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### ***Les objets communicants : un lien entre l'espace du musée et les espaces numériques***

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***Visual Velcro: Hooking the Visitor*<sup>1</sup> de Peter Samis<sup>2</sup>.**

**New technologies** can be part of a comprehensive interpretive plan.

The problem: creating a semantic context for perception. In the first half of the 20th century, museum curators and directors from Alfred Barr in New York to Grace McCann Morley in San Francisco knew that the meanings of the art of their time were far from self-evident, even to the educated Americans whom they hoped to cultivate as an audience. To be an advocate of modern art in those times was to act as an evangelist and an educator, alternately writing scholarly tomes and popularizing pamphlets, and devising innovative educational displays for use in the galleries and circulation on the road.

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<sup>1</sup> Extrait de *Museum News*, Novembre 2007.

<sup>2</sup> Peter Samis is associate curator of interpretation at the San Francisco Museum of Modern Art. This article was adapted from *The Digital Museum: A Think Guide*.

By the 1960s and 1970s, the gallery space had been pared back to a pristine white cube where, to quote Brian O'Doherty: Art exists in a kind of eternity of display, and though there is lots of "period" (late modern), there is no time. This eternity gives the gallery a limbo-like status: one has to have died already to be there. Indeed the presence of that odd piece of furniture, your own body, seems superfluous, an intrusion<sup>3</sup>.

Happily, in the 21st century, there are still embodied humans walking around art museums, and it is with these vibrant and varied individuals in mind that a museum might approach designing an interpretive plan.

Traditionally, interpretive plans have described for whom, how and why a museum interprets its collection, though not necessarily in that order. They acknowledge the diversity of visitors, both in their backgrounds and entrance narratives—the stories people tell themselves of why they go to the museum and what they hope to get out of it. Ideally, they propose a variety of strategies tailored to a range of learning styles. And they often itemize optimal standards adopted by that institution as to tone of voice, type size and wall text length, multiple languages and other accessibility features.

Since the 1990s, museum interpretive initiatives are no longer confined to the traditional analog array of exhibition didactics. Digital technologies have invaded every aspect of our lives, and museum galleries, while they may be holdouts, are no exception. So what is the state-of-the-art in museum interpretation in 2007? What mix of analog and digital? Does it entail every trendy device—each "next new thing"—that comes our way? To what end? What does current research show our visitors respond to most? What do they expect from us? How can we augment their experience in our galleries most meaningfully, least invasively? This essay provides early answers to these questions, with examples.

Consider the following interpretive principles endorsed by Tate Modern in 2004:

- Interpretation is at the heart of the gallery's mission.
- Works of art do not have self-evident meanings.
- We believe that works of art have a capacity for multiple readings and that interpretation should make visitors aware of the subjectivity of any interpretive text.
- Interpretation embraces a willingness to experiment with new ideas.
- We recognize the validity of diverse audience responses to works of art.
- Interpretation should incorporate a wide spectrum of voices and opinions from inside and outside the institution.
- Visitors are encouraged to link unfamiliar artworks with their everyday experience<sup>4</sup>.

The first rule of thumb in devising an interpretive plan for your museum is to put yourself in your visitors' shoes—through direct observation, research (including interviews and/or focus groups) and openhearted empathy. Observation tells us that most visitors have developed well-established patterns in their use of museums. They read the wall texts we provide (whether they derive much benefit from them is another question); they rely on extended object labels (often too much, to the detriment of direct observation); they pick up brochures; some take audio tours. In fact, as of this writing, visitors consistently perform all of these activities in far greater numbers than they use computers, PDAs or

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<sup>3</sup> Brian O'Doherty, *Inside the White Cube: The Ideology of the Gallery Space* (San Francisco: Lapis Press, 1986), 15. (Originally published in *Artforum* in 1976.)

