The Practice of Everyday (Media) Life: From Mass Consumption to Mass Cultural Production?

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The explosion of user-created media content on the web (dating from, say, 2005) has unleashed a new media universe. (Other terms often used to refer to this phenomenon include *social media* and *user-generated content.*) On a practical level, this universe was made possible by free web platforms and inexpensive software tools that enable people to share their media and easily access media produced by others, cheaper prices for professional-quality devices such as HD video cameras, and the addition of cameras and video capture to mobile phones. What is important, however, is that this new universe is not simply a scaled-up version of twentieth-century media culture. Instead, we have moved from *media* to *social media.*[1] What does this shift mean for how media functions and for the terms we use to talk about media? What do trends in web use mean for culture in general and for professional art in particular? These are the questions this essay will engage with.

Today *social media* is often discussed in relation to another term, *web 2.0* (coined by Tim O'Reilly in 2004). This term refers to a number of different technical, economic, and social developments; for our purposes, two commonly held ideas about web 2.0 are most relevant, but, as we will see, only the second is borne out by statistics. First, in the 2000s, we are supposedly seeing a gradual shift from the majority of internet users ac-

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1. See Adrian Chan, "Social Media: Paradigm Shift?" www.gravity7.com/paradigm_shift_1.html

cessing content produced by a much smaller number of professional producers to users increasingly accessing content produced by other nonprofessional users. Second, if in the 1990s the web was mostly a publishing medium, in the 2000s it has increasingly become a communication medium. (Communication between users, including conversations around user-generated content, takes place through a variety of forms besides email: posts, comments, reviews, ratings, gestures and tokens, votes, links, badges, photos, and video.)[2]

But these trends do not mean that every user has become a producer or that every user consumes mostly amateur material. According to 2007 statistics, only between 0.5 percent and 1.5 percent of users of the most popular social media sites (Flickr, YouTube, Wikipedia) contributed their own content. Others remained consumers of the content produced by this 0.5–1.5 percent. Further, in commercial media sites we have seen a fundamental shift in cultural consumption, referred to as the long-tail phenomenon. Not only the so-called Top 40 sites but most of the content available online—including content produced by amateurs—finds an audience.[3] These audiences can be tiny, but they are not zero. In the middle of the 2000s every track out of a million or so available through iTunes sold at least once a quarter. In other words, every track no matter how obscure found at least one listener. This translates into a new economics of media. As researchers who have studied the long-tail phenomena have demonstrated, in many industries the total volume of sales generated by such low-popularity items exceeds the volume generated by the Top 40.[4]

The second idea often expressed about web 2.0—the use of the web for social communication—is indeed supported by statistics. The numbers of people participating in some way in social networks, whether by accessing, discussing, or sharing media that they created themselves, are astonishing—at least from the perspective of early 2008. (It is likely that in 2012 or 2018 they will look trivial in comparison to what will be happening then.)

2. See ibid.
3. "The long tail" was coined by Chris Anderson in 2004. See Chris Anderson, "The Long Tail," *Wired* 12 (Oct. 2004): www.wired.com/wired/archive/12.10/tail.html
4. More long-tail statistics can be found in Tom Michiels, "The Long Tail of Search," 17 Sept. 2007, www.zoekmachine-marketing-blog.com/artikels/white-paper-the-long-tail-of-search

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MySpace: 300,000,000 users. Cyworld, a Korean site similar to MySpace: 90 percent of South Koreans in their twenties or 25 percent of the total population of South Korea. Hi5, a leading social media site for Central America: 100,000,000 users.[5] Facebook: 14,000,000 photo uploads daily. The number of new videos uploaded to YouTube every twenty-four hours (as of July 2006): 65,000.[6]

Clearly, in the 2000s we are going through a fundamental shift in modern media culture. So what does media mean after web 2.0?

The Practice of Everyday (Media) Life: Tactics as Strategies

For different reasons, media, businesses, consumer electronics, web industries, and academics celebrate content created and exchanged by web users. Academics, in particular, give disproportional attention to certain genres such as youth media, activist media, and political mashups, which are indeed important but do not represent more typical usage by hundreds of millions of people.

