

KEVIN BLOCK –

Autonomy Online: A Review of edX’s “The Architectural Imagination”

In February of 2017, Harvard University’s Graduate School of Design (GSD) and edX, a provider of massive open online courses (MOOCs) based in Cambridge, Massachusetts, released “[The Architectural Imagination](#),” a free, self-paced introduction to architectural theory and history. The course, led by K. Michael Hays, features lectures by Erika Naginski and Antoine Picon, all of whom are on Harvard’s faculty. While “The Architectural Imagination” is not the first architecture course that’s been administered online—several accredited architecture schools around the country have previously developed online courses for their respective curricula—it’s the first time that a major MOOC provider, with all of its resources and international cachet, has entered the field of architectural education.

Enrollment statistics for “The Architectural Imagination” are both impressive and surprising. According to representatives of edX, in the five-month period between the course’s release date and the end of June 2017, more than 115,000 students had enrolled, a number that is likely larger than the enrollment of all offline architectural theory courses offered in the United States combined. The median age of students is twenty-six, which is younger than average for HarvardX courses (the university’s online learning platform) and far younger than the retired, lifelong learner that one might imagine sitting in the back of the virtual lecture hall. Of these students, 56 percent are female, and the largest portion, 23 percent of them, are logging on from Brazil, despite the fact that the course is in English and does not yet have subtitles (followed by 13 percent from the United States and 5 percent from Mexico). EdX has not disclosed what percentage of these students have chosen to pay \$99 for a certificate of completion, which would make them eligible to receive the continuing education credits for the American Institute of Architect’s licensing program, but one can safely assume that this group of payees constitutes a small minority, given the geographic distribution of enrollees. [1]

MOOC mania peaked in 2013, and the current consensus among those who have remained interested in the development of higher education is that courses like “The Architectural Imagination” need to be evaluated on merit, as one might a new monograph or scientific journal article, rather than as a technological panacea or plague. To evaluate a MOOC on merit, however, requires disciplinary familiarity. As concerned scholars and educational technologists continue to debate the institutional and economic implications

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[1] Carolyn Tiernan, “Sparking the Architectural Imagination: HarvardX Learners Share Their Work,” *edX Blog*, June 28, 2017, [link](#). Demographic statistics for student participation have been provided to me via email by John Ruzicka, a HarvardX business development consultant. John Ruzicka, email to Kevin Block, “Re: Architectural Imagination—Introduction and Request for Information,” September 11, 2017.

of online education, members of each disciplinary community need to try to understand how online courses in their particular fields work, how the online platform affects the nature of course content in their discipline, and whether the pedagogical tactics that the participating faculty and MOOC producers employ are effective or not. The only way to enrich the learning experience that a MOOC like “The Architectural Imagination” provides is by providing informed feedback. The participation of architectural educators can also help to ensure that the course is blended appropriately within larger, pre-existing systems of instruction. [2]

Evaluating this last component of a MOOC (pedagogical tactics and faculty performance) can cause discomfort for many in academia. Normally, architectural theory appears as critical discourse in the pages of a journal, detached from bodies that were disciplined for campus and conference interactions, not the computer screen. This separation of theory from theorist, an effect of publication, has a way of attenuating the need for body awareness that video recordings demand. Teaching style is also highly personal. Nevertheless, since the performative dimension of online education is essential to the course’s success—and is in fact revealing of some of its basic presuppositions—performance can and should be respectfully addressed. In “The Architectural Imagination,” *how* the faculty participants make their presentation, including what we might call the course’s scenography, is in the end more noteworthy than the course content itself. That content is mostly standard, canonical fare. The presentation, in contrast, is full of interesting risks and contradictions.

Learning at a Distance: Democratizing or Commoditizing Architectural Education?