<sup>4</sup> Gillian Wilson, "Multimedia Tour Programme at Tate Modern," in David Bearman and Jennifer Trant, eds., *Museums and the Web 2004*, conference proceedings (Toronto: Archives and Museum Informatics, 2004), [www.archimuse.com/mw2004/papers/wilson/wilson.html](http://www.archimuse.com/mw2004/papers/wilson/wilson.html).

other new media appliances<sup>5</sup>. With that humbling datum in mind, let us approach our problem—no, opportunity—space!

### **Visual Velcro: Hooking Our Visitors Where They Are**

When do people most want information regarding the artworks in an exhibition? Some—more and more, in fact—want information in advance of their visit to the galleries, via the Web, and a smaller number will take the time to return to the museum's website after their visit to learn more. But the vast majority of visitors want their information “just in time,” when they're standing in front of the work. This need focuses our attention in planning for interpretive resources. If, as cognitive psychologists inform us, once a single “chunk” of information enters Short-Term Memory (STM), “[it] has between 3 and 20 seconds to reach Long-Term Memory [LTM],” our window of opportunity to hook into this new sensation is assuredly small. However, “Nothing enters LTM from STM unless it can be related, however tangentially, to something already in LTM.”<sup>6</sup>

To illustrate, let us imagine the humble Velcro patch. It consists of a strip of tiny loops, originally inspired by a burr caught in dog fur or velvet's fuzzy surface<sup>7</sup>. Now imagine a sensory impression, in this case an artwork, arriving in your perceptual field. Unless the visual impression has a hook that can fit into one of the loops on your specific LTM “patch,” it will glide right by and be forever forgotten. If there is something in the artwork, however, that strikes you—a figure, a vivid color, a bodily sensation resulting from the artwork's massive or minuscule scale, a memory trigger or implied narrative connection—then we can say that artwork has “Visual Velcro.”<sup>8</sup> It has hooked into your cognitive structure and stands a chance of remaining in your memory.

Famous artworks have had the receptive Velcro surface primed in advance by repetition and media saturation: Extreme cases would be the Mona Lisa, van Gogh's self-portraits, Dalí's watches or Warhol's soup cans. But most artworks do not benefit from this Madison Avenue-like advance exposure. They live or die on the strength of the impression they make in the moment you stand before them. Different works in our galleries have varying degrees of Visual Velcro. (In the old days, we might have said some works are “more accessible” than others.) And while certain hooks are universal—anything with a face matches our internal wiring, for instance—others are generation- or culture-specific. Still other works seem like they were made from a different miracle material of the mid-20th century: Teflon. Much of the minimalist art of the 1960s, for instance, still leaves viewers baffled. Their gaze just slips right off of it and on to the next piece . . . and shortly thereafter, out of the gallery. But once a visitor has some scaffolding, the very pieces that seemed to merit no attention can become fascinating sensory experiences.<sup>9</sup>

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<sup>5</sup> Three recent studies conducted at the San Francisco Museum of Modern Art have consistently borne this out: Randi Korn and Associates, *Matthew Barney: DRAWING RESTRAINT Interactive Educational Technologies & Interpretation Initiative Evaluation* (San Francisco: SFMOMA, 2006), [www.sfmoma.org/whowere/research\\_projects/barney/RKA\\_2006\\_SFMOMA\\_Barney\\_distribution.pdf](http://www.sfmoma.org/whowere/research_projects/barney/RKA_2006_SFMOMA_Barney_distribution.pdf); Marco Moncalvo, “Matthew Barney Learning Lounge: Visitor Monitoring Data, Analysis and Direct Observation Notes,” (Internal document, SFMOMA, October 2006); and Mauricio Estrada-Muñoz, “Anselm Kiefer Learning Lounge: Visitor-Monitoring Data, Analysis and Direct Observation-based Notes,” (Internal document, SFMOMA, February 2007).

<sup>6</sup> S. Jay Samuels, “Some Essential Label-Writing Considerations for Museum Professionals: A Review of How People Learn and Remember, and What Kinds of Texts Are Most Effective.” Paper commissioned by the Minneapolis Institute of Arts, 1988: 7–26. Cited in “Interpretation at the Minneapolis Institute of Arts: Policy and Practice,” The 1993 Interdivisional Committee on Interpretation (Internal document).