In celebrating user-generated content and implicitly equating *user-generated* with *alternative* and *progressive,* academic discussions often stay away from asking certain basic critical questions. For instance, to what extent is the phenomenon of user-generated content driven by the consumer electronics industry—the producers of digital cameras, video cameras, music players, laptops, and so on? or to what extent is the phenomenon of user-generated content also driven by social media companies themselves, who after all are in the business of getting as much traffic to their sites as possible so they can make money by selling advertising and their usage data?

Given that a significant percentage of user-generated content either follows the templates and conventions set up by the professional entertainment industry or directly reuses professionally produced content, does this mean that people's identities and imaginations are now even more firmly colonized by commercial media than they were in the twentieth century? In other words, is the replacement of mass consumption of commercial culture in the twentieth century by mass production of cultural objects by users in the early twenty-first century a progressive development? or does it constitute a further stage in the development of the culture industry as analyzed by Adorno and Horkheimer in *The Culture Industry: Enlightenment as Mass Deception* (1944)? Indeed, if twentieth-century subjects were simply consuming the products of the culture industry, twenty-

5. See www.pipl.com/statistics/social-networks/size-growth/
6. See Wikipedia, s.v. "MySpace," "Cyworld," "Facebook," and "YouTube," en.wikipedia.org/wiki/MySpace, en.wikipedia.org/wiki/Cyworld, en.wikipedia.org/wiki/Facebook, and en.wikipedia.org/wiki/Youtube

first century prosumers and "pro-ams" are passionately imitating it. That is, they now make their own cultural products that follow the templates established by the professionals and/or rely on professional content.

A case in point is anime music videos (AMV). My search for *anime music videos* on YouTube on 7 February 2008 returned 250,000 videos. Animemusicvideos.org, the main web portal for AMV (before the action moved to YouTube), contained 130,510 AMVs as of 9 February 2008. AMVs are made by fans who edit together clips from one or more anime series and put the resultant video to music, which comes from, say, a professional music video. Sometimes, AMVs also use footage cut from video games. In the last few years, AMV makers also increasingly started to add visual effects available in software such as After Effects. But regardless of the particular sources used and their combination, in the majority of AMVs all video and music comes from commercial media products. AMV makers see themselves as editors rather than as filmmakers or animators.[7]

To help us analyze AMV culture, let's put to work the categories set up by Michel de Certeau in *The Practice of Everyday Life*.[8] De Certeau makes a distinction between strategies used by institutions and power structures and tactics used by modern subjects in their everyday lives. The tactics are the ways in which individuals negotiate strategies that were set for them. For instance, to take one example discussed by de Certeau, a city's layout, signage, driving and parking rules, and official maps are strategies created by the government and corporations. The ways an individual moves through the city—taking shortcuts, wandering aimlessly, navigating through favorite routes—are tactics. In other words, an individual can't physically reorganize the city, but he or she can adapt it to his or her needs by choosing how to move through it. A tactic "expects to have to work on things in order to make them its own, or to make them 'habitable.'"[9]

As de Certeau points out, in modern societies most of the objects that people use in their everyday lives are mass-produced goods; these goods are the expressions of strategies of designers, producers, and marketers. People build their worlds and identities out of these readily available objects by using different tactics: bricolage, assembly, customization, and—to use a term that was not a part of de Certeau's vocabulary but that has become important today—remix. For instance, people rarely wear every piece from one designer as they appear in fashion shows; they usually

7. Conversation with Tim Park, 9 Feb. 2009.

8. See Michel de Certeau, *The Practice of Everyday Life,* trans. Steven Rendall (1980; Berkeley, 1984).

9. Wikipedia, s.v. *"The Practice of Everyday Life,"* en.wikipedia.org/wiki/The_Practice_of_Everyday_Life; hereafter abbreviated *"PEL."*

mix and match different pieces from different sources. They also wear pieces of clothing in different ways than they were intended, and they customize the clothes themselves with buttons, belts, and other accessories. The same goes for the ways in which people decorate their living spaces, prepare meals, and in general construct their lifestyles.

