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Great Expectations: Sustaining participation in social media spaces

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Abstract

In recent years there has been a dramatic rise in the number of participatory media technologies which museums have employed to engage people in new ways under the rubric of Web 2.0. Blogs, wikis, podcasts, vodcasts, photo and video sharing, virtual environments, tagging, annotation and other authoring tools offer people new opportunities to engage with museum content processes through co-creation and interactive cultural experiences. Arguably, these platforms and tools are creating new relationships between institutions and the public.

The advent of the ‘participatory web’ has given rise to a range of new conceptualizations and debates about what ‘participation’ means. We argue that these conceptualizations need better foundations in the study of individual motivation and group dynamics to be useful in the design and evaluation of museum social media initiatives. Often, the analysis of participation is undertaken from the
This paper contends that to create sustained participation in social media spaces, museums will need to reconsider their relationships with the public and thoroughly explore user motivations and intentions for participation in social media activities. We conclude by suggesting some ways in which museums might design and evaluate their social media initiatives to ensure their success and sustainability and offer some questions for further research.

Keywords: social media, participation, Web 2.0, reward, motivation, users
Introduction

Over the past few years we have witnessed a dramatic rise in the number of participatory media technologies which museums have employed to engage people in new ways under the rubric of Web 2.0. Blogs, wikis, podcasts, vodcasts, photo and video sharing, virtual environments, tagging, annotation and other authoring tools offer people new opportunities to engage with museum processes through co-creation and interactive cultural experiences. Arguably, these platforms and tools are creating new relationships between institutions and the public.

While the uptake of social media in the commercial and public spheres has been widely described (Benkler 2006; Tapscott and Williams, 2006; Shirky, 2008; Tapscott, 2009) its effects within the cultural sector are still yet to be fully examined. The enthusiastic embrace of participative media technologies by museums may lead to initiatives which assume a ‘build it and they will come’ attitude rather than focusing attention on the development of strategic and sustained relationship building that social media activities demand. One of the keys to building these relationships that has received little attention so far is the question of user motivations and rewards (Trant, 2009).

This paper takes as its starting point the view that to create sustained participation in social media spaces, museums will need to develop better understandings of the complexities of user motivations and rewards in social media spaces. This also includes a critical reassessment of their relationships with the people who use these services. This is in keeping with recent research such as Gilmore and Pine (2007) who suggest that in this era of multiple experiences, museums must reconstruct the value of their ‘authentic’ experiences and develop new relationships with what they previously considered ‘audiences’. According to John Falk and Beverley Sheppard, at the core of the new business models they advocate for museums are, “…the Knowledge Age attributes of understanding and relationships, all of which need to be personalized to meet the unique and changing needs of all involved…” (Falk and Sheppard, 2006: 226). These are the fundamental challenges of social media in a museum context.

In what follows we will examine the constructs of participation, motivation and reward which are shaping museum applications of ‘Web 2.0’ type, participative, social media technologies. We will discuss what these constructs might mean in a museum Web 2.0 context and suggest ways to design, manage and evaluate participative experiences that address both user and organisational needs.
Birth of the participative web

The second generation Web, or the ‘participative web’ can be dated from shortly after the turn of the millennium, although the term *Web 2.0*, by which it is also often known, was not coined by Tim O’Reilly and Dale Dougherty until 2004. In 2007, the Organisation for Economic Co-operation and Development (OECD) offered the following definition of the participative Web as,

…characterised by increased participation and interaction of Internet users who use it to communicate and express themselves. The most prominent concept to describe this evolution which uses the Internet’s inherent capabilities more extensively is called “participative web”. It represents an Internet increasingly influenced by intelligent web services based on new technologies empowering the user to be an increasing contributor to developing, rating, collaborating and distributing Internet content and developing and customising Internet applications. (OECD, 2007: 8)

O’Reilly, in an earlier attempt to burn off some of the fog around the Web 2.0 term, offered seven principles that described the key features of Web 2.0:

- The web as platform
- Harnessing collective intelligence
- Data is the next intel inside
- End of the software release cycle
- Lightweight programming models
- Software above the level of a single device
- Rich user experiences (*O’Reilly, 2005*)

O’Reilly’s list focuses on the conceptual and technological building blocks, rather than the social phenomenon of Web 2.0 which has been much discussed elsewhere. The capabilities described by O’Reilly and the programming practices and infrastructure built upon them provided the foundations and the impetus for Web 2.0’s ‘architecture of participation’.