<sup>7</sup> For the tale of the invention of \_Velcro by Swiss engineer Georges de Mestral, see Wikipedia. “Velcro,” *Wikipedia, The Free Encyclopedia*, <http://en.wikipedia.org/w/index.php?title=Velcro&oldid=126397829> (accessed April 28, 2007).

<sup>8</sup> My thanks to Mimi Michaelson for helping coin the concept of “Visual Velcro” during a series of conversations back in the 1990s.

<sup>9</sup> To cite extreme examples, there is a world of difference between the mammoth scale, rich textures, complex materiality and plunging perspectives of a painting by Anselm Kiefer and the smooth touchless surfaces of a sculpture by Donald Judd. Similarly, Bill Viola's video works engage even novice viewers through a

The work of interpretation, then, is to give cognitive hooks to the hookless, and assure that these hooks are sufficiently varied so that they can successfully land in the mental fabric of a broad array of visitors. Once visitors have a framework, all kinds of sensory impressions, emotions and reflections can weave themselves into the fabric of perception. In fact, the more you know about a subject, the more you can learn about it (presuming the mental model you are working with accommodates the new information).<sup>10</sup>

### **Use of Mobile Devices for Interpretation**

The time-honored interpretive solutions in art museums over the past several decades have been wall texts, object labels and audio guides. Audio tours are specifically designed to fill the need for artwork-specific information just in time as you are standing in front of a work. They are typically lightweight and, when worn on a lanyard with headphones, leave your hands free. Yet research repeatedly shows that most people prefer not to take them.

Only in blockbuster exhibitions does device usage go way up: as high as 30–60 percent of visitors. The thinking seems to be: “This is a once-in-a-lifetime opportunity. I made a special trip to see these [Egyptian mummies/relics of the *Titanic*/masterpieces by van Gogh/Monet/Renoir], which will not be brought together again—the press assures me—for at least 20 years, so I had better get the most out of the hour I spend with them now.” The decision to rent a tour is thus born of the confluence of two mutually reinforcing demand curves: the first born of a lifetime familiarity with the exhibition subject at a distance, the second of the need to get just-in-time information in the object’s presence<sup>11</sup>.

Price is clearly a barrier to entry. With museum admission prices heading into the \$20 range, laying out additional dollars for audio interpretation ironically feels more like a frill than a way to get the most value for your time and money. That is why museums like New York’s Museum of Modern Art (MoMA) and the Whitney now offer free audio tours. Both institutions report that free tours for their permanent collection are used far more than pay tours in other institutions.

Age and form (the type of technology) are other discriminating factors. Research shows that visitors under 40 are far less likely to take an audio guide. That said, in a recent study, 79 percent of visitors owning MP3 players—who skew heavily toward the under-35 set—said they would be more likely to download a tour to their own personal hardware.<sup>12</sup> In a recent experiment at San Francisco Museum of Modern Art (SFMOMA), visitors under 40 rated the podcast and cell phone versions of the audio tour 6.2 and 6.0, respectively, on a scale of 1 to 7—higher than the older users rated the “traditional”

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combination of human scale, recognizable characters and implied narrative. Nothing hooks us better than a story. Once viewers are hooked, they will follow you anywhere . . . or at least stay for a while. They have become *engaged viewers*.

<sup>10</sup> As Thomas Kuhn theorized decades ago in his landmark *Structure of Scientific Revolutions*, some mental models, or paradigms, are more fruitful than others. A paradigm stands or falls on how comprehensively it encompasses the data available in the field it is intended to explain. If it excludes critical data, it probably needs revision. Thomas S. Kuhn, *The Structure of Scientific Revolutions*, 3rd ed. (Chicago: University of Chicago Press, 1996).