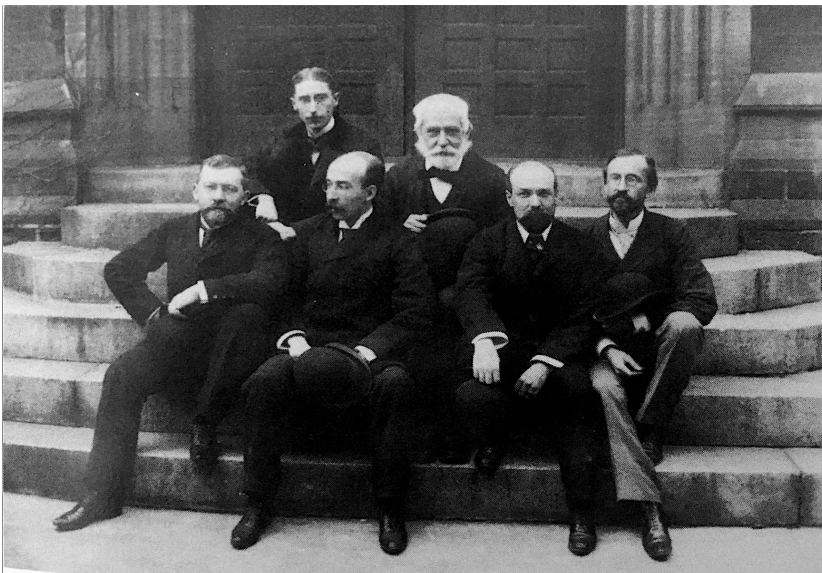
“The Architectural Imagination” is part of a longer history of distance learning in architectural education that begins at least as early as the print revolution of the early Renaissance and continued in the later-Renaissance treatises of Serlio, Vignola, and Scamozzi. The “paper palaces” of these architectural treatises not only codified architectural practice but also disseminated architectural theory to a wider community than the Albertian elite, including those who did not speak the classical languages. In the middle of the nineteenth century, the domestic pattern books of Alexander Jackson Davis and Samuel Sloan brought fragments of architectural theory to the carpenters and builders of small-town, antebellum America. In the decades after the end of World War I, recordings of architectural debates and lectures were radio broadcasted by the BBC to the British public. And a half century later, in 1987, America’s Public Broadcasting System (PBS) released Spiro Kostof’s “America by Design” television series, which purposefully toed the line between public education and popular entertainment. “This isn’t Lord Kenneth Clark telling you the high points of Western culture,” insisted Kostof, referring to the landmark BBC series *Civilization* that first aired in 1969. “This is just some guy simply helping you see,” said the renowned professor of architectural history at the University of California, Berkeley. These four examples differ culturally, technologically, and pedagogically, but they each presented architecture, in their own separate ways, as a discipline amenable to distance learning. [3]

[2] For the most current publicly available data on the growth of MOOCs, see “By the Numbers: MOOCs in 2016,” a report based on data collected by Class Central, [link](#). See also Phil Hill, “MOOCs Are Dead. Long Live Online Higher Education,” the *Chronicle of Higher Education*, August 26, 2016. On labor issues related to online education, see Robert A. Rhoads, *MOOCs, High Technology, and Higher Learning* (Baltimore, MD: Johns Hopkins University Press, 2015). My thinking on faculty labor has been especially informed by Colleen Lye and James Vernon, “The Erosion of Faculty Rights,” the *Chronicle of Higher Education*, May 19, 2014, [link](#). For a general introduction to MOOCs, of which there are now several, see Jonathan Haber, *MOOCs* (Cambridge, MA: MIT Press, 2014). On pedagogical tactics for MOOCs, I recommend Michelle D. Miller, *Minds Online: Teaching Effectively with Technology* (Cambridge, MA: Harvard University Press, 2016).

[3] These four historical examples are discussed in the following references: *Paper Palaces: The Rise of the Renaissance Architectural Treatise*, ed. Vaughan Hart with Peter Hicks (New Haven, CT: Yale University Press, 1998); Daniel D. Reiff, *Houses from Books: The Influence of Treatises, Pattern Books, and Catalogs in American Architecture, 1738–1950* (University Park, PA: Penn State University Press, 2000); Shundana Yusef, *Broadcasting Buildings: Architecture on the Wireless, 1927–1945* (Cambridge, MA: MIT Press, 2014). The Kostof quote comes from Patricia Leigh Brown, “A TV Series on the Buildings of America,” the *New York Times*, September 24, 1987.

Architectural educators across time and place have repeatedly looked to supplement or transcend the limitations of curricula centered on what the EdTech and cognitive science communities now refer to as “physical co-presence.” While office or studio-based education, whether in the master’s *bottega* or the national academy’s ateliers, has long been pedagogically dominant, it has rarely existed in isolation. This persistent interest in supplementing face-to-face education, whether under the guise of democratizing architectural education or commoditizing it, suggests that claims about the inherent materiality, spatiality, or technicality of architectural practice have never been able to rebuff creative attempts at translating these attributes through a variety of media to reach new, larger student communities.