Yet something unexpected emerged when the building began in earnest. Between 2003 and 2005, as the wave of Web 2.0 gained momentum with the rise of social media stars such as *Facebook*, *MySpace*, *Second Life*, *Flickr* and *YouTube*, a paradox surfaced in this brave new world of the mass-participation Web. What Usability guru Jakob Nielsen observed in these services late in 2006 was the phenomenon of “participation inequality”.

All large-scale, multi-user communities and online social networks that rely on users to contribute content or build services share one property: *most users don’t participate* very much. Often, they simply *lurk* in the background. In contrast, a tiny minority of users usually accounts for a
disproportionately large amount of the content and other system activity. (Nielsen, *author’s emphasis*, 2006)

This lent support to the notion of a ‘90:9:1 rule’ for new social media, as described by Nielsen:

- 90% of users are *lurkers* (i.e., read or observe, but don't contribute).
- 9% of users contribute *from time to time*, but other priorities dominate their time.
- 1% of users participate a lot and *account for most contributions*: it can seem as if they don't have lives because they often post just minutes after whatever event they're commenting on occurs.

Nor was this phenomenon new. It had been observed in other collaborative online environments more than a decade previously (Nielsen, 2006).

Such imbalances and the disproportionate efforts of the few may in fact be a common feature of social systems. The *Pareto principle* or ‘80:20 rule’ is an economic formulation that was first described early in the twentieth century and popularised in the 1950’s by Joseph Juran. It is often used to explain frequently observed imbalances between supply and demand, activity and effort, or the distribution of wealth, (i.e. the tendency of a small minority to hold the majority of a nation’s wealth). The 80:20 rule is sometimes also described as the ‘law’ of the ‘vital few and the useful many’ (Juran, 1951). While the Pareto principle is a well established construct in social and economic life, the participation inequality observed in social media appears to tend to even more extreme imbalances.

With minor variations, the phenomenon of participation inequality holds true for most of the major social media sites. In some cases, such as *YouTube and Flickr*, active participation (i.e. creating and uploading videos) has been measured as being as low as 0.18% and 0.12% respectively of all visits to these sites (Hitwise, 2007). Despite the huge traffic to these sites and the media hype about their social effects, the opportunities for active participation as creators, commentators or editors that these sites provide have not been taken up by the overwhelming majority of their users. While the ‘architecture of participation’ potentially allows users to upload, comment, tag and blog, very few do. This too is in keeping with recent research which suggests that the skills required for participation in the network of user-generated content are often beyond those of most audience members (Russo & Watkins 2006).

One of the most significant mass participation Web initiatives, *Wikipedia*, launched in 2001 and described by the Pew Internet Project as “one of the poster children” for Web 2.0 (Pew, 2006) provides an interesting case in point. Jimmy Wales, Wikipedia’s founder, was been quoted as observing that 50% of all Wikipedia edits are done by just 0.7% of its users (Swartz: 2006). Just two percent of users accounted for more than 73% of all edits. Although the number of unique visitors to Wikipedia increased by 181% between 2005 and 2006 alone, this massive use did not necessarily equate to mass participation (OECD: 12). The ‘1% rule’ – shorthand for Neilsen’s 90:9:1 formulation—has come to stand for this predictable yet still surprising phenomenon of participation inequality in popular online social media platforms.
Do these examples put to lie the idea(l) of the participative web? Is mass participation an illusion, with simply a new elite of social media amateurs usurping the old professional elites? Or does it suggest we need to reconsider our understanding of how participation works?

Investigating wiki-entry editing patterns more closely, Aaron Swartz observed an interesting division of labor within the Wikipedia community.

