Beyond Survey + Discipline: Design History + the First Year Opus

PATRICK LUCAS University of North Carolina at Greensboro

For five years, I have taught a two-semester history and theory of design course in the Department of Interior Architecture at the University of North Carolina at Greensboro (IAR221 and IAR22). These two courses, collectively, provide the forum for first and second year students to learn about design in its broadest sense and to investigate the intertwined disciplines of architecture, interior design, and object design. In attempting to cover this much territory in two semesters, I am well aware that many seminal buildings in the architectural canon are glossed over briefly or left out of the conversation entirely. Adding explorations of interiors and objects, however, changes the premise of the course sequence, though the artifacts in these latter categories also receive short shrift relative to the lack of time to cover them in detail.

Despite these shortcomings, the weaving together of three disciplinary areas, combined with the personal interests of the instructor in buildings, interiors, and objects as purveyors of cultural value, result in courses that move beyond the typical architectural survey. I argue that IAR221 and IAR222 offer the opportunity for students to expand their understanding of design - and to recognize the import of design decisions at any number of scales from the microscopic to the cosmic, following the work of Charles and Ray Eames.¹ As foundation experiences, the two-course sequence provides students with knowledge about the presence of design in our everyday lives and the impact of design on the world at various times throughout human history and across geographic space.

In this paper, I offer an alternative for teaching these "survey" classes, beginning with learning outcomes and then focusing on the important presence of teaching assistants in delivering and discussing course content, all connected to linkages with Bloom's taxonomy for "Learning in Action" in teaching complex knowledge domains of design history and theory.² It is particularly significant that the scales of the survey (object, space, building, place) help us all to understand history and theory of design as a series of complex, inter-related phenomena and ideas best understood in relation to one another, rather than considering objects, spaces, buildings, and places as discrete and unrelated cultural artifacts. Bloom's taxonomy, similarly, brings together a constellation of approaches to teaching and learning in an inter-related network. Because it is my fundamental belief that the history and theory sequence must move beyond memorization of facts, stylistic characteristics, and surface-level data, I aim to explore both scale of analysis and methods of delivery for course content. In touching on these issues, I hope to show how an "active learning" view of the history survey increases opportunities for student learning at more advanced levels of Bloom's taxonomy. As a result, I assert that the history survey could potentially move to a more central rather than its usual peripheral position in undergraduate design curricula.

LEARNING OUTCOMES

I believe that all those present in the classroom contribute knowledge and expertise in a learning community in some form. All learning styles demonstrate that each individual participant brings unique knowledge, experience, insight, energy, and skills to the table. In IAR221 and IAR222, everyone embraces a variety of roles to create and disseminate knowledge. Thus, according to the class syllabi, these courses "provide a place to study, talk about, and draw design, art, architecture, as well as furniture, textiles, and accessories produced by individuals and cultures from pre-history through the present in order to meet the following objectives:

- identify key design characteristics and movements through time;
- explain interrelations of culture and design manifest in physical form;
- **3. form** opinions about design history and theory in speech, writing, and drawing;
- interpret a framework for the study of design theory and history in global perspective;
- hypothesize about relationship of the recent built environment to past buildings and designers;
- **6. consider** design as a form of thinking and conversation where certain values and hopes about the world become materialized."

As learning outcomes, these six criteria suggest that the course sequence strives to open possibilities to move beyond the survey of artifacts to a more synthetic and over-arching understanding of design. Based on Bloom's *Taxonomy of Learning in Action*, these objectives represent the six areas of approach: KNOWLEDGE, COMPREHENSION, ANAL-YSIS, SYNTHESIS, and EVALUATION (Fig. 1).

Rather than make students memorize dates and facts about artifacts, I strive to encounter the "culture of building" inherent in the long lists of buildings, spaces, objects, designers, and dates we together address.³ Thus students acquire KNOWL-EDGE not as quantitative data but rather as qualitative and associative information far less cut-anddried than simple memorization. As students consider the building arts in the context of the cultures that produced and used them, they move to make statements of COMPREHENSION, fashioning the material encountered into a series of relationships that we build on through the two-course trajectory. Under this rubric, linking between and among time periods, cultures, and design manifestations becomes the responsibility of both instructor and student. Students then APPLY their ideas in the process of making – writing papers, producing posters, undertaking material studies, building models, drawing chair cards, as well as talking about these design products at various scales in small- and large- group presentations.

