

The Once and Future Past

Just over a decade ago, my professional trajectory in architectural education took me from an art school (Pratt) to a tech school (NJIT), from a place that still privileged the pencil to a place that had eagerly embraced the mouse. Back in Y2K, architecture schools were so abuzz with a brave new world vibe that it mattered little whether CAD induced hype or hysteria within one's NAAB accredited program. It seemed inevitable that the academy was about *to boldly go*, and if we were uncertain of the destination, Moore's law guaranteed that we were going to get there fast. Still, as a professor of history and a practicing historian, I had not yet reckoned with what all of this meant for the future of studying and teaching architecture's past.

Even as the digital revolution was transforming practice and pedagogy in the studio, things were surprisingly status quo in the lecture hall and seminar room. Slide projectors did give way to XGAs, but the move from Kodachrome to jpeg, like the transition from glass lantern plates to 35 mm celluloid a half a century before, simply substituted one form of reproduction for another. In fact, given the preponderance of slide scanning in the early days of the oughts, in many cases we were just reproducing the reproductions. Although many academics were creatively exploiting the new presentation software, for most professors, the format was little more than a twenty-first century version of a carousel tray. It was true that you could show more images, or the same image repeatedly and you could add text, video, and sound, but the average PowerPoint presentation of the early 2000s barely departed from the side-by-side display of

images that had been standard since the early 1900s.

Today, image databases organize building plans, sections, interiors, and exteriors; screen capture software records lectures and converts them to MP4s that are downloaded to iPods and laptops; course web sites and virtual learning environments provide a convenient place to park all this information for the duration of the semester. Students now have 24/7 access to an astonishing array of history-related material via computers sitting on their increasingly obsolete drafting tables. But instantaneous access to course content is not all that different from a Kostof or Trachtenberg survey book sitting on a desk.

In teaching architecture's history, even with the most immersive, interactive, and collaborative learning platforms, we have used technology mainly to transform modes of presentation through and with new tools of representation. Our colleagues teaching architecture's design, meanwhile, have used technology to transform methods of practice as well, from parametric modeling to CNC fabrication. Within the academy, this difference has produced a digital divide between history and design that is as pernicious as it is subtle. Dazzled by high-res and big gigs, we did not even realize this divide existed much less that it was reinforcing the tired master/servant design/history paradigm, to the detriment of architectural education as a whole. Unless architectural historians who are also architectural educators work to bridge this divide, history and design will move further apart as curricular concerns and as disciplinary correlates.

During the 1990s, critical theory pointed towards new synergies between design and history and during the 2000s it seemed as if a generation of architecture academics, both designers and historians, spoke the same language and worked toward the same goal—using critical theory to analyze architecture as a form of cultural production. Today, digital technologies seem to offer comparable synergistic possibilities within the academy. But practice precedes pedagogy and historians must, therefore, make technology as much a part of their professional practice as designers have.

We must master advanced visualization techniques to use 3-D rendering and even BIM to develop new ways of compiling and analyzing the buildings of the past. We must explore data mining, geographic information system, and computation for quantitative analysis of historic architecture. We must embrace new forms of collaboration, exploiting crowd sourcing, wikis, and the cloud to identify and utilize archival and ephemeral information. Such digital tools could provide us with more comprehensive data-based methods for tracing the diffusion of architectural ideas, materials, and motifs across media, time, and place. They could enable us to build information models of individual structures or landscapes to examine how they have evolved since they were completed or occupied. These digital tools could lead us to interpretive revelations we cannot even imagine. At the very least, they will enable designers and historians within the academy to move forward together to transform architectural education in the information age.