<sup>11</sup> Unfortunately, no such calculus operates in exhibitions where the artist or exhibition topic is not famous. You might think people would come to the museum, see there is a special exhibition about an unfamiliar topic or artist, and say to themselves: “Well here’s an opportunity to learn something new about a topic that is clearly important—it’s on view here at the museum—but about which I know very little. I’ll take an audio tour to fill in the gaps in my knowledge.” However, it doesn’t work this way. There is simply no prior, pentup demand. Experience shows that people may duck into the galleries, stroll around a bit and visually take in the unfamiliar material, but they are extremely unlikely to pay for a tour. A recent Antenna Audio study put it this way: “[Of those who take them], about two-thirds take audio guides only occasionally, choosing to use a guide when they are especially interested in the subject matter or if the price is right.” Discovery Communications, Inc. *Antenna Audio Global Visitor Survey* (Unpublished study for internal and client use, 2006).

<sup>12</sup> Discovery Communications (2006).

audio tour. The reasons cited included the ability to access information on demand, familiarity and comfort with the device and low or free cost.<sup>13</sup>

In fact, the tour these visitors accessed—either via downloadable podcast or cell phone—was virtually identical to that offered on the traditional audio tour. The only difference was the format in which it was delivered. An opportunity clearly exists to package and promote interpretive and contextual enhancement to visitors in this younger demographic in a way that synchronizes with their self-image and lifestyle.

Since 2001, many museums have developed PDA prototypes; fewer have found the format sustainable. SFMOMA first delivered artist videos on PDAs in its “Points of Departure” exhibition. Tate Modern has been offering hand held multimedia tours via PDA to their visitors since 2002. Perhaps the most effective aspect of these devices is not so much their ability to deliver video on demand, but the way they extend the standard audio tour through their “Touch and Listen” feature.

This template enables visitors to use the image of the artwork onscreen as an interface to call up short commentaries about different aspects of the object they are observing. It is as if they were there with a curator or informed friend, pointing at the artwork and saying, “Tell me about this part” and “What about that?” The experience comes close to a conversation in its give-and-take rhythm; rather than getting stuck with an overlong commentary, the user initiates each request for more information—and that information is reliably targeted to specific regions of the artwork, following William Carlos Williams’s edict “No ideas but in things.” When the voice talks, nothing happens onscreen: All the drama is in the object itself. The PDA is simply an intuitive, indexical form of visual menu.

Hopes	20 minutes
Expectations	15
Actual (mean)	4:16
Actual (median)	3:20

**Figure 1**

### **Visual Velcro, Cont.**

Originally, these pilot multimedia tours were free of charge and focused specifically on the permanent collection; now they accompany special exhibitions as well and are offered for a fee. While price is surely a barrier and people hesitate to sign on, not knowing what they will be getting, those who actually take the tours give them enthusiastic reviews.

Among the findings from a recent study conducted during a “Frida Kahlo” exhibition:

- Visitors looked longer, noticed detail, understood more.
- Audio commentary “guides your eyes” around the painting.
- Majority felt the guide encouraged them to spend longer in the exhibition.<sup>14</sup>

In this study, the time-honored wall label was criticized as a negative example: “The plaques by the side of paintings can be a bit distracting; with these [multimedia tours] you can look and listen.” Similarly, in a recent Whitney Museum study, a visitor testified as to how a simpler, non-multimedia audio tour served to focus her attention on the specifics of an artwork:

*Well, you have a tendency, your eyes have a tendency to see everything in the room, so your eyes can be easily distracted by something else that you see, rather than, when you’re forced to listen to*

<sup>13</sup> Randi Korn and Associates (2006).

<sup>14</sup> TWRResearch. “Evaluation of a Multimedia Guide Accompanying the Frida Kahlo Exhibition” (Unpublished evaluation report by TWRResearch for Tate Modern, London, August 2005).

