

Web 2.0: Is the museum-visitor relationship being redefined ?

Mathilde Pulh, Rémi Mencarelli

▶ **To cite this version:**

Mathilde Pulh, Rémi Mencarelli. Web 2.0: Is the museum-visitor relationship being redefined ?. International Journal of Arts Management, 2015, 18 (1), pp.43-51. halshs-01498653

HAL Id: halshs-01498653
https://shs.hal.science/halshs-01498653

Submitted on 30 Mar 2017

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

Web 2.0: Is the museum-visitor relationship being redefined ?

MATHILDE PULH
Maître de Conférences
IAE Dijon -Université de Bourgogne
CREGO-CERMAB (EA 7317)
2 Boulevard Gabriel
BP 21611 - 21066 DIJON Cedex
e-mail : mathilde.pulh@u-bourgogne.fr

REMI MENCARELLI
Professeur des Universités
Université de Savoie- IAE de Savoie Mont-Blanc - IREGE
4 chemin de Bellevue, BP 80439 - 74944
ANNECY-LE-VIEUX CEDEX
e-mail : remimencarelli@yahoo.fr

Mathilde Pulh is an assistant professor in marketing at the *Université de Bourgogne* (France). Her research focus is the relationship between cultural supply and audiences (especially museums, festivals and cultural events).

Rémi Mencarelli is a professor in marketing at the *Université de Savoie* (France). His research interests include the analysis of value in marketing and consumption in the arts sector.

Abstract: Growing integration of Web 2.0 techniques by museums is indicative of their readiness to redefine their relationship with their audience. Where visitors were traditionally kept at arm's length, the use of these techniques now involves them at every stage in implementing the museum offer on the Internet. From an inductive perspective and through an extended examination of various sites and tools offered by organizations, this article aims first to highlight the different roles currently devolved to the public in terms of communication, mediation and artistic creation. It then goes on to analyse the ramifications of visitor involvement. If these tools are able to develop the audience competences and to make museums less stuffy, their implementation may also induce tensions by challenging their authority and legitimacy and by disenchanting their visit experience.

Key words: participatory marketing, Web 2.0, museums, desacralization, legitimacy

Introduction

In the museum sphere, a new pattern has emerged in recent years through the mobilization of Web 2.0, a "participation architecture" based on the online sharing (Cooke and Buckley, 2008; Divart, 2010). This form of interactive marketing uses various tools, as social networking, podcasts, wikis, blogs (Varadarajan and Yadav, 2009), in order to encourage the visitors to take an active part in the production of museum content (Cairns, 2013; Proctor, 2013; Ridge, 2013) and to transform them in real contributors (Anderson, 2007; Sigala, 2010). While many commentators readily speak of a new digital and participatory revolution (Jenkins, 2006), this change in the relationship between museums and their public is actually part of a movement already initiated many years back. Operating in an increasingly competitive environment while subject to growing budget constraints, museums have long since re-appraised their mission of disseminating their collections to the public (Caves, 2002). Being aware of the need to attract more visitors, they now make wide use of techniques from the commercial sphere (Baumgarth, 2009) such as branding strategies (Caldwell, 2000), sophisticated admission pricing (Bailey et al., 1997) or even peripheral paying offers with shops and restaurants (Tobelem, 2012). This commercial turn has helped to place the public at the heart of museums' concerns and it has grown in scope with the emergence of a collaborative logic, notably through the use of ICT.

Thus, new mediation practices were first developed to enrich *in situ* visits and to promote visitor participation in immersive exhibits. The use of the multimedia terminal in the 1980s or the current usage of huge tactile screens, tablets and smartphone applications are part of this logic (Cordier, Dessajan and Eidelman, 2009; Jarrier and Bourgeon-Renault 2012). And now, ICT, especially 2.0 ones, help to strengthen the relationship with the audience within the framework of development of on-line museum activities (Bertacchini and Morando, 2013).