While the general ideas of *The Practice of Everyday Life* still provide an excellent intellectual paradigm for thinking about vernacular culture, changes have occurred since its publication, though not dramatically in the area of governance; yet even there we see moves towards more transparency and visibility. But in the consumer economy the changes have been quite substantial. Strategies and tactics are now often closely linked in an interactive relationship, and often their features are reversed. This is particularly true for born-digital industries and media, such as software, computer games, web sites, and social networks. Their products are explicitly designed to be customized by users. Think, for instance, of the original graphical user interface (popularized by Apple's Macintosh in 1984), which allows the user to customize the appearance and functions of the computer and the applications. The same applies to recent web interfaces—for instance, iGoogle, which allows the user to set up a custom home page selecting from many applications and information sources. Facebook, Flickr, Google, and other social media companies encourage others to write applications, which mash up data and add new services (as of early 2008, Facebook hosted over 15,000 applications written by outside developers). The explicit design for customization is not limited to the web; for instance, many computer games ship with a level editor that allows users to create their own levels of play.

Although the industries dealing with the physical, rather than the digital, world are moving much slower, they are on the same trajectory. In 2003 Toyota introduced Scion cars. Scion marketing was centered on the idea of extensive customization. Nike, Adidas, and Puma have all experimented with allowing consumers to design and order their own shoes by choosing from a broad range of shoe parts. (In the case of the Puma Mongolian Shoe Barbeque concept, a few thousand different shoes can be constructed.)[10] In early 2008 Bug Labs introduced what they called "the Lego of gadgets": an open-sourced consumer electronics platform consisting of a minicomputer and modules such as a digital camera or LCD screen.[11] The recent celebration of DIY practice in various consumer industries is another example of this growing trend. In short, since the publication of *The Prac-*

10. See www.puma.com/secure/mbbq/
11. See buglabs.net/

tice of Everyday Life, companies have developed strategies that mimic people's tactics of bricolage, reassembly, and remix. The logic of tactics has now become the logic of strategies.

The web 2.0 paradigm represents the most dramatic reconfiguration to date of the relationship between strategies and tactics. According to de Certeau's original analysis from 1980, tactics do not necessarily result in objects or anything stable or permanent: "Unlike the strategy, it [the tactic] lacks the centralized structure and permanence that would enable it to set itself up as a competitor to some other entity. . . . It renders its own activities an 'unmappable' form of subversion" *("PEL").* Since the 1980s, however, consumer and culture industries have started to systematically turn every subculture (particularly every youth subculture: bohemians, hip-hop and rap, Lolita fashion, rock, punk, skinhead, goth, and so on)[12] into products. In short, people's cultural tactics were turned into strategies now sold to them. To oppose the mainstream, you now have plenty of lifestyles—accompanied by every subcultural aspect, from music and visual styles to clothes and slang—available for purchase.

However, in the 2000s, the transformation of people's tactics into business strategies went in a new direction. The developments of the previous decade—the web platform, the dramatically decreased costs of media capture and playback, increased global travel, and the growing consumer economies of many countries that after 1990 joined the "global world"—led to the explosion of user-generated content available in digital form: web sites, blogs, forum discussions, short messages, digital photos, video, music, maps, and so on. Responding to this explosion, web 2.0 companies created powerful platforms designed to host this content. MySpace, Facebook, Live Journal, Blogger, Flickr, YouTube, hi5, Cyworld, Wretch (Taiwan), Orkut (Brazil), Baidu (China), and thousands of other social media sites make this content instantly available worldwide (except, of course, in those countries that block or filter these sites). Thus, not just particular features of particular subcultures but the details of the everyday lives of hundreds of millions of people who make and upload their media or write blogs became public.

What was ephemeral, transient, unmappable, and invisible became permanent, mappable, and viewable. Social media platforms give users unlimited space for storage and plenty of tools to organize, promote, and broadcast their thoughts, opinions, behavior, and media. You can already directly stream video using your laptop or mobile phone, and it is only a

12. See Wikipedia, s. v. "The History of Western Subcultures in the Twentieth Century," en.wikipedia.org/wiki/History_of_subcultures_in_the_20th_century

matter of time before constant broadcasting of one's life becomes as common as email. If you follow the evolution from the MyLifeBits project (2001–) to Slife software (2007–) and the Yahoo! Live personal broadcasting service (2008–), the trajectory towards constant capture and broadcasting of one's everyday life is clear.

