Observatorio (OBS*) Journal, 8 (2009), 336-352 1646-5954/ERC123483/2009 336

Mobile Media Implicit Cultures: Towards a Characterization of Mobile Entertainment and Advertising in Digital Convergence Landscape

Juan Miguel Aguado, Inmaculada Jose Martinez, Universidad de Murcia

Abstract

The specific nature of mobile devices in the media field seems to situate content consumption in a mobile-promised land characterised by ubiquity, connectivity and convenience. In that context, two different media cultures emerge in mobile business strategies and consumption habits: the 'fourth screen culture' focused on content distribution and having mobile TV as its leading application and the 'liquid medium culture', focused on users' social networks and having mobile 2.0 as its driving force. The present paper focuses on defining the role of mobile media in the media ecosystem and its projection on value perceptions that should be taken into account by policy makers and media planners. Conceptual delimitations of content design strategies, kinds of mobile contents and associated mobile cultural consumption aspects are outlined on the basis of the findings derived from an structural analysis of the B2C current supply on mobile handhelds and mobile services and a series in depth interviews with relevant actors in mobile and media companies as well as regulators and policy makers. Because of their centrality in the integration of mobile devices in the media ecosystem, the paper focuses on entertainment and advertising contents. The first constitute the driving force of the mobile device mediatization process. The latter are the key to overcome the walled-garden model of pay-per download contents, which underpins the prevalence of repurposed contents in mobile media business projections.

Introduction

As a result of its technological transition into a pocket computing device, mobile phone is increasingly becoming a relevant medium for cultural consumption (Authors, 2007). The specific nature of mobile devices in the media field seems to situate content consumption in a mobile-promised land characterised by ubiquity, connectivity and convenience, i.e., a landscape where standard cultural consumption (movies, music, series, games…) has no contextual limitations (anything you want, when you want, where you want) and offers a high convenience potential (adaptation to consumer situation). That alone would explain the interest in mobile media applications that institutional actors from the media and advertising sectors are currently showing, and consequently, the growth of strategic partnerships with mobile actors (operators, handheld producers, technology developers). Accordingly, there is a general agreement on the relevant role mobile digital devices are to play in the convergence process that characterizes media field (WAN, 2004; Klinenberg, 2005; WAN, 2007).

However, several questions arise with regard to the institutional construction of the mobile medium and its viability in users' everyday life. Which is the place of mobile media in current media ecosystem? How mobile media fit the convergence process? Are they just another digital platform through which to access standardized cultural contents? Which media culture[1] can be pointed at behind mobile business models, technology standards and regulatory initiatives? How does this 'media culture' influence current and future trends in the mobile sector?

These are some of the questions that guide the research project on 'The Social Impact of Mobile Communications in Spain: Mediatization, Identity Management and Consumption Rituals' supported by the Seneca Foundation in Spain (2006-2008) and the Research Project on Media Convergence in Spain (2007-2009) supported by the Spanish Ministry of Education and Science. The present paper focuses on defining the role of mobile media in the media ecosystem. Conceptual delimitations are outlined on the basis of the findings derived from a structural analysis of the current supply on mobile handhelds and mobile services and a series of 16 in depth interviews with relevant actors in mobile and media companies as well as regulators and policy makers in Spain during 2007. Interviews were focused on mobile content value chain perception, company and actors' strategies for the near future and global

[1] Media culture refers to the implicit conception of media functions and their role in consumption habits and social processes. The concept recalls the idea of 'organizational culture' developed in corporate communication studies (Hofstede, 1991), however attached to both the social construction and the social practice of media presupposed in business models, content formats, interfaces, symbolic standards and implicit consumption patterns (Stevenson, 1995). A media culture is the result of the overlapping of the discourse and practices of institutional actors and of social appropriation of technologies and symbolic patterns. For instance, You Tube and broadcasting television constitute embodiments of radically different media cultures.

perception on the strategic value of adapted mobile contents and the mobile web 2.0.

Despite focused in the Spanish case, the conceptual implications of the research may prove valid in wider contexts, as far as company strategies and mobile content shaping responds to variables and conditions common at least to Europe's area. Also an eventual validity of conclusions for Europe's area lies in the fact that Spain is the second country in that area as to 3G implantation (after Italy), proving to be an interesting context to experiment mobile content related strategies (Zed Digital, 2007). Additionally, an extensive account for actualized prospective reports is resort to as a coherence factor that allows building a general picture of the mobile media and entertainment mobile content landscape.