In view of these developments, it is necessary to relativize the idea of a far-reaching change in the visitor–museum relationship with the emergence of Web 2.0. Moreover, it is important to highlight that the use of these interactive tools is not specific to the museum sector. Indeed, ICT have greatly transformed society in terms of private relations between individuals and of business relations between consumers and companies (Castells, 2001; Rheingold, 2008). However, the current talk about 2.0 tools as a new managerial panacea in the museum sphere, calls for a closer examination of these practices. First, because this sector is largely more advanced than other areas of culture (Castells, 2010) and its strategies of redefinition of the relationship to the public *via* the 2.0 tools could help and inspire other structures. Second, because the implementation of these tools may induce paradoxical tensions in the relationship with the visitor. This analysis is all the more necessary because practitioners often face an emphatic discourse about the possibilities offered by these tools, which need to be renewed at an extremely rapid pace (Parry, 2010). They do not aware of the risks they face in seeking to involve the visitor.

The objective of this article is to question the roles assigned by the museum to the visitor through the use of 2.0 tools, in order, firstly, to understand the different forms of participation mobilized and their positive impacts, but also, secondly, to highlight theirs difficulties and ambiguities. Realizing, in an inductive perspective, an extended examination of various internet sites and devices used by different kinds of organizations (see Appendix 1), the first part allows us to expose different forms of visitor participation at the heart of museum offers. Three roles have been identified and are defined in terms of communication, mediation and artistic creation. Each of these functions will be presented and illustrated with representative examples from the sector considered by researchers as emblematic cases of 2.0 techniques used by museums because of their exemplary approach and the innovative nature of the applications. The second part analyses the consequences of participatory engagement of

museums in relation to the public. While this emerging collaboration seems conducive to the development of visitors' skills and to the abolition of symbolic barriers of museum access, there is a need in parallel to enquire into its potential to challenge museum' authority and legitimacy, and also into the risk of disenchanting the museum experience.

1 – The new-look visitor in the museum 2.0 era

Museums have long held an important position in the world of the Internet as illustrated by the myriad virtual museums and on-line exhibitions (McTavish, 2008) or the *Google Art Project* which lets web users view close to 40,000 digitized works from the collections of renowned institutions (like the MoMA, the National Gallery, Tate Britain and the Van Gogh Museum). But this digital presence is based primarily on a unilateral definition of the museum offer, with very little input sought from users. The development of 2.0 devices invites visitors, on the contrary, to get involved, to make the museum offer their own, or even to create content.

In order to identify the different levels of audience participation, we have maintained a careful watch over current museum practices. Our results are based on an enlarged intelligence around 2.0 devices in 64 U.S. and European museums (Appendix 1). The museums were selected to cover a wide variety of organizations in terms of size (attendance) and thematic collections (art, science and history) to also be able to compare their practices. During the year 2012–2013, for each selected museum, the 2.0 devices used were identified and described (type, goal, implementation, results obtained). We then grouped these devices in accordance with criteria established in the marketing literature to describe consumer participation (intensity, centrality, complexity) and the own expertise of researchers. At the end, three forms of participation stood out, intimating the existence of three figures of visitors: the "communicator-visitor", the "curator-visitor" and the "artist-visitor".

1.1 – Visitor involvement in defining museum communication

Integrating 2.0 techniques initially meant breaking away from the unilateral scheme of communication (defined and controlled by the museum) so as to benefit from the ability of each web user to disseminate information and promote exchange on behalf of the museum (role 1). Some institutions were quick to understand the importance of ensuring a proactive presence on the web and so to join social networks. These sites, by providing tools and interfaces for interaction, presentation and communication (Castells, 2004), allow museums to engage their audiences like so many channels of communication. The MoMA in New York, for example, joined Facebook in March 2008 and currently has more than 1.5 million 'friends', with a present and active community. The word 'museum' brings up thousands of Facebook accounts for museums offering to share photos, articles, videos and events in addition to traditional information.

Whereas these tools have enabled museums to become familiar with participatory marketing, while maintaining close control over the content generated, other initiatives have arisen that play more on involving the general public in diffusing content. They can be classified in terms of the level of interaction they engender:

- Given the popularity of blogs, many organizations have adopted this tool (akin to a logbook; Rheingold, 2008) to share with their audience. Examples include the blogs of Toulouse Natural History Museum, of the MoMA, the Guggenheim or the blog '*Art you can get into*' proposed by the Mattress Factory Art Museum. In some cases, museums allow visitors to leave their own audio or video testimonials, which are then posted on the museum's channel. Despite their apparent modernity, such blogs are essentially a digital version of traditional visitor's books.