Take William Robert Ware, the so-called father of architectural education in the United States. Ware is most remembered as the founder of architecture programs at the Massachusetts Institute of Technology and Columbia University, but he was also the creator of an architecture course for the International Correspondence School (ICS) of Scranton, Pennsylvania. Established in 1890, the ICS was a for-profit distance-learning company that invested in low-cost, machine-powered printing presses and leveraged federal subsidies for United States Postal Service programs like Rural Free Delivery to provide affordable instruction to students from working-class and agricultural backgrounds. [4] Ware, in many ways a conservative pedagogue and a strong believer in a liberal architectural education, thought that correspondence education was a way to raise the level of incoming talent to architecture schools from the bottom up, and thereby legitimate the new discipline of architecture to some of his skeptical academic colleagues. In Ware’s vision, which was informed by the tight scheduling of institutional life at the modern American research university, where there never was and never has been enough credit hours in a day to fully prepare a student for the complexities of a changing profession like architecture, students would learn the basics of practice through the mail so that they could focus on becoming fine artists when they arrived on campus. The postage system for Ware was therefore a means of supplementing, not replacing, a studio-based education. [5]



[4] For a historical overview of the ICS, see James D. Watkinson, “‘Education for Success’: The International Correspondence School of Scranton, Pennsylvania,” *the Pennsylvania Magazine of History and Biography*, vol. 120, no. 4 (October 1996): 343–369.

[5] As it turns out, contemporary evidence supports Ware’s basic strategy of using distance learning to supplement rather than replace in-person education. Distinguishing between xMOOCs (courses put together by colleges and universities that center on faculty and traditional course objectives, like demonstration of competency through tests) and cMOOCs (courses devoted to more open-ended objectives that center on supporting a network of self-directed learners), Rhoads reports, “Early MRI research findings tend to show the xMOOCs as preparatory or developmental courses offered to incoming college students may be quite helpful. But such courses were additive—they were not substitutes for face-to-face learning opportunities. Nothing presumably is lost when incoming college students are asked to complete a summer course—an xMOOC—in advance of their enrollment. This makes perfect sense if xMOOCs help incoming students develop knowledge, skills, or self-confidence prior to their first semester of coursework. But to replace some of those first-semester face-to-face courses with xMOOCs is a different matter altogether. So, it’s not simply that the xMOOC model is problematic. Instead, a key issue relates to how they are to be used as educational tools.” Rhoads, *MOOCs, High Technology, and Higher Learning*, 98.

William Robert Ware, center with white beard, and the faculty of Columbia’s Architecture Department in 1895. Courtesy of the William Robert Ware Papers and Photographs, Avery Architectural & Fine Arts Library, Columbia University, New York.

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An advertisement for the architecture course that Ware helped formulate for the International Correspondence School, published in the *Architect and Builders Magazine*, October 1899. Courtesy of International Correspondence Schools of Scranton Collection, McHugh Special Collections, Weinberg Memorial Library, The University of Scranton.

Mark Wigley, former dean of the Columbia Graduate School of Architecture, Planning, and Preservation, once characterized Ware's vision in terms of "perforating" the architecture school, a radical attempt to make it act "as a dense laboratory for the deterritorialization of architectural knowledge" through the vectors of graduates and publications. [6] Ware and his late-nineteenth-century academic colleagues thought about this vision in terms of "extending" architecture, as in the Progressive Era campaign to bring town and gown closer together through extension schools and to study urban problems like sanitation, housing, and public education in order to reform them. For Ware, then, the ICS was part of an attempt to overcome the pragmatic and demographic limitations of late-nineteenth-century higher education by reconceptualizing the architecture school as a medium of knowledge exchange rather than a McKim Mead and White–styled clubhouse for new members of

[6] Mark Wigley, "Toward the Perforated School," *Volume 1* (2004): 37–47. See also Wigley's "Prosthetic Theory: The Disciplining of Architecture," *Assemblage 15* (August 1991): 6–29.

a cultural or professional elite. It wasn't an anti-establishment vision, and it involved working with an explicitly commercial entity like the ICS, but Ware was convinced that he was ultimately helping to improve the architectural culture of the United States. [7]

Architectural Theory in a Second Gilded Age

One can assume that the faculty involved in "The Architectural Imagination," like Ware, aimed to make architectural education more accessible, but this newest chapter in the history of distance education has been written in an incredibly different cultural context. Ware was abruptly fired by Columbia's board of trustees in 1903, near the end of the Gilded Age, because its members thought that any association with a venture like the ICS would jeopardize the prestige of their institution. Now, in a period many have likened to a Second Gilded Age, a university as hallowed as Harvard has released a MOOC. Clearly, the field of higher education has shifted dramatically in the last 114 years, and elite institutions are returning to the meaning and value of perforation-extension as they try to maintain their cultural and market hegemony. We should expect that this institutional shift in American universities will have consequences for the more theoretical wing of the architectural community.