Mobile media in a landscape of digital convergence

Mobile communication devices aggregate the characteristics of an integrated portable meta-device (a single handset that includes different devices and functionalities, such as camera, organizer, pay card, TV, MP3/MP4 player, game console, etc. in a sort of "digital Swiss Army knife"), an identity related cultural object (attached to owner's body and personality) and a medium for producing, distributing and consuming cultural contents (Fortunati & Pozzobon, 2006; 2005; Authors, 2006). This hybrid nature points to a specific horizon of mobile cultural consumption where the link between device and owner's identity, functional interoperability with other media (TV, Internet, console…) and ubiquitous connectivity with others play a relevant role (Authors, 2008).

Beyond the agreement on the relevant role mobile media may play in the future media ecosystem (Feldmann, 2005; Feijoo & Maghiros, 2008), considering convergenge involves taking into account at least four dimensions (Domingo et al., 2007): Convergence in media strategies, convergence in technology resources, convergence in professional skills and convergence in content consumption.

Despite the general consensus among experts, there is not a clear picture of what finally that role of mobile media in convergence may consist of. The mobile media is certainly in a too early phase of development to play as an institutional actor in the convergence of media strategies. Reversely, its technological and usage-related characteristics are highly appreciated in the other three dimensions of media convergence.

Ubiquity, always-on connectivity and context sensitivity make mobile devices a valuable platform in cross-content and cross-promotion strategies. Moreover, their affective connection to user's identity makes the mobile device a powerful tool to produce added value for standard media products and brand image (Feldmann, 2005).

Simultaneously, the increasing functional coherence between mobile and Internet marks mobile media's content format convergence: minimization, fragmentation, on-convenience accessibility, interrelation and user involvement seem to be common aspects of the Internet and the mobile semantic structure of contents (Authors, 2007).

The same can be said with regard to professional skills and consumption habits: ubiquity, connectivity and convenience are strongly contributing to blur the borderline between content production skills and content consumption circumstances. This is especially the case of journalism and marketing. In the first case, networked contents upgrade their journalistic relevance when adding the instant connection and uploading capacities of mobile devices. Moreover, mobile media are involved in what one of the respondents called 'the universalization of witnessing'. When this applies to production and dissemination capacities, the translation of the Web 2.0 to the mobile context becomes a viable horizon. In the second case, user involvement in branded contents and services (as in contests, communities and added value offers) is posed as a valuable strategy to prevent considering mobile marketing and advertising as an invasive form of communication.

Despite all this, in the landscape of media convergence mobile devices are predominantly taken as platforms rather than as fully operative, functionally and semantically differentiated media [2]. Accordingly, two different kinds of convergence can be pointed at: A **conventional media driven convergence**, characterized by the assimilation of mobile media dynamics to content consumption standards, and an **Internet driven convergence**, characterized by the assimilation to (and the enhancement of) the Web 2.0 standards. Both conceptions constitute in the view of some of the respondents different media cultures (the 'new' and the 'old') referred to different user cultures (with different technology conceptions, different expectations and different usage habits).

For the purposes of this paper we will focus our scope on entertainment and advertising contents as a main driving force in the mobile mediatization process (France Telecom, 2006; Telefonica, 2007; Authors, 2007).

Mobile Entertainment: from personalization contents to mobile TV

Despite predictions vary according to different reports, both marketing campaigns and interviewed experts agree in at least two relevant points with regard to the future of mobile: (1) The voice-based

[2] Elsewhere (Authors, 2006; 2007) we have referred to that point considering mobile media as a 'limited medium', at least as long as the specific nature of mobile contents and their appropriation by communities of practice are not clearly defined.

business is reaching saturation point; (2) market growth is to be determined by the ability to implement competitive data-based business models, in which leisure oriented mobile content plays a leading role (France Telecom, 2006; Gaptel, 2006). The question is now whether the evolution of market (supply) and of user expectations (demand) accompanies the development in technologies with regard to mobile content business.

Technological conditions are good enough. The amount of multimedia mobile devices in Europe is already twice the amount of cell phones without multimedia functionalities (Olswang, 2007). A 2006 DNX general survey on mobile technological resources in Spain (DNX, 2007) shows that up to 41 % of mobile phones are video enabled, 40 % of them with GPRS access and up to 56 % include UMTS technology (mobile broadband). In the case of Zed Digital research (2007), focused on the mobile use of Internet users, the average technological resources even are higher and show a clear functional orientation to inter-media coordination.

With the relevant exception of SMS and MMS exchange, the use of multimedia mobile device capacities is widely devoted to entertainment activities (be it in the shape of social networking or in content consumption), especially in the case of the younger users (15-24) (DNX, 2007). Despite mobile TV presence in mobile consumption habits was still symbolic in 2006; the emerging picture prefigures a favourable ground, built upon a relatively actualized device technology and a widely extended leisure related conception of the mobile content consumption with two relevant contexts: social relations (networked leisure) and waiting times (private nomadic leisure) (DNX, 2007; Zed Digital, 2007; Authors, 2007). That very distinction in consumption contexts marks the already mentioned divorce between two media cultures in mobile content design and services.