*something, you're actually looking at every detail in the painting or sculpture rather than, you know, glancing over things and ignoring them or forgetting them.*<sup>15</sup>

In a tracking and timing study conducted at the Detroit Institute of Arts, museum curators, administrators and staff were asked how long they hoped visitors would spend in a given exhibition. Then, to add a dose of sobriety, they were asked how long they expected visitors to spend.<sup>16</sup> The results are shown in Figure 1.

Speaking of time commitments, initial research suggests very different profiles for those who take standard audio tours and those who choose instead to access the same audio commentaries just in time on their cell phones. Older, veteran museum-goers who swear by audio guides choose them because the tours offer a customized “bubble” experience that will saturate them with sound and insight for 45 minutes or more and ensure they get full value from their exhibition investment. Cell phone tour users, on the other hand, seem to want to preserve their independence: they are more comfortable with an à la carte, “cafeteria-style” alternative, where they can call up and get on-demand doses of information about specific objects—at this point, without cost. No commitment required: They get to shape their experience, and their information flows, as they go.

So what does the future hold in store for the handheld tour? Millions of dollars have been spent on the quest for the holy grail of Wi-Fi “anytime, anywhere” push access, just so visitors do not have to use onscreen menus or enter object numbers to trigger the playback of multimedia content. It now appears certain that PDAs, which once enjoyed an aura of manifest destiny as the next museum interpretive device, are not long for this world—destined instead to give way to iPods, smartphones and, as of June 2007, that new synthesis, the iPhone. So the watchword in planning would be “Design for Experience, Not for Hardware.”<sup>17</sup>

The surest way to hew true to that adage is to develop content that is hardware-independent, and not beholden to any one vendor or particular technology. In fact, the more that a museum's content obeys Web standards, the more likely it will play on visitors' own constantly evolving hardware, relieving museums of the headache of stocking, sustaining or leasing a fleet of aging players for their visitors.

What people really need, to use Second Story Interactive Studios cofounder Brad Johnson's term, is “on-demand variable mediation,” not a single choice-point when they enter the museum—to rent an audio tour or not—but rather a series of available resources all along their route.<sup>18</sup>

### **Fixed-Position Gallery Interactives**

While handhelds offer the promise of mobility, most museum visitors do not want to walk through a museum with a custom tour or a cell phone held to their ear. For these other visitors, another class of interpretive technology—smart tables and other fixed-position gallery interactives—offers many benefits.

Smart tables first saw public use in MoMA's 1999 “Un-Private House” exhibition. Flavia Sparacino of the MIT Media Lab worked with MoMA and Cambridge-based NearLife to develop a circular sit-down table within the exhibition space. When users moved a coaster bearing the image of one of the project houses to their “place setting” at the table, its RFID tag was read, identifying the project and

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<sup>15</sup> Jeffrey K. Smith, Izabella Waszkielewicz, Kathryn Potts and Benjamin K. Smith, “Visitors and the Audio Program” (Unpublished evaluation report for Whitney Museum of American Art, New York, December 2004).

<sup>16</sup> Matthew Sikora and Kenneth Morris, “Gathering Visitor Feedback to Exhibition Design Before Designing the Exhibition” (Michigan Museums Association Annual Conference, Detroit, October 2005).

<sup>17</sup> Gyroscope, Inc., “Museums in Transition: Emerging Technologies as Tools for Free-Choice Learning” (Richmond: Science Museum of Virginia and Gyroscope, Inc., 2006), 26, [www.gyroscopeinc.com/News/articles/MuseumsInTransition.pdf](http://www.gyroscopeinc.com/News/articles/MuseumsInTransition.pdf).

<sup>18</sup> Oakland Museum of California, *Creative Technology Colloquium* (Oakland: Oakland Museum of California, 2006), 18–19.

triggering a projection of floor plans or related video commentaries on the table in front of them; these projections could in turn be sent to the lazy susan at the table's center, which was then rotated for others to share.<sup>19</sup>

A simpler, far more off-the-shelf implementation of a smart table idea took place in SFMOMA's 2001 exhibition "Points of Departure: Connecting with Contemporary Art."<sup>20</sup> Basically upturned touch screen kiosks in a piece of blond wood furniture that blended with the gallery, these tables aimed to augment static wall texts with living, breathing personalities that connected visitors just in time with artists and curators, and, through them, with distinctive perspectives concerning the art on display.