…an outsider makes one edit to add a chunk of information, then insiders rack up thousands of edits doing things like changing the name of a category across a whole site—the kind of thing only insiders deeply care about. As a result, insiders account for the vast majority of the edits. But it’s the outsiders who provide nearly all the content. (Swartz: 2006)

Without comprehensive research, it is difficult to establish what proportion of the work in Wikipedia is done by what proportion of its users. Overall, it is certainly a tiny minority of users who ‘actively’ participate in online social media, but the dynamics of their participation are a little more nuanced than the 1% rule would suggest. Furthermore, additional research suggests that over time, after the initial three years of Wikipedia’s existence, “there was a dramatic shift in the distribution of work to the common users with a corresponding decline in the influence of the elite.” (Kiturr et al, 2007: 7) Clearly, as the ‘.0’ in ‘2.0’ is meant to remind us, the participative web is permanently beta, always a work in progress.

Perhaps the best way to understand these findings is as a ‘long tail’ of participation; with a small minority of participants (the ‘vital few’) shouldering the bulk of the creation and organisation work and a much larger and broader group of less active participants (‘the useful many’) spending small amounts of time and effort.1 Like the Pareto principle, this phenomenon demonstrates a ‘power law’ at work in online participation (Mayfield, 2006). But as Chris Anderson has argued in respect of online content consumption, the ‘Long Tail’ phenomenon may have eclipsed the Pareto principle in the Internet age (Anderson, 2008: 135). The long tail of participation concept might help us better understand the phenomenon of participation inequality better than Nielsen’s 90:9:1 rule.

There are also significant observed differences in participation between different demographics. Across a number of reports published by the Pew Internet Project, (Pew, 2007; 2009) younger users of social media have been shown to participate more frequently and more actively in the creation and distribution of original and ‘remixed’ content. This has led to various generalizations such as Tapscott’s argument that not only do Net Generation (or Gen Y, born 1977-1997) use technology differently from previous generations, Gen Y brains are in fact wired differently from their elders because of it (2009:29).

Other studies, such as Linda Zimmer’s (2007) analysis of user participation in Second Life, drew attention to different patterns of activity amongst Baby Boomer, Generation X

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1 The Long Tail was originally published as an article in Wired Magazine in October 2004. At the time, Chris Anderson suggested that when dealing with products and services, the ‘tail’ of variety available to consumers is far longer than we realize; it is now within reach economically; and all those niches, when aggregated, make up a significant market.
and Generation Y users, applying a framework of participation developed by Forrester Research that defines six categories of social media participant: Creators; Critics; Collectors; Joiners; Spectators and Inactives (Li, 2007). Zimmer found Gen Y’ers or ‘milennials’ were more likely to be creators in Second Life. Although Gen X’ers were high joiners, they were more likely to be spectators than creators.

Yet some other recent work from the Pew Internet Project raises questions about generational typecasting when it comes to online behavior. Patterns of use are not always as predictable between generations as is sometimes assumed. Gen Y is not the only ‘Internet generation’ (Pew, 2009) Based on such evidence it would appear that there is no longer such a thing as a typical user of any technology, as generation, life stage, skill, experience and access to technology increasingly fragment user populations. Nonetheless, the temptation to create reductionist user typologies is strong.

The Forrester framework applied by Zimmer, which was named rather grandiosely ‘Social Technographics’ is represented as a “Participation Ladder” with participants ranked from Inactives (lowest rung) to Creators (highest).

Figure 1. Forrester research’s ladder of participation

Source:

Yet when put to the test with real users in at least one instance, the neat categories and segmentation of the Forrester ladder were found wanting. Focus group research with Australian internet users aged 18-30 conducted by the Australian Museum demonstrated that the categories defined in Forrester’s ‘ladder’ did not fit that user group’s experience and patterns of online behavior. Instead, people shift between activities and roles, “movi[ng] in and out of categories depending on their age and personal/social circumstances, as well as on their levels of comfort with using technology.” (Kelly & Russo, 2008)

Another framework for analyzing participation in Web 2.0 activities - within a museum context -has been proposed by Nina Simon in her Museum 2.0 blog (http://museumtwo.blogspot.com) Simon’s ‘Hierarchy of Social Participation’ suggests an escalating progression comprising five levels from passive reception of content to social interaction with content.

Figure 2. Simon’s Hierarchy of Social Participation
This is another attempt to bring order to the messiness of Web 2.0 participation. But the participative web has many parts and many ways in which users may take part. Participation cannot be defined in any single or simple way. Individual user needs and behavior cannot be understood through demographic or ‘technographic’ stereotyping. Designing and sustaining participation in online environments in all its many forms requires an understanding of the complex dynamics of individual motivation, incentive and reward, as well as the processes of group dynamics. In the ecology of the participative web there are many different niches and interactions that sustain the system; many of which we are only just beginning to comprehend.