Following this base-level organization and preparation, students differentiate among cultures and building traditions through ANALYSIS of form, surface decoration, and technological innovation in their multi-century dabble into design. As the point of any history/theory class should be for the student to be able to comment on the design enterprise today, the courses logically lead the students to a point of SYNTHESIS in coming to terms with the current built environment as a lens to the past but also a window to understand how that legacy represents the "nautilus shell" of experience we carry on our backs.⁴ Importantly, through these higher-level conversations and assignments, students come to apply their own filter for design on their studio and support course outside the history/theory classroom. In the end, students also EVALUATE all that they have seen to better grapple with the notion of values embedded in the building and decorative arts, what Kostof suggested were the "settings and rituals" that shaped buildings and were, in turn, shapers of culture.⁵ In doing so, they bring their critical eye to one another's work, and to their own, in the studio and beyond. Against a backdrop of particular ideas concretized as buildings, places, and objects, students find their collective and individual voices and set the scene for their engagement in the design enterprise, putting learning into action outward from the history/theory classroom and making possible a vision for the courses that stands outside the architectural survey norm.

VOICES

In both IAR221 and IAR222, students from various majors on campus join interior architecture majors to enliven the classroom; roughly ten per cent of the class enrolls in an embedded honors section, with the requirement of additional leadership and scholastic opportunities for these students. For both populations, I establish the idea of varying voices for the course, starting with their own and acknowledging the life paths each student brings. Major and non-major alike, the plethora of experiences help inform what Grady Clay calls an innate ability to "read" the built environment.⁶ With this



FIGURE 1: Bloom. *Taxonomy of Educational Objectives*. Image downloaded from: <u>http://oregonstate.edu/instruct/</u> <u>coursedev/models/id/taxonomy/</u>

as a starting point, students share their insights through the various segments of the course, in their assignments, and in weekly discussion sections led by teaching assistants.

For IAR221, as many as 24 undergraduate teaching assistants each semester help frame classroom discussion and praxis with their collective understanding of design history/theory. Having just completed the sequence, I invite students to serve as both discussion leaders and instigators of classsanctioned activities in the semester just after their successful completion of the sequence or in a subsequent semester until they graduate. For IAR222, a smaller number of undergraduate and graduate teaching assistants help with the course. These more mature voices remind all that design is a dialogue in the making and the collaborative nature of design at all scales – and at all times in our design careers. With the teaching assistant voices alongside the diversity of student voices across majors, this course immediately shifts the typical architectural survey to something more open ended and less oriented to lecture.

Other voices take the form of writing. Knowing that I cannot fully cover all of the material set forth for the course, students read and utilize four books over the course of two semesters: Francis Ching's *Architecture: Form, Space, and Order*; Leland Roth's *Understanding Architecture*; Robbie Blakemore's *History of Interior Design & Furniture*; and Anne Massey's *Interior Design Since 1900.*[□] Alongside these works, I routinely suggest alternative readings in design theory, history, and culture to help flesh out exposure to a variety of authors. The readings thus add a whole set of voices to the growing chorus – and demonstrate to students that history is a poly-vocal enterprise rather than a monophonic

oration. The types of class experiences and the exercises assigned in and out of class also suggest the richness in diversity of architectural interpretation.... and link back to the idea that the courses move beyond a typical architectural survey.

Above all, the IAR221/222 sequence underscores the importance of peer learning, clearly benefitting from voices beyond the instructor/lecturer. At the heart center of the rich tapestry of opportunities for learning stands the Friday discussion session, where ideas and concepts introduced in class and in the readings circulate among upper-class teaching assistants and students enrolled in the courses. During the course of each semester, teaching assistants lead conversations and deal with both general and specific questions, such as defining the physi-

activity	description	deliverable	duration	connections	bloom
unfolding the map	trace changes on campus in uncg archives	field visit + walkabout	1 week	university archives	2
ching twister	render ching vocabulary as a twister board	learning with bodies	1 week for drawings, 1 class to play	first year drawing course	2
experience music	utilize school of music "wave" room to "hear" gothic cathedrals	field visit + worksheet	1 class	school of music	2
coming full circle	undertake precedent analysis	DVD	1 week		3
be cool boy!	analyze "west side story" movie sets, costumes, music dance demonstration	movie + worksheet dance class observation	weekend + 1 class	department of dance	3
coke can cathedral	construct a tectonic investigation using everyday object	hands on charrette	1 class		3
cornucopia of [de]light	investigate light through various media (across entire program)	hands on charrette	1 day	entire program	3
artifact : container : artifact	evaluate relationships between objects + spaces in museums	powerpoint presentation	report during semester	local museums	4
gothic cathedrals	compare four cathedrals to assess region in europe	website + worksheet	1 week learning unit outside class		4
it's about time	manifest 3D cardboard time line/experience	design/build project	3 weeks	first year drawing + studio course	4
4x4	investigate language of modernism	website + worksheet	1 week learning unit outside class		4
abstractions	perform thematic investigations in all time periods at four scales (e.g. water of life)	matrix + blog entries	weekly assignments throughout semester		5
east meets west	make non-western connections across globe	unit summaries on blog	at the end of each of 4 learning units		5
close to home	compose 12x40' super graphic about modernism in design + allied arts	installation	1 week	department of art, department of history	5
the opus project	realize online reporting system connecting studio, history, and drawing courses	blog heavily illustrated by images	throughout semester	first year drawing + studio course	6

iar221 + 222 : history + theory of design i + ii : list of investigations beyond survey patrick lee lucas : department of interior architecture : university of north carolina at greensboro