The tables' content comprised three levels, corresponding to three sets of voices and kinds of questions, shown in Figure 2.

Level	Speakers/Agents	Questions
1	Curator Videos	Why would anyone make this? What is it doing in this big important building?
2	Artist Videos	Why did I make this? How did I make this?
3	Visitor Activity	What would you be doing if you made this?

**Figure 2**

Each smart table was tailored to offer a 3–5 minute experience for the average visitor—though they contained about 20 minutes of content if all levels were fully explored.<sup>21</sup> They only treated the artworks visible in their immediate vicinity; to hear about artworks in other parts of the exhibition, you had to use the smart tables in those zones. The presence of actual curators and a lightness and variety of tone provided a welcome departure from the faceless, anonymous museum voice so common to museum wall texts. Curatorial commentary was ruthlessly pruned to sound-byte length, enabling the editing of multiple perspectives into each table. The artist videos were much appreciated by the visitors, as were the activities that gave visitors the chance to try out the artistic concepts.

Since that time, other museums such as the Indianapolis Museum of Art (IMA) and the Churchill Museum and Cabinet War Rooms in London have deployed far more technologically ambitious interactive tables, to serve as a catalyst for group or collective experience. The IMA's "etx Perceptable," situated in what was then called its "X-Room," allowed visitors to place one of three paddle-like tools over a changing array of artworks projected on a tabletop to trigger either associated artworks, interpretive information or maps displaying the artwork's location.

The Churchill Museum's "Lifeline Table" creates a 19-foot-long visual interface to a database of documents, photos, journals and letters that chronicle Winston Churchill's 90-year life. Certain dates, often unknown in advance to users, trigger rewards or "Easter eggs," light and sound animations that spread across the table.

<sup>19</sup> O. Omojola, "An Installation of Interactive Furniture," *IBM Systems Journal* 39 (2000), 3–4; and Flavia Sparacino, Kent Larson, Ron MacNeil, Glorianna Davenport, Alex Pentland, "Technologies and Methods for Interactive Exhibit Design: From Wireless Object and Body Tracking to Wearable Computers," [www.archimuse.com/publishing/ichim99/sparacino.pdf](http://www.archimuse.com/publishing/ichim99/sparacino.pdf).

<sup>20</sup> The exhibition was the result of a unique collaboration between curatorial and education departments and benefited from the support of outside partners such as MIT's Media Lab, Steelcase, and Compaq. In the final analysis, the SFMOMA smart tables were not "smart" in the MIT sense; they only appeared smart to gallery visitors because they had a menu of engaging talking heads cycling through them.

<sup>21</sup> Taken together, the six tables contained a total of two hours of content. For a more complete description of the "Points of Departure" exhibition and its development process, see Peter S. Samis, "Points of Departure: Curators and Educators Collaborate to Prototype a 'Museum of the Future,'" in *International Cultural Heritage Informatics Meeting: Cultural Heritage and Technologies in the Third Millennium*, vol. I, full papers, eds., David Bearman and Franca Garzotto (Milan: Politecnico di Milano, 2001), 623–638.

Tables of this scale dominate the gallery and so far have been almost exclusively deployed in history museums. It is unclear as of this writing how and when they might be adapted to an art museum setting.<sup>22</sup>

Other types of digital interactives that have worked remarkably well in art museum settings include the Philadelphia Museum of Art's interactive scroll and ceramic bowl facsimiles, which offer visitors a "kinaesthetic" experience of Japanese artifacts, and the Cleveland Museum of Art's wall-mounted, touch-screen exploration of the hidden layers of its early Picasso painting, *La Vie*.

### **Diversifying the Menu: Learning Lounges and InfoCafés**

Integrating the benefits of just-in-time context provided by educational technologies within the social spaces of the museum leads to what may be the next frontier: the design of interactive spaces where both analog and digital resources are available to enhance visitor experience.