- More interactively, some museums go so far as to incorporate messages created by their visitors into their communication campaigns. Following the lead of the '*It's time we MET!*' campaign launched by the Metropolitan Museum of Art in 2009, the MUCEM (Musée des Civilisations de l'Europe et de la Méditerranée, Marseille), when it opened in June 2013, used a Facebook application allowing web users to create their own avatars in the museum's colours and insert a slogan to encourage visitors. The operation was made into a contest with the winners seeing their portraits included in the museum's official communication campaign.

These examples are concrete illustrations of visitor participation in defining the content of institutions' communication. However, it should be borne in mind that, behind the declared participatory logic, the museums generally control the content, choosing what and what not to publish so as to maintain control of their 'e-reputation'.

1.2 – Visitors as museum mediation agents

Some institutions have decided to go a step further by making visitor action and participation more central. Some tools allow the general public to take on a role traditionally held by the curator and to freely arrange the museum content and define the mediation components (role 2). This turns essentially on two forms of action.

First, museums may invite the public to take a hand in defining systems for classifying their works. This 'folksonomy' approach refers to a form of 'folk classification' whereby users index digital documents as opposed to traditional systems of classification by experts (Peters, 2009). Thus, like Philadelphia Museum of Art, Brooklyn Museum encourages its visitors to help in indexing collections by associating their own key words (tags) with the on-line museum content ('*Tag, You're it!*') or by choosing to validate tags assigned by other users ('*Freeze Tag!*'). This form of social tagging by the public therefore seems to be a new way to

describe, encounter and understand cultural projects (Cairns, 2013; Ridge, 2013), providing a counterweight to the often complex scientific thesaurus drawn up by curators.

These particular forms of testimonials from other visitors define an alternative way of discovering the museum, without any specialist guidance. The folksonomies allow a form of intuitive navigation, different from the official visit based on the expertise of art historians. Moreover, this '*naïvigation*' may also be guided simply by serendipity (Sinclair and Cardew Hall, 2008) and may be an excellent way for web users to make visitor-centered discoveries.

Similarly, the general public can play a big part by helping to select works to be exhibited. In late 2013, the Museum of Fine Arts in Boston communicated on the establishment of a 'crowdsourced exhibit' entitled '*Boston Loves Impressionism'*, for which it invited its visitors to play the role of the curator, allowing them to vote (*via* a specific website but also via facebook) for their favourites among 50 works from its impressionist collection. The public could select 10 paintings that would be highlighted with a heart symbol to indicate their status as 'audience favourite' and the three favourite works were displayed at the entrance to the exhibition.

By allowing such action from virtual communities about the definition of the offer, museums do indeed seem to be moving towards 'living' culture to suit their audience.

1.3 – Redefining visitors as full-blown artists

Other initiatives go even further in constructing collaborative museums insofar as they enable visitors to create their own 'works' for inclusion in the collections (role 3). The aim is for museums to more directly embrace the 'consumer made' concept, defined as the outcome of bringing to bear the skills of one or more consumers so as to modify or improve firms' offers and so come up with an original creation (Cova and Cova, 2012). Review of the devices developed recently by museums reveals this ever greater involvement of visitors in creating the exhibits, with such collaboration being either marginal or central to the museum's offer.

Some museums encourage their web-user public to create, but merely include such creations as a side-line to their central offer. This is the case of institutions which look to give a role to visitor input simply by capitalising on their previous museum visit like the Cité de l'Architecture. In 2012, this museal organization invited visitors to take photographs in the exhibition galleries and to publish them on a dedicated blog to highlight the public's interpretation of the architecture.

Some operations also invite visitors to create cultural objects. But these are often relegated to play a peripheral role in the cultural offer. Thus, in 2012, as part of a temporary exhibition on Bob Dylan, the Cité de la Musique suggested users should replay one of the American musician's song and post the video on Dailymotion. The movies were subsequently presented to visitors to the exhibition.