One possible consequence is the end of theory as we've come to know it. That's the provocative conclusion that Christopher Hawthorne, the architecture critic at the *Los Angeles Times*, suggests in his own review of "The Architectural Imagination." For Hawthorne, the course marks the end of an era in which highfalutin theorizations and paper architectures ruled the day. Referring to the introductory module to the course, Hawthorne jokes that a Hays doppelgänger has somehow replaced the impenetrable avant-gardist intellectual he previously encountered and struggled to understand:

THE HAYS I KNOW—THE HAYS I'VE SEEN GIVE LECTURES AND INTERVIEW ARCHITECTS ONSTAGE AND WHOSE ESSAYS I'VE TRIED AGAIN AND AGAIN, IN HEADACHY ATTEMPT AFTER HEADACHY ATTEMPT, TO HACK MY WAY THROUGH—IS NOT KNOWN FOR AN ESPECIALLY ACCESSIBLE OR PUBLIC-MINDED SENSIBILITY. INSTEAD HE REPRESENTS AN APPROACH TO TEACHING ARCHITECTURE AND ARCHITECTURAL THEORY THAT HAS HELD SWAY IN THE AMERICAN ACADEMY FOR AT LEAST A GENERATION. THIS APPROACH DOESN'T SIMPLY TREAT ARCHITECTURE AS A DISCIPLINE SEPARATE FROM THE REST OF THE WORLD, WITH ITS OWN PASSWORDS AND PROTOCOLS. IT GUARDS THAT SEPARATION WITH ITS LIFE. [8]

The separation that Hawthorne refers to—architecture's "autonomy" as a discourse—was never just a philosophical position; it was also a sociological phenomenon, a strategy of withdrawal formulated in the late 1970s and early 1980s to survive stagflation and the chaos of postmodernism. It asked the question of whether there is architectural knowledge as such, an understanding of architecture removed from the externalities that so often drive our discussions of the built environment. [9]

[7] For a more extended account of Ware's relationship with the International Correspondence School, see my forthcoming dissertation, *Drawn Apart: Abstraction and the Formation of Architectural Expertise in Postbellum New York*, to be submitted in May 2018.

[8] Christopher Hawthorne, "Harvard's First Online Course: Does It Make the Grade?" the *Los Angeles Times*, May 4, 2017, [link](#).

[9] For a recent, compelling critique of Hays's autonomy project, see Nathaniel Coleman, "The Myth of Autonomy," *Architecture Philosophy—Journal of the International Society for the Philosophy of Architecture*, vol. 1, no. 2 (2015): 157–178.

But does “The Architectural Imagination” really represent a more “public-minded sensibility” than the days of autonomy, as Hawthorne implies? As an introduction to architectural theory and history, “The Architectural Imagination” remains structured by the insights and concerns of Continental philosophy and Frankfurt School Critical theory. Hays begins the ten-module course ambitiously, by defining the term “imagination” in a more rigorously philosophical sense than how it’s typically used in common parlance, as merely a synonym for creativity. Imagination here is the faculty in Kantian epistemology that bridges the gap between perception and understanding, the sensuous experience of phenomena and the work of conceptual thought. It demarcates a cognitive space where, in Paul Guyer’s words, “architecture is thought of as expressing and communicating abstract ideas, not just aiming for beauty and utility.” [10] For Hays, this is the space where architectural autonomy supposedly emerges, where architecture thinks and speaks its own language as a mode of knowledge. “Architecture is not just about the need for shelter or the need for a functional building,” Hays claims in his opening to the course. “In some ways, it’s just what exceeds necessity that is architecture.” Anyone who knows Hays’s work, including his essays and editorial selections for *Architecture Theory Since 1968*, will be familiar with this jumping-off point.

That gambit is a leap of faith. To expect that students in this kind of MOOC will come to the course with a background sufficiently steeped in aesthetic theory to understand an assigned reading like Guyer’s “Kant and the Philosophy of Architecture” is equal parts optimistic and uncompromisingly dogmatic (keeping in mind that 23 percent of these students are Portuguese language speakers from Brazil, with plenty of other languages among the enrollees, and that many lack access to digital libraries like JStor, which are necessary just to get ahold of copyrighted content like Guyer’s article). Still, the big question that Hays tries to pose at the outset is what it might mean to think about architecture as an independent language, and that question seems absolutely appropriate. There are a number of ways to think through and communicate that fundamental structuralist analogy, that architecture is or is like a language—some of which might serve as a more inclusive point of departure. Hays’s emphasis on the imagination in idealist philosophy is also something of a red herring, since as the course proceeds the lectures increasingly focus on representation as their theoretical keyword while leaving the imagination behind.