Linear, lockstep models of participation ‘ladders’ and ‘hierarchies’ obscure and discount the complexity of individual and group behavior as well as idealising some forms of participation over others. Such models disregard the myriad diversity in how people participate in social media spaces. The ladder and hierarchy metaphors also hide the randomised and viral nature of participation in networked social spaces. Instead of individuals climbing ladders and pyramids, the social media phenomenon relies on the network efforts of joining in- in whatever capacity (Benkler, 2006). Simply being part of that crowd produces an effect; the crowd both enables and sustains the phenomenon. Google is still perhaps the finest example of this ‘wisdom of crowds’ at work in the online space (Suriowecki, 2004).

Social media gives people many ways to shape their own experiences and those of others, some through deliberate acts such as contribution, commenting, rating or re-mixing, others incidental to their use (i.e. through searching, subscribing, being counted toward most visited or other recommender systems.) As O’Reilly observes, "One of the key lessons of …Web 2.0 is: Users add value. Web 2.0 companies set inclusive defaults for aggregating data and building value as a side effect of ordinary use of the application. [T]hey build systems that get better the more people use them” (O’Reilly, 2005). This is another manifestation of what Dan Bricklin described as the ‘cornucopia of the commons’- where, “the act of using the database adds value to it.” (Bricklin, 2000; Mayfield 2006). In the Web 2.0 world, to use is to contribute.

The old dichotomies of active and passive participation inherited from the traditional mass broadcasting paradigm are too simplistic to analyse user goals and experiences in participative networked systems. Linear ladder or pyramid constructs are equally inadequate for the task.

In any case, we should also always bear in mind that the use of social media technologies are evolving rapidly. What was true of 2007, or last month, is likely to have changed by the end of the year. It’s difficult to pin down a moving target with any accuracy. What
we need are explanatory methods that are fluid, flexible and multi-dimensional rather than rigid and uni-linear.

Constructs of participation
The tendency to describe user activity in social media spaces within narrow, linear models of participation appears to be the result of a conflation of organisational objectives with those of users. Forrester’s ladder and Simon’s pyramid suggest that users will gravitate to more or to more intense participation, because that is the hope of the organisation: to increase the intensity and benefits of participation to ever greater levels amongst ever greater numbers of people.

From the user’s point of view, it is not that simple. Participation is infinitely more flexible and reflects people’s needs and purposes at differing times. Modes of behavior are not fixed or mutually exclusive. Forrester’s overlapping segments recognize this; yet their ladder implies something much more rigid.

While such models reflect a legitimate concern with capturing and measuring organisational value from user participation (whether financial, promotional, or for the public good) their emphasis is on pushing more users up the ladder or the pyramid. That may be the organisation’s ‘reward’ for a successful online strategy or a cool Web 2.0 service but, for the user, motivations and rewards are far more complex. We suggest instead that it is essential to separate the organisational and user perspectives on participation in any discussion of the purpose and achievements of social media.

The museum view: from interaction to participation and relationship
Museum constructs of audience participation have a long and complex history, which predates social media, the web and computers generally. For decades museums have wrestled with the baggage of past constructs and conceits about ‘visitors’, ‘users’ and ‘audiences’ and their relationship to the museum (McPherson, 2006; Peacock and Brownbill, 2007). Web 2.0 is simply the latest catalyst to foment those debates and challenge established patterns of relating.

One of the earliest attempts to grapple with the concepts of what a more participative web environment would mean for museums was suggested at this conference in 2003. Gail Durbin observed a tendency to confuse and conflate terms when describing the experience of new media.

Like ‘access’, the word interactivity is used loosely. For some it means anything in a museum context making use of new media. To me it is any use of new media where the user can influence the outcome, although the degree of interactivity may be limited by the programme. Participation in a web context is a particular kind of interactivity which encourages a sense of involvement. Here outcome is dependent on the opportunities individuals have to exercise their imagination and creativity. (Durbin, 2003)
“Interaction design” has its origins twenty years ago as the study of computer programming routines that would interact with human behavior. It follows in the tradition of human-computer interaction (HCI) research which during its halcyon years from the 1960’s to the 1980’s brought forth such crucial inventions as the on-screen manipulation of objects, the mouse, ‘windows’, text editing and hypertext (Myers, 1998).