In other instances, visitor contributions may be far more central, as when they are asked to bring in or create an artwork in response to a specific cultural project. In this way, in 2012, the National Museum of American History of Washington invited its web-user public to post family photographs on Flickr, a selection of which was included in the '*Growing Up in 1950–1965*' exhibition.

Finally, some initiatives come about around virtual museums which are created by and for their own users on a common theme. For example, the National Museum of African American History and Culture, the brick-and-mortar venue for which is due to open in 2015, was officially created in 2003, through a contributory virtual space, providing Afro-Americans with the opportunity to immortalise their own history in a social memory network of collective recollections.

Whereas only a short while back visitors were considered as harmful in museums (Lindauer, 2008), examination of these 2.0 devices attests to a major renewal of the roles that museums assign to their audiences. It also demonstrates that the use of Web 2.0 is not only the fact of

superstar museums (Frey, 1998). These innovations are also carried by smaller structures, which place this research of interaction at the heart of their strategy. But this development is not without its consequences for the visitor–museum relationship. The impact this has needs to be understood.

2 – The paradoxical tensions of the 2.0 devices on the visitor–museum relationship

Museum directors hope to achieve a number of managerial objectives through such participatory actions. Museums count on enhancing the status of visitors who thus become partners of the institution and so are liable to display greater commitment and attachment to it (Troye and Supphellen, 2012). By building a closer relationship, museums hope to promote frequentation of their website and the actual museum, to benefit from positive word-of-mouth recommendations and from a broader audience in the long term.

However, beyond this fallout, the emplacement of this participatory logic changes the nature of the relationship between visitors and museums and raises questions about the position occupied by the public and the museum in the social space. Consequently, it is important to show that this collaborative trend can have beneficial effects by developing the visitors' skills and facilitating access to museums. But it can also have adverse effects by questioning the museum authority and identity and by disenchanting the museum experience.

2.1 - Enhancing visitor skills and desacralizing museums

The massive mobilisation of 2.0 devices by museums leads logically enough to the emergence of a hyper-actor consumer who is able to communicate, cooperate and even debate with the museum in a more egalitarian way, much like a full member of the institution (Russo *et al*., 2008). This valuation of ‘amateurs’, who are neither novices nor professionals, who are

increasingly called for by organisations (Ritzer and Jurgenson, 2010), reflects the true democratisation of abilities, leading, in the museum context, to the content being made more accessible.

These collaborative movements also prompt the emergence of a form of 'collective' intelligence arising from the pooling and synergy of individual knowledge which cyberspace tends to accelerate (Levy and Bonomo, 1999). Museums can harness these collective inputs especially as, according to Surowiecki (2004), crowds prove far better than any expert at solving even the most complex problems. Like contributory communication operations (role 1), these devices enable institutions to take advantage of the creative potential of visitors by engaging them in a co-promotional logic (Cova, Dalli and Zwick, 2011), while contributing to the development of a strong sense of belonging.

These devices therefore enable visitors to put together their own museum and help to strip the entity of its revered aura. Web 2.0 tools seem able to respond to a recurrent issue with museums: removing the symbolic barriers preventing access to their heritage. The museum is no longer likened to a sanctuary but rather to a Lego museum defined as 'an open and accessible museum […]; a museum one can make one's own, in the same way one can easily construct a complex, personal 'work' from simple Lego bricks designed to be easy to assemble and to free up creative potential' (Bausson, 2011). In this logic, the aim is no longer to provide a 'shop window' for the public to contemplate but to give precedence to a participatory museum architecture to make it easier for visitors to relate to the content. Social tagging techniques are emblematic of this. Insofar as visitors themselves categorise the objects they come across, they can more readily appreciate the value of what is on offer (role 2). A study of tagging behaviour of visitors to US museums (The Cleveland Museum of Art; The Indianapolis Museum of Art; The Metropolitan Museum of Art, etc.) showed that 86% of visitor tags did not match any of the museums' reference labels. Moreover, more than 88% of

the tags were thought useful for research by museum staff (Trant, 2006). These taggings therefore constitute ‘alternative knowledge’ arising out of a ‘democratic’ process of reappropriation of decision-making by visitors (Cordier, Dessajan and Eidelman, 2009).