What’s undeniable, however, is the excitement that Hays conveys with every sweeping gesticulation and piercing squint of the eyes. It’s clear that he’s meant to embody and enliven architectural theory, and he performs the task with genuine intellectual enthusiasm and on-screen charisma. This affective challenge is by no means trivial in an online learning scenario in which the student attrition rate is notoriously high. For legitimate pedagogical reasons, someone or something needs to grab the online student’s attention and inspire him or her to maintain focus. Hays fulfills that role.

The second and fourth modules of the course then consider perspective and typology as techniques used for expressing the architectural imagination. In the second module, Erika Naginski discusses perspective through a reading of Rudolf Wittkower’s *Architectural Principles in the Age of Humanism*, a classic text first published in 1949 (when the depoliticization of the so-called

[10] Paul Guyer, “Kant and the Philosophy of Architecture,” the *Journal of Aesthetics and Art Criticism*, vol. 69, no. 1 (Winter 2011): 7–19. This is an assigned reading for the first module of the course.



Prof. K. Michael Hays, breathing life into architectural theory. Still from “The Architectural Imagination,” a MOOC launched by edX in conjunction with Harvard University.

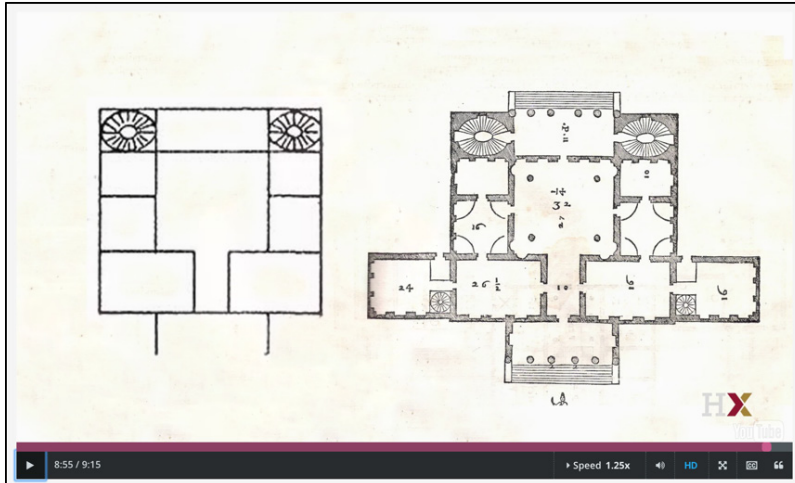
Modern Movement, and its remaking as the idea of an “International Style,” was well under way). [11] If Hays performs architectural theory as a virtuoso act of philosophical improvisation in the first module, Naginski’s module on perspective successfully conveys the idea that architectural theory is a product of close reading. This difference isn’t belabored, but it is significant. It goes one step beyond the analogy of architecture as language and begins to suggest theory as an effect of textuality, or a mode of knowledge that emerges through particular forms of interaction that are mediated by technology and culture.

Naginski—sitting down, script in hand—reads lectures that are exceptionally clear in explaining Wittkower’s method of analysis. As readers of Wittkower know, this method proceeds through the schematic abstraction of Palladio’s villa designs, a process that transforms complex buildings into simple, measurable diagrams. Wittkower produced these diagrams to make a series of comparisons possible, comparisons that allowed, in turn, for the identification of an underlying structure to Palladio’s built works based on a system of harmonic proportions and the manipulation of spatial units. “He develops a syntax, a language, a form,” Naginski states, referring to Wittkower while signaling the course’s linguistic leitmotif:

HE’S INTERESTED IN RENAISSANCE ARCHITECTURE AS AN EXPLICITLY—AND THESE ARE HIS WORDS—AS AN EXPLICITLY “MATHEMATICAL SCIENCE WHICH WORKED WITH SPATIAL UNITS.” WITTKOWER’S WHOLE ANALYSIS ALONG THESE LINES CAN BE UNDERSTOOD AS A PHILOSOPHICAL EXERCISE, NOT AN HISTORICAL ANALYSIS IN WHICH THINKING AND REASON EMERGE AS THE DEFINING CHARACTERISTICS OF THE ARCHITECT. AND THIS IS WHAT’S DEMONSTRATED THROUGH THE DIAGRAMS. ULTIMATELY, WHAT EMERGES FROM THIS IS THE AUTONOMY OF ARCHITECTURE ITSELF.

