international news in a similar percentage. Overall, in relation to gender, females consume more news that males do, although a healthy number of females and males still follow the news.

Finally, in relation to education there are also significant differences in news consumption patterns. The largest variation in the consumption of news is the differences between College Graduates who are the largest consumers of national news (78%) and local news (64%). From the collegers (Somecoll: a category describing education beyond High School but not necessarily College graduate) only 48% consume local news (the lowest percentage of news consumption across all categories relating to age, gender and education). However, 72% of collegers consume international news. Therefore, whilst there is some relative consistency in the consumption of international news across the ages and between males and females, there are significant differences in relation to those who are regularly interacting with the news that has been produced.

4.2. Accessing the news

In contrast to how audiences consume news products, we also looked closely into where audience members access their news. Figure

![Figure 2. Following of the news (by percentages).](image-url)
3 further illustrates news consumption. However, these tables illustrate where various age groups are accessing their content, particularly in relation to new media sources such as social media versus traditional media.

All age groups indicated that their main source of content is television news. Gen Y (18-34 yr. old) source a significant amount of news by word of mouth (63%) and After Workers (75+) clearly prefer to read their news from newspapers in comparison to the other age groups. The most interesting finding in relation to new media is the comparison of sourcing news on the Web with Gen Y (18-34 yr. old) leading in searching the web and every other old age group falling away in terms of their use of the web to source news. The lowest user of the Web for news sourcing is the After Workers with only 30% drawing on this.

Similarly, the younger the age group is, the more likely it is to source news via Twitter or Bing with 425 of Gen Y using Twitter and only 17% of After Workers using Twitter as a source. Age seems to have a significant impact on the propensity to source news using social media.

![Figure 3. News sources used by audiences according to age (by percentages).](image)

4.3. Participatory continuum in the news social logic

From seven items of the survey we extrapolated data to illustrate low to high levels of interaction and participation with the news. Drawing on three categories of age, gender and education, we explored participatory practices such as customising a home page in order to contribute your own online article, opinion, picture or video. The section of “social media sources” in Figure 3 reveals that Gen Y (18-34 yr. old) are the highest consumers and pro designers but are not as high as Gen X (35-46 yr. old) in posting a news item to Twitter. Overall Gen Y are the highest news producers and designers and 65+ are the least, they are the group with the lowest rate to be a consumer, producer or pro-designer. No one over 50 yr. old tweeted about the news.

In terms of gender (figure 4), both females and males similarly pro-design and send an email link to a news story or video. Females are much bigger contributors of customising a home page, posting news on a social network, such as on twitter and commenting on a news story or blog. Education reveals the most surprising results in terms of who contributes to news. The higher the level of education is, the more likely the users are to email a link to a news story/video.

College Graduates are sending links double that of LTHS. However, LTHS are the biggest contributors of posting news on Twitter and contributing their own article, opinion, and pictures/videos. High School Graduates are the largest Tweeters of news and those with some college education are the highest commenter's on a news story or blog. Across all levels of education, pro-designing is minimal. While all levels of education moderately consume and prosume news, the data illustrate that education is associated with highest degrees of variation.

5. Discussion and conclusions. Implications for education

Some existing research on news consumption in adolescents (Casero-Ripollés, 2012; Condeza & al., 2014) and other young groups (Hasebrink & Domeyer, 2012) confirms our data as well as it confirms the opposite relationship between age and use of social media, where the elderly prefer reading printed news. The results from the
Association for Research of Media (AIMC, 2015) indicate that the main activity in news consumption for the young generations is searching, diminishing the location-dependence for the news selection and consumption.

We are increasingly more immersed in a Web 2.0 culture; however, there are low levels of participation as users are predominantly consumers of news (as depicted in figure 4). Previous studies confirm that it is the toll or devices potential for interaction what is important, however our data reveal that there is little indication of change. With little evidence to suggest that citizens are actively co-designing editorial content with news organizations. Despite the myriad of participatory practices, some emerging studies confirm that participation in the processes of news production have been severely circumscribed, as the news organisation still dominates and controls the production of its editorial content (Domingo & al., 2008; Harrison & Barthel, 2009; Hermida & Thurman, 2008; Hermida, 2012; Sienger, & al., 2011).