While this collaborative orientation hints at a bright future for museums, it is best to be cautious because the emergence of these new visitors raises some weighty questions at the same time.

2.2 – Challenge to the museum’s authority and disenchantment with the museum experience

According to Cova (2008), many structures are using these 2.0 devices rather by imitation, without necessarily anticipating the necessary precautions to obtain an effectively participation from consumers (Divard, 2010). So, before jumping headlong into major investments, museums must also weigh the limits of consumer involvement. In an operational way, structures must be wondering if they are ready to engage in a real dialogue with the consumer. The museums must anticipate the control of this interactivity in order not to be overwhelmed by visitors' contributions, which may be not up to the expected results (authors, 2009). At the same time, museums must be careful to avoid an artificial interaction with the visitors, in which they would be in fact kept away.

Beyond these practical reflections, some experts more generally criticize the fact to appeal to visitor' contributions. Indeed, while for some commentators, the amateur is in these days of the Internet the key figure in a new form of expertise (Leadbeater and Miller, 2004), others, like Keen (2007), denounce an illusory wisdom of crowds that is highlighted in the 2.0 world. For them, the democratic definition of content, like devices inviting visitors to become creators (role 3), cannot actually produce anything other than a chaotic jumble of references, from which artists or works might be unable to emerge in the absence of any real authority. Now, historically, the museum is the sole authoritative voice because of its scientific and/or

artistic expertise (MacDonald and Fyfe, 1996). This voice is now lowered and even drowned out by visitors' voices. Such a preponderance of 'popular' expertise may therefore impoverish the museum's degree of artistic or scientific innovation. The museum might be tempted to reduce risk-taking and to focus more on a consensual and unifying content, liable to attract the most visitors. Finally by promoting public participation and by defending a certain appropriation of content, it may prove difficult not to take the desire for democratization beyond the point at which it tips into demagogic excess. This might undermine the museum's legitimacy and its true contribution 'in the service of society and its development' (mission defined by ICOM). Simon (2010) argues that a balance must be maintained between visitor input and curator expertise to ensure the quality and coherence of museum content.

Open-ended strategies, devoid of any clearly defined project and supervision, may lead to the museum's intentions becoming scrambled. For example, by choosing to allow web-user visitors to have their say by means of blogs or social networks (role 1), the museum proposes a new form of communication by which individuals may speak out freely, by-passing the legitimate, traditional forms of expression (Gunthert, 2009). Museums must therefore accept the codes specific to these instruments while at the same time defending their authority, their reputation and more fundamentally still their expertise.

That expertise largely underpins the museum's legitimacy, which is defined historically as the 'institutional figure of showing' (Deloche, 2001) and its traditional distancing of itself in its relationship with visitors. Yet, what becomes of the autonomy of the artist and curator as the fundamental principle of museum cultural policies if visitors become creators and purveyors of museum content (roles 2 and 3)? The decline in the sacralised character of the museum offer is admittedly nothing new (Vaughan, 2001), but by encouraging visitor involvement within the actual cultural offer, participatory devices help to hasten that decline. As the cultural artefact stands apart in being something out of the ordinary, it seems inevitable that

by encouraging visitor contributions the museum offer will end up being quite ordinary instead. Moreover, this can lead to forms of 'conversion' of the offer, as with the tools of folksonomy, leading some visitors no longer to work on collective indexing but to make individual value judgments about the works exhibited.

Lastly, whereas museums use 2.0 tools in an attempt to surprise visitors, to involve them and therefore to re-enchant their museum experience, the widespread development of such devices may quite the contrary engender a form of disenchantment (Ritzer, 2011). The effervescence of collective social production may gradually give way to participation becoming 'routine', guiding the offer down a slippery slope towards a form of 'disenchanted pro-sumption' (Denegri-Knott and Zwick, 2012). Apart from the fact that the increasingly common use of such tools is likely to make them run of the mill, their short life span means they must be constantly updated if they are to remain effective and consumers not tire of them.