At SFMOMA we have integrated "Learning Lounges" in two exhibitions since 2006. Visitor observation, surveys and interviews reliably indicate that these learning spaces work: They make the whole exhibition more meaningful. While exploring an exhibition, many cognitive threads open up; a learning lounge gives visitors the opportunity to reflect and review, to augment their emergent understandings while still in an art space, before they have to resume the hectic pace of the outside world. This is the point of maximum "wanting to know"—and the opportunity to hook the artworks into the fabric of viewers' lives.

Interestingly SFMOMA's research shows that use of analog resources trumps the digital in these hybrid lounges. People are far more likely to watch the artist video and read the illustrated FAQs on the walls than to sit down at a computer kiosk. Years of museum-going and a society that processes knowledge through video apparently predispose people to prioritize certain forms of literacy. Visitors who do sit down at the computers often spend a long time there and rate them highly, but others say the computers remind them too much of work and require too much effort. Compared to straight linear video where all the decisions have been made, they do require effort. You must choose and choose again—and navigationally speaking, the kiosks are a bit of an unknown quantity. (That said, when no dedicated artist video exists, kiosk usage goes up considerably.)

I have a theory—which has not yet been put to the test—that something akin to the old Marshall McLuhan distinction between hot and cool media is at play here.<sup>23</sup> Art is hot and wall text and graphics are hot—they are familiar, almost handmade. But the glass pane of flat screen computer displays is cool. It speaks of a world quite remote from the handmade warmth in the galleries. So one can understand why some visitors—especially older ones—who come to the art museum to restore their souls by contact with something handmade and personal would shun technologies in this liminal zone. They might go home and check out the same program on the Web, but that is after they have left this place of refuge. As for the artist video, it may be playing on a similar flat screen, but it is made hot by the presence of the artist—the one who made all the objects you have just seen.

Video, text, graphics and seating all come together at Paris's new Musée du Quai Branly. There, a freestanding, leather-covered interpretive wall snakes like a spine through the heart of the permanent collection galleries, blending analog and digital resources with raised, texture-mapped graphics and commentaries in Braille for the visually impaired.

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<sup>22</sup> Second Story Interactive Studios has recently developed a new and equally ambitious interactive table for the National World War I Museum in Kansas City, Mo.

<sup>23</sup> Marshall McLuhan, *Understanding Media: The Extensions of Man* (Cambridge: MIT Press, 1994). In a 1965 CBC television interview, McLuhan stated that "cool" characterized "a medium that uses all of you, but leaves you detached in the act of using you," [http:// archives.cbc.ca/IDC-1-74-342-1818/people/mcluhan/clip4](http://archives.cbc.ca/IDC-1-74-342-1818/people/mcluhan/clip4).



In London, Tate Modern routinely posts exhibition-related wall graphics—and sometimes videos—to the wall of its upstairs café. The museum recently collaborated with Ab Rogers Design to develop a “Learning Zone” on the fifth-floor landing adjacent to the permanent collection galleries. The zone’s bright red, high-impact plastic furnishings serve as a magnet for teen and 20-something audiences, who go there to play free association games with artworks, brief themselves on artists and movements through witty multimedia kiosks and catch a revolving selection of video screenings. Informality and participation are key here: heavy-handed, musty pedagogy has been banned, and visitor viewpoints are actively solicited via note cards, then filtered and posted in a set of hanging red bulletin board frames.

Learning lounges are inherently social spaces. Their use is not restricted to an individual, as audio tours often are. Moreover, they enable another behavior: People use not just one or two interpretive resources but four, five or six—and the more they use, the more highly they rate the exhibition, and the more meaningful they say the art is for them.<sup>24</sup> There is clearly no single magic bullet. People are inherently diverse in their learning styles, generational inclinations, entrance narratives and comfort levels with the objects we present—but zones like these that combine analog and digital resources help to weave a cognitive-emotive tapestry around the artworks that invites and structures engaged inquiry. Through such environments we welcome and meet our visitors where they are.