The category of entertainment contents is however as comprehensive as in the case of the Internet contents. It includes all those kind of mobile contents and services consumed in terms of leisure activities. For the purposes of our research, according to discussions with experts, we shall consider a three-group distinction: Value added services, Communication services and Mobile video & TV.

Value added services (VAS) include both interactive (mobile videogames) and personalization contents (music, ring tones, logos, wallpapers, etc.), and constitute the first step in the process of mobile phone mediatization. As such, VAS play a significant role in the transition from voice-based business models to data-based ones. Since VAS become a fruitful field for branding campaigns (as for instance, in braded content based promotions), they may be considered as a key factor in the intersection of three relevant areas defining mobile media: personal identity, brand identity and standardized cultural contents. Their

connection to mobile marketing and mobile advertising contents, thus, will presumably increase in the coming years.

Communication contents refer to those entertainment and leisure contents related to users' social networks and/or to users' participation in media dynamics (such as contests, polls, opinion, etc.). Because of their dialogic nature, media oriented communication contents typically constitute cross-media strategies, allowing for instance, to co-ordinate the functionalities of website, SMS, TV and printed media, as it happens in TV contests, debate programs, etc. While conventional media related communication contents are considered to be not so relevant, social network communication contents are strongly attracting attention of mobile business developers and marketing planners. In this sense, communication contents constitute the base for the so called *Mobile 2.0* and involve any kind of 'sharing practice' of user-produced or user-involving content. In this category of mobile entertainment contents the borderline between the 'old' and the 'new' media cultures (one focused on contents, the other focusing on users) can be clearly observed. According to one of the interviewed experts, "with the old media the point was what contents do with people [in terms of influence, brand awareness, attention demand, loyalty creation, etc.], but in the new media, the important thing is what people do with contents". A wide variety of software applications addressed to facilitate the exchange of user-made contents is now being developed (starting from Nokia's Lifeblog in 2005)[3].

In spite of it all, many of the expectations of the mobile content business future lie in the shoulders of mobile TV, and yet available predictions are not only diverse but in many cases radically opposed. For instance, a 2007 report by Infonetics Research predicts a "phenomenal five-year growth for mobile TV revenues", with an increase in DVB-H subscribers up to 11.7 million by 2010 (Infonetics, 2007). The 2007 Telecom Trends International Report on Mobile TV predicts two billion-plus mobile TV viewers in 2013 (Telecom Trends, 2007), prefiguring mobile TV as a killer application in the market of mobile contents. In the opposite side, M:Metrics research presented at the MIPCOM Audiovisual Content Conference in 2007 reminds that barely a 1% of mobile subscribers are watching mobile TV in the US and the United Kingdom (Reiter, 2007) and figures on users willing to watch mobile TV in Europe barely exceed 5 % according to various reports (Olswang, 2007; Ernest & Young, 2007; Reuters, 2007).

One point to pay attention to is the fact that advertising and commercialization strategies on mobile

[3] The opening of mobile operative systems (like the case of Google's Android) and the distribution of third-party oriented SDKs (as in MacIntosh's iPhone or Nokia's Symbian) is also relevant to this respect.

video services have introduced in the past some confusion with regard to mobile TV, often contributing to increase expectations beyond the reach of mobile technologies at a given stage. From 2004 to 2006, services of WAP portal based video downloading or video streaming subscriptions were presented under the label of 'mobile TV'. In the case of Spain, the three dominant mobile operators (Movistar, Vodafone and Amena/Orange) launched in 2005 video downloading and streaming access portals as 'mobile TV' services. Through them, users could download or stream episodes of TV series, music video clips and, in most cases, value added contents like trailers, personalization contents, games, etc. The problem is that UMTS based streaming technologies are able to work with a constant demand of data flow (networked data flow), but they are not broadcasting technologies in the strict sense of the term (as it happens with Internet broadband), and hence they have easily problems in facing a massive demand of content (Rümmler et al., 2005). The result of that experience has been paradoxical: on one side, an increasing perception of 'mobile TV' as an inefficient and expensive service; on the other, the consolidation of micro-video as a mobile content format (Berman et al., 2007). Once technology standards make possible real mobile TV (receiving real time TV signal), marketing planners have now to face the very same barrier they have contributed to build.

In Spain, first experiences with mobile TV started in 2006[4]. The results were quite promising: 72 % of participants considered very interesting the service, and 80 % of them would recommend subscription (DNX, 2007). Despite there is no legal frame for the DVB-H standard in Spain up to date, 2007 has been the year of the commercial launch of mobile TV in Spain (mostly multipoint distribution through HSDPA or similar standards in 3G nets). The dominant model is that of cable TV: a set of channels covering a wide thematic and target profile spectrum[5]. Tariffication models and coherence with current existing TV content supply are the tools mobile operators can use to fight users' reluctance to subscribe mobile TV services. The experience in Japan and Korea shows that a common flat rate for wide packs of content services (mobile TV, Internet access, file downloading/uploading, location services and VAS) is to be the dominant tariffication model for medium and high subscription rates (Berman et al., 2006). The problem then is how to reach the number of subscribers that makes the model functional in terms of cost-profit balance.