Conclusion

The analysis proposed here has revealed, from an interpretative perspective, a typology of consumers based on the different roles that museums propose to attribute to them. The use of 2.0 devices gives rise to communicator visitors, mediator visitors and artist visitors as contributors to museum actions, in a wide variety of structures. Apart from identifying these new figures, this article also points out the consequences in terms of how the relationship between the public and museums is being redefined. If these tools are able to develop the audience competences and to make museums less stuffy, their implementation may also induce paradoxical tensions by challenging their authority and legitimacy and by disenchanting their visit experience.

The development of digital devices accentuates a little further the transition museums embarked upon many years back. They no longer present themselves as the inescapable

supervisory authority but increasingly as platforms for exchange among their different communities. But, paradoxically, abandoning the heritage authority and the remoteness that museums traditionally maintained in their relations to their audiences may ultimately undermine the legitimacy and the very identity of these institutions. Indeed, in seeking to reinforce the relationship with the public *via* the democratization and/or the desacralization of collections, institutions can very easily slip into a demagogic attitude, as rightly pointed out by some practitioners.

However, these conclusions have to be moderated given the limits associated with the exploratory and interpretative approach used. First, regarding the methodology, it is difficult to claim to have identified all of the practices associated with 2.0 tools in the museum sphere. The objective of exhaustive observation is not complete. Second, in a highly changing environment, the rapid lifecycle of these tools and the immediacy of the associated actions mean that any analysis may rapidly become obsolete (Euzeby and Martinez, 2012). Furthermore, the roles of visitors emerged on the basis of an interpretation. Such a construction cannot but be subjective to some extent (Cova and Cova, 2009).

Given the limitations, this reflection can only be a first step for further research to analyze the effects of 2.0 devices on the visitor–museum relationship. It could be appropriate to understand more precisely firstly the managerial goals associated with these tools, secondly the impact of these tools on the proximity of visitors with the museum and finally the possible divergences of representations related to these tools between visitors and managers.

References

Anderson, P. 2007. "What is Web 2.0? Ideas, technologies and implications for education", *JISC Technology and Standards Watch*: http://www.jisc.org.uk/publications/publications/twweb2.aspx

Authors. 2009.

Bailey, S., Falconer, P., Foley, M., McPherson, G. and M.Graham. 1997. "Charging for Admission to Museums and Galleries: Arguments and Evidence", *Museum Management and Curatorship*, Vol. 16, n° 4, p. 355-369.

Baumgarth, C. 2009. "Brand Orientation of Museums: Model and Empirical Results", *International Journal of Arts Management*, Vol 11, n° 3, p. 30-45.

Bausson, S. 2011. *Le musée-légo*, http://www.knowtex.com/blog/le-musee-lego/.

Bertacchini, E. and F. Morando 2013. "The Future of Museum in the Digital Age: New Models for Access to and Use of Digital Collections", *International Journal of Arts Management*, Vol. 15, n° 2, p. 60-72.

Cairns, S. 2013. "Mutualizing Museum Knowledge: Folksonomies and the Changing Shape of Expertise", *Curator: The Museum Journal*, Vol. 56, n°1, p.107-119.

Caldwell, N. G. 2000. "The Emergence of Museum Brands", *International Journal of Arts Management*, Vol. 2, n°5, p. 28-34.

Castells, M. 2001. *The Internet Galaxy. Reflections on the Internet, Business, and Society*. Oxford: Oxford University Press.

Castells, M. 2004. "Why Networks Matter. In *Network Logic: Who Governs in an Interconnected World?"*. Ed. McCarthy H., Miller P. and P. Skidmore. London: Demos.

Castells, M. 2010. "Museums in the Information Era: Cultural Connectors of Time and Space". In: *Museums in a Digital Age*. R. Parry (ed.). London: Routledge, p. 427-434.

Caves, R E. 2002. *Creative Industries, Contracts Between Arts and Commerce*, Harvard, Harvard University Press.

Cooke, M. and N. Buckley. 2008. "Web 2.0, social networks and the future of market research", *International Journal of Market Research*, Vol. 50, n°2, p. 267-292.

Cordier, JP., Dessajan S. and J. Eidelman. 2009. "Une culture scientifique et technique au service d'une co-construction des savoirs", *La Lettre de l'OCIM [en ligne*], 126.