According to de Certeau's theory, strategy "is engaged in the work of systematizing, of imposing order." "Its ways are set. It cannot be expected to be capable of breaking up and regrouping easily, something which a tactical model does naturally" *("PEL")*. The strategies used by social media companies today, however, are the exact opposite; they are focused on flexibility and constant change. (Of course, all businesses in the age of globalization had to become adaptable, mobile, flexible, and ready to break up and regroup, but they rarely achieved the flexibility of web companies and developers.)[13] According to O'Reilly, one important feature of web 2.0 applications is "design for 'hackability' and remixability."[14] Thus, most major web 2.0 companies—Amazon, eBay, Flickr, Google, Microsoft, Yahoo!, and YouTube—make available their programming interfaces and some of their data to encourage others to create new applications.[15]

In summary, today strategies used by social media companies often look more like tactics in the original formulation by de Certeau while tactics look like strategies. Since the companies that create social media platforms make money from having as many users as possible visit them (they do so by serving ads, by selling data about usage to other companies, by selling add-on services, and so on), they have a direct interest in having users pour as much of their lives into these platforms as possible. Consequently, they give users unlimited storage space for all their media and the ability to customize their online lives (for instance, by controlling what is seen by whom) by expanding the functionality of the platforms themselves.

This, however, does not mean strategies and tactics have completely

13. Here is a typical statement coming from the business community: "Competition is changing overnight, and product lifecycles often last for just a few months. Permanence has been torn asunder. We are in a time that demands a new agility and flexibility: and everyone must have the skill and insight to prepare for a future that is rushing at them faster than ever before" (Jim Carroll, "The Masters of Business Imagination Manifesto aka The Masters of Business Innovation," www.jimcarroll.com/10s/10MBI.htm).

14. Tim O'Reilly, "What Is Web 2.0: Design Patterns and Business Models for the Next Generation of Software," www.oreillynet.com/pub/a/oreilly/tim/news/2005/09/30/what-is-web-20.html?page=4

15. See Wikipedia, s.v. "Mashup (Web Application Hybrid)," en.wikipedia.org/wiki/Mashup_%28web_application_hybrid%29

exchanged places. If we look at the actual media content produced by users, here the relationship between strategies and tactics is different. As I already mentioned, for many decades companies have been systematically turning the elements of various subcultures into commercial products. But these subcultures themselves rarely develop completely from scratch; rather, they are the result of the cultural appropriation and/or remix of earlier commercial culture.[16] AMV subculture is a case in point. On the one hand, media content exemplifies the new strategies-as-tactics phenomenon; AMVs are hosted on mainstream social media sites such as YouTube, so they are not exactly "transient" or "unmappable" (since you can search them, see how other users rated them, and so on). On the other hand, on the level of content, they very much exemplify de Certeauvian everyday life; the great majority of AMVs consist of segments lifted from commercial anime shows and commercial music. This does not mean that the best AMVs are not creative or original, but their creativity is different from the romantic and modernist model of making it new. To use de Certeau's terms, we can describe the process of creating new web content as a tactical creativity, which "expects to have to work on things in order to make them its own, or to make them 'habitable.'"

Conversations through Media

So far I discussed social media using the old familiar terms. However, these very terms—*content, cultural object, cultural production*, and *cultural consumption*—are redefined by web 2.0 practices. We see new kinds of communication where factual content, opinion, and conversation often can't be clearly separated. Blogs are a good example of this; lots of blog entries consist of comments about an item copied from another source. Or think about forums or comments below a web site entry in which an original post may generate a long discussion that goes into new and original directions, with the original item long forgotten.

Often *content, news,* or *media* become tokens used to initiate or maintain a conversation. Their original meaning is less important than their function as tokens. I am thinking here of people posting pictures on each other's pages on MySpace or exchanging gifts on Facebook. What kind of gift you get is less important than receiving a gift or the act of posting a

16. A very interesting feature in *Wired* describes a creative relationship between commercial manga publishers and fans in Japan. One story quotes Keiji Takeda, one of the main organizers of fan conventions in Japan, as saying, "This is where [the convention floor] we're finding the next generation of authors. The publishers understand the value of not destroying that" (Daniel H. Pink, "Japan, Ink: Inside the Manga Industrial Complex," *Wired* 15 [Oct. 2007]: www.wired.com/techbiz/media/magazine/15-11/ff_manga?currentPage=3).

comment or a picture. Although it may appear that such conversations simply foreground Roman Jakobson's emotive and/or phatic communication functions described in 1960,[17] it is also possible that a detailed analysis will show them to be a genuinely new phenomenon.