In museum spaces, computerised ‘interactive’ experiences were, first and foremost, closed systems with a fixed array of potential pre-scripted outcomes. As Durbin intimates, the idea of interaction that the participative web presents is something different, an open-ended one, shaped more by the user than by the program presets.

Participation, Web 2.0 style, has the qualities of emergence and self-organisation common to all open-ended, complex systems (Gribbin, 2004). In creating or contributing to social media environments, museums can no longer program the outcome of the interactions around them or between them and the public. Designing for participation means enabling rather than scripting the outcomes.

‘Participation design’ should not be confused with ‘participatory design’ which has a longer history, beginning as a collaborative process within workplaces, particularly in Scandinavia in the 1960s (DePaula, 2004). Participatory design is more of a methodology for ensuring those affected by design decisions are able to have input into them.

Designing for participation is, instead, as much an act of faith as a rational planning method. It represents and requires a ‘radical trust’ in the fluid, unpredictable and open-ended dynamics of community (O’Reilly, 2005; Spadaccini and Chan 2007). And conversely, online communities that are facilitated or supported by museums must also trust the museum to act in good faith. Participation depends on a sustained pact of mutual trust and reciprocity, rather than the pre-scripted and didactic communications more characteristic of museums. Here participation starts to sound much more about relationships than simple interactions.

While there are a rapidly growing number of museum Web 2.0 initiatives, the benefits of participation have mostly been discussed from an organisational perspective. Seb Chan (2008) has gone some way to providing an insight into possible measurements of success. In this analysis, he alludes to four ways in which organisations can measure the success of their social media initiatives:

- Self management: the extent to which the community participates in sharing and creating knowledge;
- Ambient presence: the frequency and/or consistency of organisational presence on other social networking sites (ie: other blogs, Flickr, YouTube etc) and the amount of information available on aggregator sites such as Technorati;
- Strategic conversion: mechanisms for tracking the convergence and connection between physical and online visitation; and
- Citations: the frequency and quality of citations in sites such as Wikipedia, in academic papers and in commercial settings.
Chan’s analysis provides a useful correlation between organisational effort (human resource, budget and timescale) and reward. From this perspective, user experience is not nearly as important as the value of the venture in organisational terms. The issue here is that should organisations only use measures such as those suggested by Chan, they continue to run the risk of creating content and infrastructure which does not meet user needs.

If we are to shift from an organisation-centric to a user-centric view of the Web 2.0 museum experience we need new methods for understanding the user experience and new ways of relating to individuals and the online ‘crowd’. Richard Lanham, in *The Economics of Attention* (2006) describes the transition of contemporary society from an economy of ‘stuff’ to an “attention economy” where information is in super abundance and what is in scarce supply are not goods but human attention. In Lanham’s view the challenge for organisations is to create and sustain compelling ‘attention structures’ (Lanham: 21). If museums are going to capture and hold attention with our participative web initiatives we need to pay a lot more attention to what users think and do.

**Why participate? The tangle of user motivation and rewards**

Any discussion of user motivation to participate in social media will inevitably trace its roots to the discipline of psychology. Much of what we understand and assume about human behavior has been grounded in the precepts of behaviorism and its successors. One of the most contentious and long-running debates within psychology arises from the attempts within the discipline to shrug off the reductionist, mechanical assumptions of behaviorism (Kohn, 1993; Reiss, 2004.) Breaking away from determinist constructs such as Thorndike’s ‘law of effects’ (1898) and Skinner’s focus on ‘operant conditioning’ and ‘schedules of reinforcement’, a more complex view of human motivation emerged in the 1940s and 50’s (Maslow, 1943; Herzberg, 1959). Instead of simply responding to the promise of reward in a mechanical way as the behaviorists asserted (eg. ‘The Incentive Theory of Motivation’ or ‘Expectancy Theory’), the idea of intrinsic motivation took shape. Intrinsic motivation is the idea that people choose behaviors to meet internal drives or needs. It is typically contrasted with extrinsic motivation, which has its source outside the individual, eg. the promise of praise or material reward, or conversely, fear of punishment.