Cova, B. 2008. "Consumer made : quand le consommateur devient producteur". *Décisions Marketing*, Vol. 50, p. 19-27.

Cova, B. and V. Cova. 2009. "Les figures du nouveau consommateur: une genèse de la gouvernementalité du consommateur", *Recherche et Applications en Marketing*, Vol. 24, n° 3, p. 81-100.

Cova, B. and V. Cova. 2012. "On the Road to Prosumption: Marketing Discourse and the Development of Consumer Competencies", *Consumption, Market & Culture*, Vol. 15, n° 2, p. 149-168.

Cova, B., Dalli, D. and D. Zwick. 2011. "Critical Perspectives on Consumers' Role as Producers': Broadening the Debate on Value Co-Creation in Marketing Processes", *Marketing Theory*, Vol. 11, n° 3, p. 231-241.

Deloche, B. 2001. *Le musée virtuel*. Paris : P.U.F.

Denegri-Knott, J. and D. Zwick. 2012. "Tracking Prosumption on eBay: Desire, Enchantment, and the Challenge of Slow Re-McDonaldization", *American Behavorial Scientist*, Vol. 56, n° 4, p. 1-20.

Divard, R. 2010. *Le marketing participatif*. Paris : Dunod.

Euzéby, F and C. Martinez. 2010. "Spectacle vivant et Internet. Exister en ligne pour accroître la fréquentation en salle", *Décisions Marketing*, n° 66, p. 59-71.

Frey, B. S. 1998. "Superstar museums: an economic analysis", *Journal of Cultural Economics*, Vol. 22, n°2-3, p. 113-125.

Gunther, A. 2009. "Why blog?", *in* Marin Dacos (dir.), *Read/Write Book.* Marseille, Cléo, p.190-196.

Jarrier, E. and D. Bourgeon-Renault. 2012. "Impact of Mediation Devices on the Museum Visit Experience and on Visitors' Behavioural Intentions", *International Journal of Arts Management*, Vol. 15, n° 1, p. 18-29.

Jenkins, H. 2006. *Convergence Culture. Where Old and New Media Collide*, New York: New York University Press.

Keen, A. 2007. *The Cult of the Amateur: How Blogs, MySpace, YouTube, and the Rest of Today's User-Generated Media Are Destroying Our Economy, Our Culture, and Our Values.* New York: Doubleday.

Leadbeater, C. and P. Miller. 2004. *The Pro-Am revolution.* London: Demos.

Levy, P. and R. Bonomo. 1999. *Collective Intelligence: Mankind's Emerging World in Cyberspace*, Perseus Publishing.

Lindauer, M. 2008. "The Critical Museum Visitor", in *New Museum Theory and Practice: An Introduction* (ed J. Marstine). Oxford: Blackwell Publishing Ltd.

MacDonald, S. and G. Fyfe. 1998. *Theorizing museums: representing identity and diversity in a changing world*, Wiley

McTavish, L. 2008. "Visiting the Virtual Museum: Art and Experience Online", in *New Museum Theory and Practice: An Introduction* (ed J. Marstine). Oxford: Blackwell Publishing Ltd.

Parry, R. 2010, *Museums in a digital age*, London: Routledge.

Peters, I. 2009. *Folksonomies: Indexing and Retrieval in the Web 2.0*. Berlin: Walter de Gruyter GmbH & Co.

Proctor, N. 2013. "Crowdsourcing – An Introduction: From Public Goods to Public Good", Curator: The Museum Journal, vol. 56, n°1, p.105-106.

Rheingold, H. 2008. *Using Participatory Media and Public Voice to Encourage Civic Engagement*, *Civic Life Online: Learning How Digital Media Can Engage Youth*; Edited by W.L. Bennett. The J.D. and C.T. MacArthur Foundation Series on Digital Media and Learning, Cambridge, MA: The MIT Press, p. 97–118.

Ridge, M. 2013. "From Tagging to Theorizing: Deepening Engagement with Cultural Heritage through Crowdsourcing", *Curator: The Museum Journal*, Vol. 56, n°4, p.435-450.