[4] A pilot program with Vodafone, Abertis Telecom and Nokia, involving as content producers private and public television channels (Antena 3, Telecinco, Canal Sur, RTVE, Canal Nou) and cable TV operators (Sogecable, Veo TV, Net TV) was carried out with 300 users. On the basis of DVB-H technology (recommended by the EU), participants had access to 14 TV channels.

[5] Vodafone together with the cable TV operator Sogecable offers 16 thematic channels dealing with humor, movies, news, sports, music, travel and cartoons. An interesting point is the inclusion of Ecuavisa Internacional, a channel with news, sports and series from Ecuador which is specifically addressed to a vast immigrant population with a high consumption potential. Movistar offers as well 15 channels, including MTV, CNN, Antena 3 and Reality Channel, while Orange distributes 28 channels including financial news, cooking and adult contents

This is especially relevant if we take into account that one of the most important barriers for mobile TV consumption development is users' high sensitivity to subscription costs. In a secondary place, with much less importance than costs, users tend to show doubts about the real usefulness of mobile TV (Olswang, 2007). The most enthusiastic segment of users in Spain –early adopters and trend-setters, age 25-34, gadget lover, middle-upper class, educated, working, well-traveled and media hungry (DNX, 2007; Feijoo & Maghiros, 2008)- keeps the average monthly mobile services bill between 30 and 60 € (DNX, 2007). Business developers are aware of the inverse proportion between interest and expenditure control: Teenagers and young users (14-24) consider mobile TV and video as interesting as expensive, and systematically develop alternative practices to access video contents at a lower cost (as, for instance, sideloading video contents from their PC, or exchanging files via Bluetooth and infrared). Younger professionals (25-34) constitute the key target for mobile TV social adoption, while in the category of elder qualified professionals (40-something), where the sensitivity to subscription cost is low, there is a practical absence of interest in mobile leisure (Zed Digital, 2007).

Despite the broad picture speaks of a low subscription rate and a high expenditure control, a transfer of young users' high interest in mobile leisure to the elder age group categories is expected. Consequently, mobile TV developers foresee an increase of the subscriptions to mobile video and TV services on the basis of a progressive instilment of a mobile leisure culture in those age groups with higher expenditure capability. That trend can be reinforced by two important drivers: an open legislation with regard to DVB-H (that would allow mobile TV business models to escape the walled-garden schema that characterizes conventional media business models) and a simultaneous diversification of services supply and technology development in order to keep subscription costs within reasonable limits (Gaptel, 2006; Berman et al., 2007).

To sum up, mobile TV constitutes the typical mobile repurposed content, and as such it tends to reproduce the schemes of its original medium (television) regarding content formats, business models and perceived value projections. Mobile TV development reinforces the conception of mobile devices as conventional cultural consumption media, according to a content-centric model that, however, demands a specific adaptation of technology and its relation to users (Feijoo and Maghiros, 2008).

Mobile TV has still to face important barriers and uncertainties. Some of the most relevant pending matters in the horizon of mobile TV development raised by interviewed experts concern the role of advertising in mobile TV services, the development of competitive content enabling platforms that allow implementing the specificity of mobile TV, an adequate planning of spectrum management and the

development of efficient software and interfaces. In addition, some of the coming challenges for mobile TV regard the role definition of content production vs. content licensing, the final decision whether mobile TV service is to be SIM-based or device-based and, consequently, the balancing of the role of two of the core mobile TV agents –operators as drivers for pay-per-view mobile TV and device manufacturers as drivers for free-to-air mobile TV-. The specific nature of mobile content formats, even in the case of repurposed contents, constitutes another field for challenges awaiting mobile TV conception: fragmentation and miniaturization (as in mobisodes or in user made video clips) involve mobile video consumption (and production) in a long-tail effect that may be difficult for conventional media models to keep up with.

Finally, despite the hopes of business developers seem to lie in the evolution of the younger users' segment, they should take into account that it is precisely in that segment where conventional media are loosing the battle with new media. The increasing use among young mobile users of alternative forms of access to mobile contents (sideloading from computers, downloading through WiFi or Bluetooth) points to a quite different media culture within mobile environment.