These concepts are now commonplace, although sometimes confused and still much debated by psychologists. People such as Alfie Kohn have argued that even the concept of intrinsic motivation is contestable. “What appears at first blush an uncomplicated idea reveals itself as a tangle of possibilities, all of which have substantive implications for what we counter pose to the use of rewards” (Kohn 1993: 276). Kohn and others have also pointed to repeated experimental evidence that shows extrinsic rewards appear to diminish levels of intrinsic motivation and satisfaction. This, contends Kohn, is proof that the ‘carrot and stick’ reward systems which predominate in education and management are ineffective and probably counterproductive in motivating and satisfying people.

Reiss (2005) however argues that the bifurcation of intrinsic and extrinsic motivation represents a false dichotomy. The tendency to divide the recognised reinforcers of human behavior such as play, competition, autonomy, food and sex into one or the other
category also leads to a confusion of means and ends. He argues that “motivation is fundamentally multifaceted and cannot be reduced to just two sources (2005: 7).

There is also much confusion over pleasure as the motivation rather than the reward for a particular behavior. According to Reiss, “Enjoyment is rarely intrinsic to behavior; rather, enjoyment almost always depends on the satiation of a desire, need, or motive of the individual” (2005: 4). His own theory of motivation identifies 16 basic drives motivating human behavior (Reiss, 2004: 187). The six most relevant as possible motives driving online participation are: power (mastery); curiosity; status; social contact; order and acceptance.

Museums have long wrestled with the question of motivation in seeking to understand on site visitation. We would argue that the complex reasons for engaging with museums are often difficult to define because of our ongoing confusion about the nature of motivation. A different perspective on motivation, particularly when it is not related to employment conditions or security, personal safety and well-being or family issues might position online participation in a social realm more easily explored through notions of entertainment and experience (Gilmore and Pine, 2007).

Ellenbogen et al (2008) have concluded that in respect of museum visitation, ‘psychographic variables’ that is, those which describe people’s psychological and motivational characteristics, are far more predictive than demographic variables. (Ellenbogen et al:188). They have proposed seven categories of motivation for visiting museums:

- Entertainment;
- Social;
- Learning;
- Life Cycle;
- Place;
- Practical;
- Context or content.

These motives too might be classified according to notions of intrinsic and extrinsic motivation and reward, or within the entertainment and experience formulation of Gilmore and Pine, or within Reiss’ framework of basic drives.

As another perspective on motivation in online spaces, Lanham (2006) offers a three point ‘motive spectrum’ for human behavior that he uses to explain people’s participation in the ‘attention economy’. At one end, labeled ‘game’; he describes the competitive “struggle to survival and prevail” in the middle ‘purpose’ describing the practical motives of everyday life and at the other end ‘play’ the things that people ‘just like’ to do (ibid: 169). The important thing about Lanham’s typology is how it allows for the flow of motivation and behavior between these three states. Motivation is multifaceted; a single activity may invoke all three states.
In terms of motivation as it affects online participation, Waterson (2006) has summarised the findings of five case studies examining participant motivation in online communities. Those studies highlighted ten common motivations for participants in nine different communities which ranged from usenet groups to wiki-based communities of practice:

- Seeking information for personal benefit;
- Opportunities to exchange ideas and find solutions to problems;
- Fun;
- Opportunity for dialogue;
- Opportunity to help others;
- Chance to gain respect and visibility within a community;
- Seeking to build social cohesion within a group;
- Shared sense of identity and belonging;
- Raise profile with peers;
- Commitment to shared values and norms. (Waterson, 2006: 334)

These observations strongly echo the types of motives cited above from Reiss’ list of basic desires. Interestingly too, some of the studies analysed by Waterson also observed how motivations (and rewards) evolved over time. This makes clear once again the shifting, dynamic nature of individual motivation and its interaction with the group dynamics of online communities.

Bishop (2007) argues that we need to focus on goal-driven rather than need-driven explanations of user motivation and behavior.

Theories that suggest that individuals are needs-driven and so-called needs are met in the order of a hierarchy are not suitable for online communities. It is quite likely that community members will desire to do two things at the same time, something that needs-based theories do not take into account. Theories that suggest that individuals are goal-driven are more appropriate for online communities as users will develop and change goals based on their interactions in the online community (Bishop, 2007: 1890).

