For better or worse, digital technologies —
smartphones, LEDs, social networking —
are changing our cityscapes.

by Andrzej Zarzycki

Wall to Wall: The

"Foursquare is all about helping you find new ways to explore the city. Earn points and unlock badges for discovering new places, doing new things, and meeting new people."

This message greets you when you download a smartphone application from one of the popular online social-networking sites. To increase its functionality, the app links you automatically with your Facebook friends and Twitter feeds. The message encourages you to join a virtual club of urban dwellers and promises exciting new possibilities. By monitoring your activities through your phone's GPS, the app alerts you when friends are nearby, showing their location. It also helps you to map daily routines, comment on venues, and learn from anonymous contributors. On occasion, it gives you a personal insight into private arrangements within the public realm: Navneet Alang, a Toronto-based blogger for *This Magazine*, writes about his favorite tip from Foursquare, which suggests asking a waiter at a certain restaurant for "the secret pink menu." "You could call it a new approach to urban discovery, one that takes the online mantra of 'by the people, for the people' and mixes it with happenstance," he adds.

Digital technology increasingly, and more and more seamlessly, bridges the physical landscape with virtual environments to form visually rich and emotionally engaging narratives. Mobile devices serve as portals to enter and navigate multimodal landscapes. Geographic data, pictures, and brief commentaries merge into a single data-based landscape. The distinction between the actual and virtual, or the permanent and temporal, fades when seen through the screen of a smartphone. Similarly, the distinction between the built and the conceptual is blurred with the integration of LED and projection technologies into architectural façades, effectively transforming previously static façades into dynamic media objects. Landscape becomes a continuous interface between

these urban media façades and the ever-expanding use of digital devices with interactive content. Interactions and experiences that in the past were predominantly confined to art-gallery installations or online chat rooms become Main Street events with broader participation and authorship. While perceived by some as invasive and overreaching, media participatory landscapes could also help us to reclaim the public realm and democratize its content.

Media façades

Media-infused urban spaces such as New York's Times Square, or to a greater degree the Ginza and Shibuya neighborhoods of Tokyo, expand their content into mobile communication devices and often merge with the online experience. This is not limited to their visual identities or content delivery methods; these urban spaces often redefine a message and authorship within a public domain. By doing so, they create opportunities for, though not necessary guarantees of, greater public participation.

Building on the increasing role of mobile devices in people's everyday lives, many initiatives have attempted to capture this new audience and functionality. A recent ad campaign by Microsoft allowed random users to contribute a short phrase about their use of personal computers to "I'm a PC" advertisements. Each respondent's photograph and phrase were later displayed on one of the media façades in Times Square, giving the participant 15 seconds of global visibility. This moment of personal visibility was further documented by a webcam, fed into an online gallery, and sent to the contributor in a personalized e-mail. The entire process effectively established a communication loop from mobile device to media façade and back to mobile device. Although this was a commercial campaign, it established an operability that could be easily adapted to social activism and other purposes.

Digital Landscape

Green Cloud (*Nuage Vert*), Helsinki, by HeHe. Image based on original photo by Antti Ahonen.

Interactive Power Station "Shooting Star" project, Brussels, by Magic Monkey. Photo © magicmonkey.net.

Architectural responses

Most commercially driven media façades are simple projection or display screens superimposed on an exterior wall without considering architectural design. They often are seen as design eyesores that desperately cry for public attention. Recently, however, more buildings have incorporated media components into their façades in ways that do not compromise design. In the Graz Art Museum, Peter Cook and Colin Fournier introduced "communicative display skin" that features a large, low-resolution media façade. Their design relies on abstract patterns with pixelated text or graphics, treating the media component as yet another building skin and augmenting it with a textural reading. This approach allows media content to enhance a structure's appearance and to communicate a message or convey a building's functional content without compromising its design integrity. In other projects, media screens and projection lighting elements change the three-dimensional perception of an immobile object, as seen in works by digital-media firm NuFormer. Temporal façade alterations can inform, entertain, or simply showcase a work of architecture in new ways, continuing a tradition of public artists such as Krzysztof Wodiczko.