Furthermore, the current research examples of participation demonstrate that the involvement of the user is not oriented towards the informational aspects of the news. Rather, the cultural or private stories, which have been widely analysed by Jönsson & Örnerbring (2011). Citizens are mostly empowered to create popular culture-oriented content and personal/everyday life-oriented content rather than news/informational content.

If news consumption is one of the ways and means of connection with reality, the challenge is how to increase the interest in online media and the involvement of different users for a global news conversation. While there is an increase in digital consumption (Katz, 2015) in all countries from USA, Europe and Asia (Diaz-Nosty, 2013), new educational approaches are required. These need to enable a citizen to think, create and produce media messages, and be actively engaged. Furthermore, they need to draw on their critical skills if they are to engage and participate in news consumption (Kuehn, 2011). This requires a rethinking to ensure that citizens acquire general and specific skills to support an efficient evolution from being a news user to being a “pro-designer”. Active and comprehensive media literacy coupled with involvement in the communication policy; and a revision of how media literacy levels in Europe should be assessed (Celot & Pérez-Tornero, 2010). Literacy programs should be designed to involve citizens of different ages in the active media prosumption and pro-design.

We suggest the following pro-design development initiatives for a more sustainable news ecosystem. First, the establishment of incentives for the audience to enhance their activating, or extrinsic or intrinsic motivation to participate (ways of rewarding based on explicit recognition, prizes or material). Second, regarding the production of the news, some mechanism of verification needs to be translated from the journalism practices to the community
audience reports. Both with respect to reliability (trust) and readability (style) of the news. Third, another important issue are the regulations in the creation, management, sharing, curation and referencing of User Generated Contents. Certainly, we acknowledge there is a gap in between what technologies allow audience members to do for reporting an event, and what is legally appropriate to turn into public news.

For individuals, the development of the social logic will be based on an educational basis in participatory practices to be critical, active and responsible to, for and by the media. Although evidence of the higher levels of the conceptual framework was not significant to the data provided, with low presence of users in the news prodesign, it is worth to point out a fact that probably see multiplied after and may be present in the course taken by the news production in a near future worldwide. The social logic and the innovative practices described in the conceptual framework serve to make recommendations regarding media literacy. Thus, we finally propose some guidelines for media education aimed at training citizens to build their pro-design capabilities:

- Instead of passive viewing of news content, the evolutions of Web 2.0 towards collaborative formulas are offering a major involvement of the audience in the use of the media. However, individual factors such as demographic characteristic of the users—age, gender, and education—and the type of news content they are permitted to produce are restraining their participatory possibilities. Thus, democratic societies are asked to question the media literacy models, with a commitment for the training of audiences supporting the dignity, democratic values and civic ethics that makes sense in the self-identification and configuration of the social logic of diverse collectives.

- Media literacy training at early stages, from formal educational contexts, must be focused on providing tools and strategies for citizens to enable them to produce, and interpret the news, from a responsible, sustainable and ethical use. In older age groups, from formal and informal education, training programs must be developed for stimulating democratic news production and civic participation in the news production process. This will require in the long run the disrupting of the established design education curricula of schools and universities offers, which are moving away from specific emerging technologies that are in constant evolution, to training on successful participatory practices where citizens can find value and implication.

- If future news product design and production democratization is to occur then the key to its success will be the ability for the news innovators to work across a variety of different disciplines (besides to education including economics, politics, sociology, innovation, and computer science) so that they can build productive news eco-systems. Establishing transdisciplinary partnerships between public and private entities, audio-visual and journalistic professionals and other agents, would favour an effective exchange of how to analyse and what kind of participatory practices are needed across different cohorts in several media.

- With the advance of the social era, the role of citizens is evolving from prosumers into pro-designers. This could be in collaboration with incumbent news producers or through newly emerging organizational forms and citizen-driven production systems. This would facilitate wider democratic participation in news production and decentralised organizational designs. However, how much and when this will happen will of course depend on several factors linked to economics, technological feasibility, social policies and of course politics. Meanwhile, the creation of interconnection systems through virtual communities is necessary. These could emerge in social spaces and be encouraged by local community training initiatives. This includes the construction of a social logic led by principles such as “open participation”, “shared evaluation systems”, “heterarchy” and “connectivism”.

References