The mobile advertising challenge

As in the case of entertainment, the advertising industry is currently facing the dilemma of approaching the mobile device as a mere platform through which to distribute ads or to understand it as a media in order to integrate strategies with other mobile contents. The strategic value of mobile devices as a communication tool for advertisers has been already proved (Iddris, 2006) and it is based in the specific nature of mobile devices commented in section 1. However, the personal and identity-related condition of the mobile device poses as well deep challenges to mobile advertising, for it underlies a generalized perception of mobile advertising as an invasive form of communication (Authors, 2007). In order to avoid that perception, advertising agencies adopt three core values in their approach to mobile advertising contents: usefulness (the user should perceive in the ad a functional or symbolic profit), attractiveness (the user should perceive in the ad some aesthetic value, preferably attached to entertainment) and permission (the user should perceive that the ad in his/her device responds to an explicit permission and it is not an unwanted message) (Tanla, 2006).

In that framework, and according to developments in connectivity and applications, mobile advertising contents get over the SMS direct marketing oriented model and become hybridized with mobile entertainment contents (sponsored personalization contents, advergames, banded contents, etc.) and

with networked contents (sponsored contests, user's communities, branded or sponsored blogging…), emphasizing that way their attractiveness and their functionality.

The very hybrid nature of the mobile device facilitates an increasing involvement of mobile advertising in 360º communication campaigns and in cross-media advertising strategies (where Internet-TV-mobile is the prevalent model) that allow optimizing the multimedia capacities of mobile devices and their viral potential. The case of the Coca-Cola Campaign 'The Happiness Factory' (2008) is a good example of that.

Additionally, the development of the mobile Internet involves some kind of adaptation of Internet advertising standards to the mobile environment. Beyond the wide use of the Internet as a channel to distribute mobile branded personalization contents, that adaptation has relevant consequences in the field of search engines (Google, Yahoo and MS Live Search) as advertising agents. Mobile devices dramatically enhance in-search advertising in two relevant aspects: adaptation to the user's profile and location. Although the first is a well-known value for Internet in-search advertising, mobile communications extend its functionality allowing a more precise targeting to profiles (usage routines) and situation (information about the context and preferences of the user in a given place and moment). Location is perhaps the most innovative contribution of mobile technologies to advertising strategies, the potential of which has not been fully explored yet. Situated mobile advertising is another relevant development trend. Advertisers can reach their targets in known situations and places not only through mobile and WiFi networks, but also through Bluetooth: situating content servers in given locations (airports, malls, metro stations…) they can distribute under user permission sponsored, branded and value-added contents ('goodies') with advertising purposes.

If the general context for the evolution of mobile advertising contents is the integration with entertainment mobile contents and their 'desirability' with regard to user's permission and usefulness, the case of the evolution of personalization content portals deserves a specific consideration. Originally they were conceived as online repositories of personalization contents (ringtones, wallpapers, videos, music, etc.) available mainly for young users through a small subscription fee. As soon as the advertising investment more easily repayable, some of them started to work as advertising funded content providers. For instance, the British operator 3 launched in 2007 a portal called *Planet 3* that offered free mobile entertainment contents in exchange of user targeted advertising. The innovation was that the user did not only give permission to receive mobile ads and branded contents in exchange of downloading a video: it was the user who decided which ads –and of which brands- he or she

receives. By this, mobile advertising contents emphasize (and optimize) their entertainment nature and become an object of cultural consumption. The formula implemented by Planet 3 constitutes an interesting alterative to the integration of ads into downloaded contents (embedded ads). This latter is the model adopted by most news mobile TV channels, but it has the problem of keeping the 'invasive' perception of mobile advertising unsolved. The next step in value-added mobile advertising is the case of Blyk. Though it was founded in 2006 as an advertising funded personalization content provider –in the mood of Planet 3-, Blyk was redefined in 2007 as an advertising based mobile operator (offering free text and minutes in exchange for ads from selected brands), constituting an innovative formula to integrate marketing and advertising in the mobile content business.

Another, more blurred, horizon for the development of mobile advertising contents is the impact of mobile social networking. According to Berman (2007), the involvement of user in viral diffusion of contents (some of them explicitly or implicitly related to brands and products) may point to a sort of 'amateurization' and universalization of advertising practices, like already occurs in the case of journalism (participative journalism and info-blogging) and TV (Youtube).

Despite all, the current nature of mobile advertising contents is closer to the platform and content-oriented conception that to the communication and user oriented model. Most of the current mobile advertising formats simply adapt TV or Internet formats, and their efficiency in the mobile environment is still to be proved (Lane, 2008). However, the importance of the integration process of mobile advertising contents into the sphere of mobile entertainment contents is such, that it may radically change the value chain structure, the business models and even the consumption rituals that define the mobile sector (Berman et al., 2007).

Beyond the fourth screen: Mobile 2.0 and the liquid medium

The idea that adapting television to mobile environment will result in a consolidation of the mobile medium is in the origin of the term 'fourth screen' and, as such, it constituted a reference term in interviews to designate the conception of the mobile media as a platform for cultural content consumption[6].