Furthermore, media façades create an opportunity to redefine the relationship between a building and the public realm. In contrast with the Modernist dictum of a façade as an expression of the inner functional or structural logic of a building, these projects connect it back to historic practices, which considered a façade as an enclosure of a public space.

Social activism

Just as graffiti, posters, and handbills have historically appropriated the façades of private structures for public speech, so have media-enhanced landscapes already begun to extend beyond commercial use or aesthetic considerations into the sphere of social discourse and activism. The implications are profound: nothing less than the transfer of the public domain back from corporate ownership to public authorship. Equally profound is the opportunity for individual expression similar to that found in online environments. An example of this form of public discourse is a Dutch project, the D-Tower by artist Q.S. Serafijn and architect Lars Spuybroek (NOX), which maps the emotions of the inhabitants of the city of Doetinchem and expresses them through an interactive art installation. This installation relies on the input of voluntary collaborators; because the data are not analyzed or sampled statistically, the work is purely a subjective form of expression. The "Green Cloud" art installation by HeHe (Helen Evans and Heiko Hansen) confronts contemporary environmental issues, displaying energy usage by Helsinki residents. Exhausts from a power plant are used as a screen for media projections, directly correlating the visual presence of the "green cloud" image with the amount of energy produced. This adaptive installation continues to remind residents of the role they play in energy conservancy. The Green Cloud successfully integrates the ephemeral qualities of landscape with the effective use of digital media. Both installations illustrate social, emotional, or environmental data using an interface that puts residents into the position of active content creators, thus shifting their role from consumption to authorship.

D-Tower interactive public artwork project, Doetinchem, Netherlands, by artist Q.S. Serafijn and architect Lars Spuybroek (NOX) with Pitupong Chaowakul, Chris Seung-woo Yoo, and Norbert Palz. Photo courtesy NOX.

Graz Art Museum media façade, Graz, Austria, by Realities:United in collaboration with Spacelab Cook Fournier and ÖBA Architektur Consult. Photo by Peter Pakesch/ Landesmuseum Johanneum/CC BY-NC-ND 3.0.

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In contrast to these anonymous contributions to public discourse, the recent Interactive Power Station "Shooting Star" project by Magic Monkey drew upon the urge to claim authorship of individual expression. "Create your own Shooting Star and share your wish with your loved ones and the millions of commuters!" encourages a Web advertisement for the project, which was installed during the December 2009 holiday season in Brussels. The Shooting Star project allowed contributing individuals to customize their holiday messages, using the Electrabel Power Plant cooling tower as a canvas for the animated LED installation. The response from the public was high, with the project attracting over 5,000 contributions within a 20-day period. The Interactive Power Station project built upon concepts previously developed in two others: Toyo Ito's "Tower of Winds" in Yokohama, which used light as a masking device for an industrial site, and the "I'm a PC" campaign in Times Square discussed earlier, which incorporated open online public participation.

The need

As digital media, and especially media façades, assume a more prominent role in contemporary architecture, there is a growing need for research and for creative models that demonstrate enriching and meaningful integration of this technology into the urban environment. A number of questions emerge for architects and designers. How can the integration of new technologies with architecture and landscape create spaces that evoke new experiences, touch us emotionally, and help us feel at home? How can media-rich architecture and landscapes provide new answers for the needs of a mobile and globally connected society?

These are the issues we need to address in the next decade, or life — in the form of commercial enterprise — will answer them for us. The question is not whether we like or dislike the extension of media content into architecture and landscape; the digital media landscape, in the form of advertisement and corporate identity, is already here. Instead, the challenge is to direct its development toward the aesthetic benefit of our urban environments and the cultural and political benefit of our society. ∎

Andrzej Zarzycki is an assistant professor in the College of Architecture and Design at New Jersey Institute of Technology (NJIT). His work as a designer and researcher focuses on media-based environments and the use of digital tools to create experiential architectural spaces. He is a co-winner of the SHIFTboston Ideas Competition 2009.