Perhaps because of this confusion, we are yet to research adequately the possible motivations for participation in museum initiated online communities. Initial findings from the steve.museum tagging project (http://www.steve.museum) have suggested one apparent motivator that may be particularly relevant for museums, that of institutional affiliation. In her analysis of participation in that project, Jennifer Trant observes that:

Motivations for tagging are often unclear. While the literature of tagging and folksonomy points initially to a selfish motivation for personal information management, the members of the steve.museum team have posited another, more altruistic motivation for tagging museum
collections. People may just want to “help out” museums. (Trant, 2009: 37)

Further research is required to identify and test such motivations and to examine their interaction with other factors, both intrinsic and extrinsic.

In looking for theoretical guidance to explain, model and evaluate museum Web 2.0 initiatives from a user point of view we face several obstacles and gaps. Traditional media and communications theory struggles to accommodate network dynamics in its conceptions of user behavior, as it is grounded in a functionalist rather than a social view of technology (Schrock, 2009). Similarly, the discipline of psychology is caught up in its own wrangling over the core constructs of motivation and reward. What is needed to explore and explain social media more effectively are new theoretical models of user behavior in social media spaces that take account of the social dynamics of these spaces and of the motivations and rewards shaping individual behavior.

Designing for sustainable web 2.0 participation

One of the most promising models for understanding and perhaps designing spaces for participation and collaboration comes from the observations of Clay Shirky in his account of the changes enabled by social media, Here Comes Everybody: The Power of Organizing without Organizations (2008).

Shirky argues that three elements are needed to make the complex blend of social and technological factors that comprise social media work. Those instances that flourish, he says, demonstrate a successful fusion of a plausible promise, an effective tool and an acceptable bargain with the users. The promise is the basic ‘why’ for anyone to join or contribute to a group. The tool helps with the ‘how’ – how will the difficulties of co-ordination be overcome, or at least be held to manageable levels? And the bargain sets the rules of the road: if you are interested in the promise and adopt the tools, what can you expect, and what will be expected of you? (Shirky: 260)

We can see evidence of Shirky’s trio -promise, tool and bargain- at work in some current examples of museum Web 2.0 initiatives.

Promise is “the essential piece, the thing that convinces a potential user to become an actual user.” (Shirky: 261). Dawson et al (2008) describe how the Canadian Science and Technology Museum Corporation’s offer of a forum for comments, discussion and uploading images through a Facebook presence was embraced enthusiastically by its public members. The implicit promise here was of greater involvement in the museum and new ways to maximise the benefits of membership.

Direct appeal seems to be effective at conveying a promise. In an examination of museum videos on YouTube Alexander et al (2008) note a higher level of response to videos posted when a direct call for submissions has been made.

Evaluation of the Library of Congress’ (LoC) Flickr Pilot Project which led to the launch of the Flickr Commons (http://www.flickr.com/commons) notes that
We appear to have tapped into the Web community’s altruistic substratum by asking people for help. Taggers tag for a variety of different reasons, and this diversity is part of what makes Flickr photo collections valuable to a wide membership base. The original Flickr blog post and text announcing the Commons (“This is for the good of humanity, dude!!”) struck just the right chord. People wanted to participate and liked being asked to contribute. (Springer et al. 2008: 15).

Similarly, the National Library of Australia’s Flickr initiative, Click and Flick, (http://www.pictureaustralia.org/flickr.html) which provided inspiration for the LoC pilot, promised the opportunity “for individuals to help build the nation’s visual record” (Hooton, 2006). As Shirky observes in respect of Wikipedia, the promise of contributing to something larger than oneself is compelling for many: “if you help, this will get better.” (Shirky: 278).

The second of Shirky’s elements, tool, is a little more straightforward. Many Web 2.0 platforms provide a standard set of tools, eg. profiles, messaging and friending on social networking sites such as Facebook and MySpace. Different blogging and wiki tools may vary in terms of the range and complexity of features they provide, but they share common core functionality. However the availability of open APIs (Application Programming Interfaces) that typifies Web 2.0 means many of these platforms and tools can be customized and personalized well beyond generic functionality. The ArtShare application, (http://www.facebook.com/apps/application.php?id=7723691927&ref=pr) designed by the Brooklyn Museum for Facebook users, enables people to collect and upload and share artwork from museums and their peers. ArtShare aims to give users greater freedom to use museum content, allowing them “to display their favorite paintings, photographs, and objects on their own terms and in their own spaces.” (Bernstein, 2008).