[6] The term 'fourth screen' was coined in 2003 by Dario Betti, Senior Analyst at Ovum (a global telecom and software consulting firm), in reference to the increasing relevance of mobile video and multimedia after the social appropriation of cinema (first screen), television (second) and personal computer (the third screen) (Jaokar & Fish, 2007). Today the term is widely used in the debate on the future of mobile TV, i.e., the fourth cultural consumption platform through which to access standardized contents. The explicit connection of the term with classic media (or 'screens'), makes it especially suitable for designating the kind of media culture behind mobile TV.

Despite all the hype around interactivity, ubiquity and users' choice, the 'fourth screen media culture' emerging from the current mobile entertainment content supply and discussions with experts is broadly characterized by the following points:

a) Institutionally grounded: The institutional dimension of conventional media and telecommunication operators heavily influences the conception of mobile media as content consumption platforms, what results in a slow-down of technology innovation processes and a bi-directional (instead of multi-directional) conception of mobile content consumption.
b) Concentrated control over production and distribution is the result of the generalized walled-garden model for content commercialization. Such conception emphasizes a central role of operators as data-pipelines and it hinders both software development and the adaptation of content formats to mobile specific capabilities.
c) Content-centric: Content is the nucleus of the mobile TV business, what amounts to concentrate the whole process in production and distribution, leaving aside users and squandering the high potential of mobile communications with regard to social networks, context sensitivity and user identity.
d) Strongly legislated: As a result of their institutional dependency from conventional media and telecommunication operators, mobile TV business models are heavily biased by centralized regulatory initiatives which, in their turn, tend to organize actors and processes in a similar way they do with conventional media.
e) Dominance of closed/proprietary technology standards: The walled-garden scheme favours the adoption of closed and proprietary platforms that clips the wings of collaborative design and hinders the development of socially networked mobile specific contents.
f) Lack of innovation in usage habits and content formats: Mobile TV constitutes a main platform for mobile repurposed entertainment contents, which basically reproduce the standards of TV contents conveniently adapted to mobile device (screen size, timing, battery, etc.). The question remaining is whether mobile TV is just a miniaturized TV set or another kind of television.
g) Passive conception of users: According to the general adoption of conventional media patterns, user is relegated to the role of 'content consumer' and the very meaning of interactivity and customization is restricted to certain choice options.

While experts coming from conventional media interpret the 'fourth screen culture' as a 'natural'

development of the current media landscape, technology developers, handheld producers and operators showed themselves to be more sensitive to the possibilities of socially networked contents and the need to design and implement specific mobile contents. The latter pointed at the increase of alternative practices of access to contents (WiFi, Bluetooth, sideloading, etc.) and the impact of socially networked contents in mobile entertainment (the so called *Mobile 2.0*) as relevant trends to take into account. However, for media related experts these were marginal phenomena approached to as value-adding items for conventional contents and products.

But what is Mobile 2.0 and what is its contribution in terms of media culture? The concept of Mobile 2.0[7] starts from –and goes beyond- bringing the Web 2.0 to the mobile device (De Waele, 2006). Socio-technical conditions for the emergence of the Mobile 2.0 include the increasing relevance of Internet standards with the Web as a main platform for telecommunication networks and the increasing presence of dual mode (WiFi and 3G) mobile devices (De Waele, 2006). Certainly the first step has been the entering of Web 2.0 killer applications to the mobile world: Yahoo with Flickr, Google with You Tube and Google Maps, Skype with MySpace, Facebook, etc...

2008 is the year of the Mobile 2.0 take-off. Three milestones can be pointed at with regard to that: The launch of the iPhone, focusing mobile Internet networking; the launch of Blyk as the first advertising-funded free advertising-funded pan-European mobile operator; and the launch of Android, the open mobile platform by Google, which widens the space for collaborative design of applications.

Already throughout 2007 a growing number of mobile services and applications addressed to blogging (Jaiku), free calling (Gizmo, Skype), locating (Loopt, Plazes), messaging (Funambol), ordering and ticketing (Mobo), file exchange (Mystrands), media sharing (JuiceCaster) and information search (Plusmo) are contributing to redefine the very idea of mobile content: from data based content to context-adapted data-plus-software based content (De Waele, 2006). Mobile operators and handheld manufacturers do not want to stay out of the game: besides its Nseries, Nokia has developed Widsets, an open platform for the mobile access to Web 2.0 widgets (RSS feed, Wikipedia, blogs, etc.) and Mosh, a file exchange platform. But the Mobile 2.0 means not only the adaptation of Web 2.0 applications to the mobile environment, but inversely, it also implicates the development of mobile specific applications that are being adapted to the Web (Jaokar & Fish, 2007)[8].