The beginnings of such an analysis can be found in the work of social media designer Adrian Chan. As he points out, "All cultures practice the exchange of tokens that bear and carry meanings, communicate interest and count as personal and social transactions." Token gestures "cue, signal, indicate users' interests in one another." While the use of tokens is not unique to networked social media, some of the features pointed out by Chan do appear to be new. For instance, as Chan notes, the use of tokens is often "accompanied by ambiguity of intent and motive (the token's meaning may be codified while the user's motive for using it may not). This can double up the meaning of interaction and communication, allowing the recipients of tokens to respond to the token or to the user behind its use."[18]

Consider another very interesting new communication situation: a conversation around a piece of media—for instance, comments added by users below somebody's Flickr photo or YouTube video that respond not only to the media object but also to other comments.[19] (The same is often true for comments, reviews, and discussions on the web in general; the object in question can be software, a film, a previous post, and so on.) Of course, such conversation structures are also common in real life; think of a typical discussion in a graduate film studies class, for instance. However, web infrastructure and software allow such conversations to become distributed in space and time; people can respond to each other regardless of their location, and the conversation can in theory go forever. (The web has millions of such conversations taking place at the same time.) These conversations are quite common; according to a report by the Pew Internet and American Life Project, among U.S. teens who post photos online, 89 percent reported that people comment on these photos at least some of the time.[20]

17. See Louis Hébert, "The Functions of Language," *Signo* (2006), www.signosemio.com/jakobson/a_fonctions.asp

18. Chan, "Social Media."

19. According to a survey conducted in 2007, 13 percent of internet users who watch videos also post comments about the videos. This number, however, does not tell how many of these comments are responses to other comments. See Mary Madden, "Online Video: 57 Percent of Internet Users Have Watched Videos Online and Most of Them Share What They Find with Others," 25 July 2007, www.pewinternet.org/pdfs/PIP_Online_Video_2007.pdf

20. See Amanda Lenhart et al., "Teens and Social Media: The Use of Social Media Gaining a Greater Foothold in Teen Life as They Embrace the Conversational Nature of Interactive Online Media," 19 Dec. 2007, www.pewinternet.org/pdfs/PIP_Teens_Social_Media_Final.pdf

Equally interesting is a conversation that takes place through images or video—for instance, responding to a video with a new video. This, in fact, is a standard feature of the YouTube interface.[21] (Note that all examples of interfaces, features, and common uses of social media sites refer to early 2008; obviously details may change by the date of this essay's publication.) Though social media sites contain huge numbers of such conversations through media, for me the most interesting case so far is a five-minute theoretical video, "Web 2.0 . . . The Machine Is Us/ing Us," posted by a cultural anthropologist, Michael Wesch, on 31 January 2007.[22] A year later this video had been watched 4,638,265 times. It had also generated twenty-eight video responses ranging from short thirty-second comments to equally theoretical and carefully crafted long videos.

Just as is the case with any other feature of contemporary digital culture, some precedents can be found for any of these communication situations. For instance, modern art can be understood as conversations among different artists, artistic schools, critics, and curators. That is, one artist or movement is responding to the work produced by another artist or movement. Thus, modernists in general reacted against classical nineteenth-century culture, Jasper Johns and other pop artists reacted to abstract expressionism, Jean-Luc Godard reacted to Hollywood-style narrative cinema, and so on. To use the terms of YouTube, we can say that Godard posted his video response to one huge clip called classical narrative cinema. But the Hollywood studios did not respond—at least not for another thirty years.

Typically, conversations among artists and artistic schools were not full conversations. One artist or school produced something, another artist or school later responded with their own productions, and this was all. The first artist or school usually did not respond. But, beginning in the 1980s, professional media practices began to respond to each other more quickly, and conversations no longer are one-way. Music videos affect the editing strategies of feature films and television; similarly, today noncinematic motion graphics are employing narrative features. Cinematography, which before only existed in films, is used in video games. But these conversations are still different from the communication between individuals through media in a networked environment. In the case of web 2.0, individuals, rather than only professional producers, directly talk to each other using different media, and the exchange can happen within hours.

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21. The phenomenon of conversation through media was first noted by Derek Lomas in 2006 in relation to comments on MySpace pages.