Naginski’s lecture creates a productive tension with those given by Hays in the first module, a tension that poses the following question: Does the architectural imagination take place in the head of the architecture, on paper, or somewhere in between?

[11] Rudolf Wittkower, *Architectural Principles in the Age of Humanism* (New York: Norton, 1971), originally published in 1949. For a historiographical assessment of Wittkower’s text, see Alina A. Payne, “Rudolf Wittkower and Architectural Principles in the Age of Modernism,” *Journal of the Society of Architectural Historians*, vol. 53, no. 3 (September 1994): 322–342.



Wittkower's diagram of Palladio's Villa Cornaro from *Architectural Principles in the Age of Humanism*, presented in "The Architectural Imagination" as a model of how one might read architecture.

One pedagogical habit that I noticed in Naginski's lectures was a commitment to asking counterfactual questions and posing "How might we...?" scenarios, a habit that seems to be especially important for online coursework. Students who enroll in "The Architectural Imagination" are being introduced to topics and methods in isolation from the variety of ideas, and the often stimulating energy, that circulate throughout a brick-and-mortar architecture school. These students are far less likely to encounter alternative models or modes of analysis by proximity to a vibrant diversity of architectural thought and production. There are some new online course providers that try to replicate the diversity of thought that a good art school would make present through the interaction design of their platform—I think of [Kadenze](#), a for-profit company started in 2015 by a retired Princeton University music professor and now backed by a number of high-profile academic and industrial partners. Through Kannu, Kadenze's customizable learning management system, displaying work, sharing feedback, and collaborating is ostensibly made easier than ever before. But if digitally re-creating an environment of heterogeneous thinking is the problem, then the solution is not always technological. Here, the possible plurality of thought that one might otherwise encounter within the social space of the school can at least partially be found in the rhetorical style of the lecture itself.

Throughout her module, Naginski pointedly emphasizes what Wittkower is *not* doing and what his analysis of Palladio's buildings actually represses, namely, the contingencies and stylistic "eccentricities" (her words) that might interest the architectural historian. Architectural theory comes with gaps and omissions, often overlooking the realities of social and historical context. To ask, "What might we expect the historian to garner from a picture of the Renaissance architect or the building that he erected?" as Naginski does near the end of the module, is to remind students that every analytical theory, including one as powerful as Wittkower's formalism, has its limitations, however useful it might have been for a generation of mid-century modernists.

In those moments when Naginski, the historian of Baroque and Enlightenment architecture, asks her viewer to consider how one might diverge from Wittkower's interpretation, she simulates a kind of debate with her text that

models the kind of critical reading habit necessary for the development of an architectural imagination—development not in theory but through pedagogical practice. As I mentioned before, Hays begins the course by stating that “Architecture is not just about the need for shelter or the need for a functional building.” That’s a simple enough statement and one that might not warrant too much discussion, but it is polemical nonetheless. Indeed, that statement is precisely what separated a generation of young architectural theorists like Hays from “the received models of modernist functionalism and the positivist analyses that had re-emerged in the guises of behaviorism, sociology, and operations research in the 1960s.” [12] Students would benefit from knowing a bit more about the history of theory and the interventions that it made, not as a matter of disclosure but as a means of helping them draw the cognitive map necessary for situating the course within a much broader realm of architectural discourse. In short, counterfactual analysis can promote historiographical awareness, a mode of critical thinking.

[12] K. Michael Hays, ed., *Architectural Theory since 1968* (Cambridge, MA: MIT Press, 1998), xiii. The passage quoted is from Hays’s introduction.

The Remediation of Course Design

Given the importance of pedagogical modeling, one begins to question the conservatism of the course’s format. That Naginski’s rhetorical style brings another voice to the proverbial table makes it all the more noticeable that there is never another voice that is *literally* at the table. In every module of “The Architectural Imagination,” professors appear by themselves, never together. This results in the dreaded “sage-on-stage” lecture format that often appears in online courses as a *de facto* strategy—which is fine in some scenarios, even despite what we know about its limitations for student learning, though perhaps not the most appropriate way to conduct a survey course on architecture that wants to stimulate thought rather than simply transmitting a version of history. Traditionally, the ekphrastic exercise involved in surveys has made use of an extensive pedagogical apparatus, including casts, photographic slides, and miniature models, which, like dramatic props, are meant to relocate the student from the classroom to the building site. One would expect an online course to be better than its offline, analog counterpart at producing this virtuality effect. Strangely, it isn’t—or at least not yet.