[7] The term was first used in 2006 by Verizon Wireless and Orange in sponsoring workshops and conferences devoted to the adaptation of Web 2.0 applications to the mobile environment.

[8] The development of a ".mobi" domain for the web that identifies Internet mobile enabled contents and applications is another driving initiative that illustrates the potential reach of the Mobile 2.0 within the Web's landscape.

The Mobile 2.0 environment is characterized by openness (free-to-use platforms and software available for collaborative design); networking (both in terms of design –involving diverse companies and users- and usage –involving user social networks-), context sensitivity and user empowerment (Jaokar & Fish, 2007). Thus, regardless the early stage of Mobile 2.0 development, it undoubtedly implements completely different business logics and usage rituals and it refers to a radically different media culture (see table 1). Location based services (LBS), ubiquitous accessibility to social networks and user situated behaviour are to play a determinant role in the definition of the very communication processes that founds the conception of the mobile media.

Another relevant point regarding Mobile 2.0 implications is the blurring of inter-media boundaries which underpins the transition from device-based functionality (typical for the 'fourth screen approach') to cross-media application-based functionality (Olswang, 2007). On the basis of that dissolution of the inter-media boundaries and somewhat quoting famous Bauman's concept about the 'liquid society' (Bauman, 2000), we have posed the term 'liquid medium' for the kind of role Mobile 2.0 prefigures for mobile communications in the coming media landscape. In fact, hybridization, fragmentation, context dependency, ubiquity, accelerated evolution and fluid social networks are not only defining terms for the role of mobile devices in the media ecosystem: they are some of the core characteristics of Bauman's 'liquid society'.

Table 1: Opposite issues in mobile TV and Mobile 2.0 implicit media cultures.

MOBILE TV IMPLICIT MEDIA CULTURE	**MOBILE 2.0 IMPLICIT MEDIA CULTURE**
Institutionally grounded	Multi-Network based
Concentrated control over production and distribution	Distributed control over production (developers) and distribution (users)
Content-centric	User-centric
Strongly legislated	Standard legal frames
Closed/proprietary technology standards	Open technology standards
Lack of innovation in usage habits and content formats	Strongly innovative in usage habits and content formats
Passive conception of users	Active conception of users
Device based functionality	Cross-media application-based functionality
MOBILE MEDIA IMPLICIT CONCEPTION:	
Content consumption platform	Communication platform
Information platform	
KIND OF CONVERGENCE INVOLVED:	
Media/content oriented	Usage oriented

Certainly the paradox faced by mobile content and software developers is not solved: Mobile 2.0 involves the conception of "mobile devices as personal communication and information tools". Thus, the divide between the content platform conception and the communication platform view remains. Table 1 summarizes the issues characterizing both media cultures behind these two conceptions. The question, however, is whether (in light of the contradictory forecasts for the future of mobile TV, the reluctance of mobile advertising to take a leading role in the process and the somewhat chaotic development of the Mobile 2.0) these are opposite models or if they are obliged to coexist (and even to co-operate).

The position adopted by some relevant mobile operators (Vodafone and Orange, for instance), the

increasing interest of policy makers (especially in the EU) and the growing cross-media usage (Olswang, 2007; Authors, 2008) point precisely to a threefold conception of the mobile medium aggregating the characteristics of self media (identity attached media that allow for the autonomous production, management and dissemination of contents), conversational media (social interaction and inter-individual communication addressed media) and classic media (broadcast media and mass media). How these three spheres of the liquid medium may come to influence each other is, perhaps, the key question regarding the future of the mobile in digital convergence.

REFERENCES

AGUADO, J. M., y MARTÍNEZ, I. J. (2007) "From Mobile Phones to Mobile Media: Current Developments in Mobile Phone-Based Cultural Consumption", in Goggin, G. and Hjorth, L. (2007): *Mobile Media 2007,* University of New South Wales, Australia, pp. 47-57.

AGUADO, J. M., y MARTÍNEZ, I. J. (2008) "Massmediatizing Mobile Phones: Contents Development, Professional Convergence and Consumption Practices", in Caspi, D. and Azran, T. (2008): *New Media and Innovative Technologies: Industry and Society.* Ben Gurion University, Israel. 2007. pp. 211-239.

AGUADO, J. M., y MARTÍNEZ, I. J. (2006) "La mediatización de la telefonía móvil: de la interacción al consumo cultural", in *ZER, Revista de Estudios de Comunicación,* vol. 11/ Nr. 20, Universidad del País Vasco, pp. 319-343.

BAUMAN (2000) *Liquid Modernity*. Cambridge, Polity Press.