Ritzer, G. 2011. *The McDonaldization of Society*, 6th edition. Thousand Oaks: Pine Forge Press.

Ritzer, G. and N. Jurgenson. 2010. "Production, consumption, presumption. The nature of capitalism in the age of the digital 'prosumer'", *Journal of Consumer Culture*, Vol. 10, n° 1, p. 13-36.

Russo, A., Watkins, J., Kelly, L. and S. Chan. 2008. "Participatory communication with social media", *Curator: The Museum Journal*, Vol. 51, n° 1, p. 21-31.

Sigala, M. 2010. "Web 2.0, Social Marketing Strategies and Distribution Channels for City Destinations: Enhancing the Participatory Role of Travelers and Exploiting their Collective Intelligence". In S. Dasgupta (Ed.), *Social Computing: Concepts, Methodologies, Tools, and Applications*, Hershey, p. 1280-1304.

Simon, N. 2010. *The Participatory Museum*. Santa Cruz, California : Museum 2.0.

Sinclair, J. and M. Cardew-Hall. 2008. "The folksonomy tag cloud: when is it useful?", *Journal of Information Science*, Vol. 34, n° 1, p. 15-29.

Surowiecki, J. 2004. *The Wisdom of Crowds*. *Why the Many are Smarter than the Few*. London: Abacus.

Tobelem, J.M. 2012. *Le nouvel âge des musées: Les institutions culturelles au défi de la gestion*. Paris: Armand Collin.

Trant, J. 2006. "Exploring the potential for social tagging and folksonomy in art museums: proof of concept", *New Review of Hypermedia and Multimedia*, Vol.12, n° 1, p. 83-105.

Troye, S.V. and M. Supphelen. 2012. "Consumer participation in coproduction: 'I made it myself', Effects on consumers'sensory perceptions and evaluations of outcome and input product", *Journal of Marketing*, Vol. 16, n° 2, p. 33-46.

Varadarajan, R. and M.S. Yadav. 2009. “Marketing strategy in an internet-enabled environment: a retrospective on the first ten years of JIM and a prospective on the next ten years”, *Journal of Interactive Marketing*, Vol. 23, n°1, p. 11–22.

Vaughan, R. 2001. “Images of a museum”, *Museum Management and Curatorship*, Vol. 19, n°3, p. 253-268.

Appendix 1 – Sample of studied museums

List of U.S. museums studied: Metropolitan Museum of Art (New York), Brooklyn Museum (New York), Rubin Museum of Art (New York), Museum of Modern Art PS1 (New York), Guggenheim Museum (New York), National Air and Space Museum (New York), National Museum of African American History and Culture (Washington), National Museum of American History (Washington), Smithonian American Art Museum (Washington), Boston Museum of Fine Arts, Art Institute of Chicago, Cleveland Museum of Art, Indianapolis Museum of Art, Walters Art Museum (Baltimore), Philadelphia Museum of Art, Mattress Factory Art Museum (Pittsburgh), Minneapolis Institute of Arts, Tech Museum of Innovation (San Jose), De Young Museum (San Francisco), Los Angeles County Museum of Art, San Francisco Museum of Modern Art, Seattle Art Museum.

List of European museums studied: Tate Modern (London), Tate Britain (London), National Gallery (London), British Museum (London), Victoria and Albert Museum (London), Centre Pompidou (Paris), Musée d'Orsay (Paris), Musée du Quai Branly (Paris), Cité des Sciences et de l'Industrie (Paris), Cité de la Musique (Paris), Musée du Louvre (Paris), Musée des Civilisations de l'Europe et de la Méditerranée (Marseille), Muséum d'histoire naturelle de Toulouse, Royal Museums of Fine Arts of Belgium (Brussels), Magritte Museum (Brussels), Rijksmuseum (Amsterdam), Van Gogh Museum (Amsterdam), Hermitage Amsterdam, Museo Nacional Centro de Arte Reina Sofia (Madrid), Museo Nacional del Prado (Madrid), Guggenheim Bilbao, Belvedere (Vienna), Kunst Historiches Museum Wien, Staatliche Museen zu Berlin (including 19 museums – e.g.: Pergamon Museum, Neues Museum or Alte National Gallery).