“The Architectural Imagination’s” somewhat conservative relationship to architectural media is most evident in the fifth module of the course, wherein Antoine Picon lectures on Joseph Paxton’s Crystal Palace Exhibition building of 1851 and the broader impact of technology on architecture. Picon’s lectures are, on their own, excellent, even if the task of explaining architecture’s “fundamental relation to materiality” seems antithetical to some of Hays’s earlier pronouncements about aesthetic autonomy. The problem, however, lies in how Picon appears on-screen, as the sage-on-stage is minimized to a talking head. An unrelenting series of severe close-ups fix him to his chair and make his presentation feel somewhat stilted. There is an enormous amount of graphic documentation about the Crystal Palace that is included in this section, and one yearns for Picon to have the opportunity to interact with these documents and show, perhaps at his office table and even in the archives, how he goes about making sense of the historical material. This would involve a very different cinematography, one that is more about peeking over a shoulder and watching

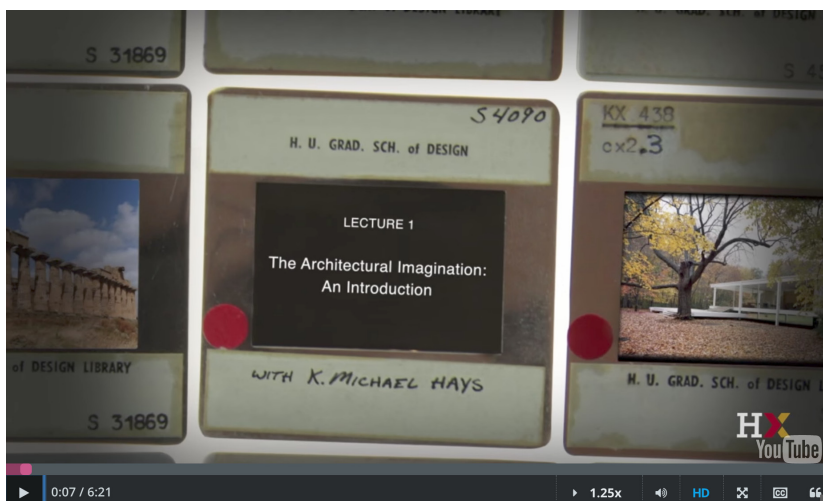
the historian-as-craftsman at work.

Watching “The Architectural Imagination” with Marshall McLuhan’s famous dictum that the content of a medium is always another medium, it is clear that the structure of this online course—like most others—is still nostalgically conceptualized through the structure of an offline course. [13] For example, consider the course’s title sequence and the introductions to each module, which might seem trivial upon first viewing. In the background there is an array of photographic slides. The slides, labeled with typewritten catalog numbers, appear as if they are resting on a light table. A soundtrack of cellos and violins, bowed in counter-rhythm, along with a faint, glitchy-sounding backbeat swell until the proverbial lights of the classroom turn off. Then there’s a shuffle sound of a projector (not a click of a computer mouse or tap of a keyboard button), and a new slide appears, as if written in chalk on a blackboard. What is the function or meaning of this sequence? Is it a visual cue that primes the baby boomer or the Gen Xer for the kind of on-campus educational experience that he or she might have experienced in the past? Or is it simply meant to connote “college education,” and through connotation mark edX’s video content as somehow different from whatever a student might find elsewhere on the internet?

The sequence reveals that “The Architectural Imagination” was produced with particular filmic conventions in mind, conventions that are, in turn, anchored in an educational experience—looking at slides in the darkened lecture hall, working in the crowded studios of Gund Hall—that is assumed to be more primary than the experience that newer educational technologies make possible. These conventions and this assumption need to be questioned if online courses are going to develop their own audiovisual language. One way to do that, to de-center physical co-presence, is to keep the complex history of distance learning closely in mind.

In this regard, the utilization of various animations to supplement Hays’s lectures on Le Corbusier’s famed Dom-ino system in the seventh module and his lectures on Peter Eisenman’s Memorial to the Murdered Jews of Europe in the tenth and final module begin to chart a path that other online course designers can follow. When Hays quotes a key passage in one of Le Corbusier’s texts, that passage is highlighted word by word, as if Hays, like a diligent student, was reading it for the first time in a clean copy of the book.