BERMAN, S. et al. (2006) *The end of television as we know it: A future industry perspective*. IBM Institute for Business Value. http://www-05.ibm.com/e-business/uk/innovation/channel/html/revitalize/trends/pdf/ge510-6248-end-of-tv-full.pdf

BERMAN, S. et al. (2007) *The end of advertising as we know it*. IBM Institute for Business Value. http://www-03.ibm.com/industries/media/doc/content/bin/media_ibv_advertisingv2. pdf

CMT (2006) *Informe Anual 2006*. Madrid, Comisión del Mercado de las Telecomunicaciones.

DE WAELE, R. (2006) "Understanding Mobile 2.0". Available at http://www.readwriteweb.com/archives/understanding_mobile_2.php

DNX Report (2007): *Mobile TV: Tendencias en España*. Research report available at http://www.dnxgroup.com/ideas/index_dnxTrends.html

ERNEST & YOUNG (2007) Mediabarometer 2007. http://www.ey.nl/?pag=956& nieuws_id=3058

DOMINGO, D. et al (2007) "Four Dimensions of Journalistic Convergence: A Preliminary Approach to Current Media Trends in Spain", research paper presented at the *International Symposium on Online Journalism*, University of Austin, Texas, March, 30-31.

FEIJOO, C. & MAGHIROS, I. (2008). "Mobile content. On the verge of an explosion". *JRC Scientific Reports*, EC. IPTS forthcoming publication.

FELDMANN, V. (2005) *Leveraging Mobile Media. Cross-Media Strategy and Innovation Policy for Mobile Media Communication*. Heidelberg-New York, Physica Verlag.

FRANCE TELECOMM (2006a) *Informe e-España 2006*. Fundación France Telecom, Madrid

FRANCE TELECOMM (2006b) "Ocio digital: el rey de los contenidos" en *Analisis y Prospectiva*, nº 13. Fundación France Telecom, Madrid

FORTUNATI, L. and POZZOBON, F. (2006) "Media Mobiles: When Interpersonal Media become Mass Media", paper presented at 2006 ICA Pre-Conference "After the Mobile Phone?", June 16-18 2006, University of Erfurt, Germany.

GAPTEL (2006) *Contenidos Digitales: Nuevos modelos de distribución online*. Grupo de Análisis y Prospectiva del Sector de las Telecomunicaciones. Red.es, 2006.

HOFSTEDE, G. (1991) *Culture and organizations: Software of the mind*. London. McGraw-Hill.

IDDRIS, F. (2006) *Mobile Advertising in B2C Marketing*. Master Thesis. Lulea University of Technology.

INFONETICS RESEARCH (2007) *Mobile Video Phones, Services and Subscribers*. http://www.infonetics.com.

JAOKAR, A. and FISH, A. (2006) *Mobile Web 2.0*. Oxford. Futuretext Publications.

KLINENBERG, E. (2005) "Convergence: News production in a digital age". *Annals of the American Academy of Political and Social Science*, 597(1), 48-64.

KRENTZSCHMAR, S. (2006) "Journalistic Content and the Football World Championship 2006: Multimedia Services on Mobile Devices", paper presented at 2006 ICA Pre-Conference "After the Mobile Phone?", June 16-18 2006, University of Erfurt, Germany.

LANE, N. (2008) *Mobile Advertising: Cutting through the Hype*. Informa Media. UK.

OLSWANG (2007) Olwang Convergence Consumer Survey 2007. Available at http://www.olswang.com/convergence07/convergence2007.zip

REITER, A. (2007): "MIPCOM conference presenters discuss the lack of mobile TV viewers and advertisers", Reiter's Mobile Television Report. URL: www.mobiletelevisionreport.com.

REUTERS (2007) "TV on cellphone screens? No thanks, say Europeans" URL: http://uk.reuters.com/article/technologyNews/idUKL2436545720070924.

RÜMMLER, R. ; YUN WON CHUNG and HAMID A. (2005) "Modeling and analysis of an efficient multicast mechanism for UMTS", in *IEEE transactions on vehicular technology*, vol. 54, n°1, IEEE, New York, pp. 350-365.

STEVENSON, N. (1995). *Understanding media cultures*. London. Sage.

TANLA (2006) *Mobile Marketing and Advertising Guide*. Tanla Mobile. UK.

TELECOM TRENDS INTERNATIONAL (2007) "Mobile TV: Executing the Vision". Research Report.

TELEFONICA, (2007): *Informe sobre la Sociedad de la Información en España (SIE-2007)*. Madrid, 2007.

(WAN) WORLD ASSOCIATION OF NEWSPAPERS (2004): *Shaping the Future of the Newspaper. The Mobile Opportunity*. WAN. 2004.

(WAN) WORLD ASSOCIATION OF NEWSPAPERS (2007) *World Digital Media Trends*. WAN. 2007.

ZED DIGITAL (2007) Móviles y Publicidad: Percepciones y Tendencias. Zed Digital. Zenith Optimedia Group. URL: www.zeddigital.es/ presentacion_publicidad_y_moviles_ 12dic06.pdf