22. See youtube.com/watch?v=6gmP4nkoEOE

Because of their two-way nature, conversations between people conducted through and around visual and/or sound objects can also be related to exchanges between professional critics. Through the medium of a journal, modern art critics were able to respond to each other relatively quickly—if not in hours, then at least in weeks. In fact, such exchanges between critics (and sometimes modernist artists who also acted as critics and theorists) played a key role in the development of modern art. Think of the battles between different modern isms in the 1910s and 1920s conducted in journals such as the Russian *LEF*, Michael Fried's essay "Art and Objecthood" with its attack on minimalism in the 1960s, or the establishment of postmodern doctrine in *October* in the first half of the 1980s. Certainly, very few if any of the conversations between users and fans today have the same length, theoretical grounding, or role as these professional critical exchanges in the past. They do, however, play increasingly important roles in shaping professionally produced media. Game producers, musicians, and film companies try to react to what fans say about their products, implement fans' wishes, and even shape story lines in response to conversations among cultural consumers.

Is Art after Web 2.0 Still Possible?

Do professional artists benefit from the explosion of media content online and the easily available media publishing platforms? Does the fact that we now have such platforms, where anybody can publish their videos and charge for the downloads, mean that artists have a new distribution channel for their works? Or does the world of social media—hundreds of millions of people daily uploading and downloading video, audio, and photographs; media objects produced by unknown authors getting millions of downloads; media objects fluently and rapidly moving between users, devices, contexts, and networks—make professional art irrelevant? In short, while modern artists have so far successfully met the challenges of each generation of media technologies, can professional art survive the extreme democratization of media production and access?

On one level, this question is meaningless. Surely, never has modern art been so commercially successful. No longer a pursuit for a few, contemporary art has become another form of mass culture. Its popularity is often equal to that of other mass media. Most importantly, contemporary art has become a legitimate investment category, and, with all the money invested in it, it is unlikely that this market will ever collapse. (Of course, history repeatedly has shown that even the most stable political regimes do eventually collapse.)

In a certain sense, since the beginnings of globalization in the early

1990s, the number of participants in the institution called contemporary art has grown, an increase that parallels the rise of social media in the 2000s. Since the early 1990s, many new countries have entered the "global world" and adopted Western values in their cultural politics; they have supported, collected, and promoted contemporary art. Thus, today Shanghai already has not just one but three museums of contemporary art plus more large-size spaces that show contemporary art than New York or London. A number of starchitects such as Frank Gehry and Zaha Hadid are now building museums and cultural centers on Saadiyat Island in Abu Dhabi. Rem Koolhaas is building a new museum of contemporary art in Riga.

In the case of social media, the unprecedented growth in the number of people who upload and view each other's media has led to lots of innovation. While the typical diary video or anime on YouTube may not be that special, enough are. In fact, in all media where the technologies of production are democratized (video, music, animation, graphic design, and so on), I have come across many projects that not only rival those produced by most well-known commercial companies and most well-known artists but also often explore areas not yet touched by those with lots of symbolic capital.

While some of these projects come from prototypical amateurs, prosumers, and pro-ams, most are done by young professionals or professionals-in-training. The emergence of the web as the new standard communication medium in the 1990s means that today in most cultural fields every professional or company, regardless of its size and physical location, has a web presence and posts new work online. Perhaps most importantly, young design students can now put their work before a global audience. They can see what others are doing, and they can develop new tools together; consider, for example, the processing.org community.

Note that we are not talking about "classical" social media or "classical" user-generated content here, since, at least at present, many such portfolios, sample projects, and demo reels are being uploaded on company web sites and specialized aggregation sites known to people in the field. Here are some examples of such sites that I consult regularly: xplsv.tv (motion graphics, animation), coroflot.com (design portfolios from around the world), archinect.com (architecture students' projects), and infosthetics .com (information visualization). In my view, the significant percentage of works you find on these web sites represents the most innovative cultural production done today. Or, at least, they make it clear that the world of professional art has no special license on creativity and innovation.

But perhaps the most important conceptual innovation has been hap-

pening in the development of the web 2.0 medium itself. I am thinking about all the new creative software tools—web mashups, Firefox plug-ins, Facebook applications, and so on—coming from both large companies such as Google and from individual developers. Therefore, the true challenge posed to art by social media may not be all the excellent cultural work produced by students and nonprofessionals, although I do think this is also important. The real challenge may lie in the dynamics of web 2.0 culture—its constant innovation, its energy, and its unpredictability.