[13] “The content of writing is speech, just as the written word is the content of print, and print is the content of the telegraph.” Marshall McLuhan, *Understanding Media: The Extensions of Man* (Cambridge, MA: MIT Press, 1994), 8. In design theory, especially interface design theory, the term used to describe this dynamic is skeuomorphism. In skeuomorphic design, which often emerges in periods of rapid technological change, ‘an object or feature imitates the design of a similar artifact made from another material.’ In Classical Greece, for example, architectural features made in stone often took the form of older, more conventional wooden features. The term was coined in the late nineteenth century to describe habits of Victorian ornamentation. Now it is often used to suggest the ways in which the analog remains the referent of the digital. See “skeuomorph, n.” in *OED Online*, June 2017, Oxford University Press, [link](#).



A still from the title sequence for “The Architectural Imagination.” A digital video of photographic slides suggests remediation at work.

When Hays refers to the drawing set for the Villa Savoye, those drawings are redrawn layer by layer or exploded into their constituent parts to show how the layout was determined by a factor like the turning radius of an automobile or by an internal circulation path. Later on in the module, the *promenade architecturale* that Le Corbusier choreographed for the Villa Savoye is plotted step by step with a chain of small red circles. Helen Han, the animator and illustrator listed in the credits for “The Architectural Imagination,” has completed a huge task in digitally re-creating the images of Le Corbusier’s *Toward an Architecture*, and it makes Hays’s oral presentation much stronger.

Likewise, with Eisenman’s Memorial, the edX team visited Berlin and recorded footage of a site visit. Han then employs a series of animations to visually demonstrate how Eisenman’s design tries to produce a memory of a historical event while simultaneously resisting the impulse toward representing a static image of the past, one of the major challenges of the project. Hays calls the memorial “a peripatetic architecture,” and indeed the camera and animations are essential for demonstrating what operations really put the project in motion. It seems that MOOCs work best when presenters become *cicerones*, or guides to an architectural Grand Tour, instead of sages-on-stage or talking heads. And like the Grand Tours of yesteryear, completed by young amateurs from the European elite, this requires substantial financial investment and a well-coordinated collective effort.

That the course at times functions in a way akin to a Grand Tour, which never intended to democratize architectural education, points to a final question that the architectural MOOC poses. Recall the demography of “The Architectural Imagination,” which asks us to speculate about how the knowledge gleaned from the course’s enrollment might affect its design and pedagogy in the future. The preponderance of Brazilian students surely says something about the globalization of architectural culture and the unequal distribution of interest in architectural theory, though my intention is not to start that discussion right now. [14] Instead, given their virtual presence, how should that affect the way educators introduce architectural theory and history to the next generation of students? Would a future iteration of “The Architectural Imagination” involve a Brazilian faculty member and analysis of projects from places other than Europe, taking seriously the calls made by scholars over the last thirty years to globalize architectural history and theory? Or, alternatively, would “The Architectural Imagination” utilize a Netflix-style recommendation engine to algorithmically suggest projects that might spark student interest and engagement based on IP addresses? Whatever the advantages or disadvantages of acknowledging or “targeting” an audience from an ethical or commercial standpoint, do we as architectural educators have a responsibility to meet our students wherever they might be—physically, mentally, emotionally, or socially? That seems like such an old question. We won’t come up with a relevant answer unless architecture’s MOOC experiment continues.

[14] John Ruzicka, my contact at HarvardX, offers the following thoughts: “While we typically see high enrollments from South America (particularly from Brazil), it’s atypical for Brazil to make up such a large percentage. In almost all courses, the U.S. will have the most enrollments. We’re still working to understand the growing popularity of HarvardX courses in general from Brazil—and in particular, why Brazilians make up such a large percentage for this course...One possible explanation is that we’ve enjoyed some no-cost media placement in several online publications in Brazil that have been shared on social media and blogs for the better part of the past year. Articles that list ‘20 free online courses from Harvard’ (for example) have become popular and drive web traffic to our enrollment page...Another point that we’re examining is the completion rate—how do the learners from Brazil compare to U.S.-based learners in this course that is considered to be academically rigorous? Since the course will remain open for a few more months, we’ll complete that analysis at a later date.” Ruzicka to Block, September 11, 2017. See also Anthony C. Robinson, “Mapping a MOOC Reveals Global Patterns in Student Engagement,” the *Chronicle of Higher Education*, January 11, 2016, [link](#).