### **Adding the Human Element**

While we are on the topic of social learning environments, let us not forget that museums have another interpretive asset in the galleries beyond object labels, wall texts, audio, video and computers: PEOPLE! Curators, museum educators, docents and animators of various stripes all serve as the ultimate analog interactive device: context-sensitive, responsive to visitor questions and observations in real time, with built-in Artificial Intelligence (AI)—minus the “A.” The major drawback is that these in-person tours, even if offered several times a day, do not reach the majority of visitors.

More and more museums are experimenting with either replacing or supplementing their in-gallery security personnel with gallery attendants who know something about art and are encouraged to respond to visitor questions and converse with them about the works, all the while keeping their eyes on the objects. This extension of the museum guard’s vocation beyond simple asset protection holds great promise, as gallery attendants are typically the only museum staff with whom our visitors come into contact when they are looking at art. Institutions ranging from the Phillips Collection to Tate, the Walker Art Center and the San Jose Museum of Art have seen fit to hire art students or artists to work in their galleries. The Guggenheim has adopted a hybrid solution, employing gallery guides to converse casually with visitors about the art even while they retain their traditional guard staff.<sup>25</sup> At SITE Santa Fe, a contemporary art space in New Mexico, the gallery attendants have been trained in Visual Thinking Strategies so they may facilitate visitors’ interactions with a changing array of cutting-edge, contemporary art.<sup>26</sup>

### **Conclusion**

Interpretive practice has clearly evolved and diversified over the past ten years to include an array of in-museum digital devices, both mobile and fixed. Yet none of these has supplanted those time-honored staples of gallery interpretation: wall texts, object labels and live tours. Surveys show that

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<sup>24</sup> What’s more, in SFMOMA’s Matthew Barney study, people familiar with Matthew Barney were *more* likely to use all these resources than people who had never heard of him. This echoes the rule I mentioned before, that people avail themselves of an interpretive resource like an audio guide if they already know something about the subject. Counter-intuitive perhaps, but there it is. For a more in-depth evaluation of the range of interpretive devices and resources offered in SFMOMA’s Matthew Barney exhibition, see Peter Samis, “Petroleum Jelly Served Seven Ways: Visitor Response to a Multi-Track interpretive Approach to ‘Matthew Barney: DRAWING RESTRAINT,’” in the proceedings of *Museums and the Web 2007*.

<sup>25</sup> Ted Loos, “ART: Hi, Let’s Talk Art. No, Really. It’s My Job,” *New York Times*, August 6, 2006.

<sup>26</sup> See [www.vue.org](http://www.vue.org).

analog resources are still, along with linear film and video, the most frequently utilized interpretive resources in our museums—even if they are not necessarily the most highly rated!<sup>27</sup> The discrepancy between visitor use patterns and satisfaction ratings is clear indication that a “teachable moment” is at hand. Research shows that visitor experiences are largely shaped by visitor expectations;<sup>28</sup> it follows that museums themselves must alter visitor expectations by actively promoting innovative interpretive resources as an essential part of the museum experience. The phenomenon may be partly generational: As we transition from a paper-centric generation to one of digital natives, the printed word may lose some of its primacy, and technology use will feel more natural. But as of this writing, a hybrid palette of complementary resources—both analog and digital—seems to offer the best chance of giving our visitors a cognitive scaffolding that hones their confidence and builds their capacity to experience even the most unfamiliar and challenging art.

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<sup>27</sup> In the Randi Korn evaluation of interpretive resources for the “Matthew Barney” exhibition cited above, the podcast and cell phone tour rated most highly among an array of interpretive resources, while traditional analog texts ranked last.

<sup>28</sup> John Falk and Beverly Sheppard, *Thriving in the Knowledge Age: New Business Models for Museums and Other Cultural Institution* (Walnut Creek, Calif.: AltaMira Press, 2006).

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