Similarly, in Australia, the Powerhouse Museum’s OPAC 2.0, built on top of the museum’s collection database, (http://www.powerhousemuseum.com/collection/database/) provides tools for users to add their own keyword ‘tags’ to collection items. This tool was designed to “provide a means to improve serendipitous discovery and enhance the ability of users to find related objects and explore deeper into a collection.” (Chan, 2007). Once again, the benefits of such a tool go in three directions: the contributing individual gets to share their knowledge or just participate; the museum’s store of information is enhanced and the group of users visiting the site benefit from the aggregated results of their and others’ contributions. What we don’t yet understand is how these interactions and transactions spur and sustain each other.

The third of Shirky’s keys to success, the idea of the bargain, is the one that is most complex and perhaps the one that brings up the most issues for museums. This is the place where mutual expectations of the host, participant and group are established and enforced. As Shirky notes, online communities such as Wikipedia have evolved sophisticated ‘rules of engagement’ to clarify those expectations. One of the foundations of that bargain is the wiki principle “that you can edit anyone else’s writing and anyone else can edit yours” (ibid 271).
In establishing effective ‘bargains’ within social media spaces museums face three key sets of issues which often prove problematic: copyright and ownership of posted material (both the museum’s and that of contributors); whether to provide a voice of expert authority and whether or how to moderate interactions, especially in the case of publicly funded institutions.

But these issues are not insurmountable. In fact the challenge of striking the right bargain may be where the real value of Web 2.0 is created. Flickr Commons is perhaps the best example so far of where the bargain has been made clear and simple and in the process, has moved institutions beyond their comfort zones. As the LoC evaluation notes, their Flickr pilot “resulted in many positive yet unplanned outcomes” (Springer et al: 2).

What the idea of the bargain does focus attention on is the need to fully understand the mutual expectations and boundaries of all participants in social media spaces. The bargain aspect is also where organisations like museums have to come to grips with what they are willing and able to offer to support and sustain participation. As the name ‘bargain’ suggests, it’s all about negotiation.

Shirky’s three elements are a useful starting point for understanding the dynamics of social media systems from a user point of view. However, the combination of promise, tool and bargain cannot be used as a simple recipe, because the interactions between the different components are too complex (ibid: 260-1). In fact, it is a substantial balancing act and requires significant effort to sustain. “First,” as Shirky says “because getting each of these elements right is actually quite challenging, while getting all of them right is essential. Second, as groups themselves, the complexity comes not just from elements but from their interactions.” (ibid: 277) Once again, it is clear that to be sustainable participation environments must be designed and managed as dynamic systems not as fixed structures.

Conclusion: some answers, more questions

What Shirky’s model suggests about social media is that we should view these spaces as living systems, or what we might call an ecology of attention, to rephrase Lanham’s idea of attention structures. The challenge for museums therefore is learning to support the health of that ecology by maintaining the right level of contribution, not seeking to extract too much and working thoughtfully with the other processes of that system, namely individual motivation and group dynamics. So far, museums have been overly focused on what they themselves might get from social media systems, not on understanding and nurturing their dynamics. It is time to examine more carefully the interests, motivations and rewards that drive the other parts of these emerging systems.

In order to advance that understanding, we propose further research to address the following questions:

- What are the stated and implicit assumptions about participation in museum Web 2.0 projects?
- What do they offer in terms of rewards for participation?
- How are they evaluated from the user point of view, if at all?
• Do they cater equally well for the needs of the ‘vital few’ and the ‘useful many’?
• Are they leveraging the ‘long tail of participation’ effectively by providing for and recognising different types of participation?
• What does the evidence show about the links between motivation and reward from the user point of view?
• How do individual motivations and rewards interact with the social dynamics of groups?

From this research it should be possible to develop a practical framework to inform the planning, design and evaluation of museum social media activities from both the organisational and user perspectives. Such a framework will support the long-term success of such initiatives, based on a recognition of the subtle and complex interplay of motivations and rewards that sustain participation in social media spaces.

References