FIGURE 2 : A matrix of investigations from iar221 + iar222, showing linkages to courses outside the history classroom as well as placement on Bloom's taxonomy.

cal nature of spirituality, speculating on the challenges and opportunities inherent in visual communication, constructing physical objects from ideas, conceptualizing about the material covered during the week; connecting space, form, and style as ways of talking about design; pondering about how ideas move from place to place physically through buildings and objects; and thinking about items we save and treasure versus those that we discard and the implication of these practices in light of the growing interest in sustainability. In sum, the Friday discussion sections provide the link for history/ theory course content application to studio, perception and communication assignments, general education course comparison, and the life of the mind of the designer. These crossroads days also tend to signal continued opportunities for collaborative and active learning. The conversations and investigations that rise weekly do so as evidence of the benefit inherent in actualizing a history/theory course that depends on connections outward to other aspects of design and student acquisition of knowledge and skills, moving ever upward in Bloom's taxonomy. In considering scale by looking at sites, buildings, spaces, and objects from times and places in the past, students gain an incredibly abundant source for ideas to help feed their intellectual pursuits in studio and beyond.

INNOVATIVE INSTRUCTION

Out of necessity - large class sizes, multiple voices, and a course that simultaneously introduces students to architecture, interiors, and product design - IAR221 and IAR222 became a platform into which various course modules and experiences beyond the chronological survey found a home. The key emphasis in the paradigm shift beyond the conventional history course centered around the notion of understanding design elements and principles across scales (object, space, building, place) and through time, with active rather than passive teaching and learning strategies. With inherently less emphasis on stylistic characteristics of the building envelope and more import around intellectual, social, and historical contexts and constructs - and the meanings inherent in and realized in design - the course sequence moved to an integrated vision of design more in keeping with and supporting other courses within the program. Rather than rely on outmoded paradigms about the memorization of building and furniture styles, dates and places, I shifted the focus to elements and principles of design; the cultural context of design; using a comparative rather than chronological basis for our work; and connecting the discussion of objects within their room and building environments.

With talented teaching assistants, I shaped a variety of face-to-face explorations in the classroom and online to address many different learning modes and to make good use of incredible resources available via the keyboard. Though space prevents from a thorough description of these various investigations undertaken by students, collectively the opportunities suggest activities and explorations beyond the history survey. As such, they demonstrate the value of active learning utilizing the inevitable wealth of resources at any university. Close linkages include other courses with the Department of Interior Architecture which, with connections on campus, suggest that design is better understood not as a sole enterprise (contained within the history classroom), but rather one that speaks to multidisciplinary frames and the energy that rises from embracing design at four scales, situated within allied forms of study, and centered in studio practice.

As to Bloom's taxonomy (Fig. 2), the listed exercises indicate not the acquisition of knowledge alone, which inevitably comes with a lecture, but celebrate a variety of learning mechanisms. In learning through field visits (unfolding the map, experience music) and learning with their bodies (ching twister), students take on active learning through COM-PREHENSION [2]. Engaging in analysis of buildings and cultural products (coming full circle, be cool boy!, coke can cathedral) and working hands on through studio explorations centered in history eras (cornucopia of [de]light), students practice AP-PLICATION [3] of principles and elements of design in meaningful ways. By assessing and comparing museums (artifact : container : artifact), cathedrals (gothic cathedrals), eras of design history (it's about time) and linguistic expressions as tied to modernism (4x4), students elevate active learning to ANALYSIS [4] of design elements and principles as expressed by others. In thinking through writing on a blog (abstractions, east meets west) and participating in the making of an exhibit (close to home), students undertake SYNTHESIS [5] of design issues and approaches, elevating their discourse with each other and their own understandings of the place of design in the world. By internalizing their comprehension of design on a regular basis (the opus project), placing their own studio work in the context of design history and in thinking regularly and critically about design, students endeavor towards EVALUATION (6), the highest mode in Bloom's taxonomy, bringing them to a point of immersion in their design education. History thus moves beyond a survey that students scan from afar, selectively borrowing from the panoply of design as a sort of surface treatment, to a more holistic consideration of design from the microscopic to the cosmic, deeply imbedded in the everyday practice of conversation and representation.

THE OPUS PROJECT

The genesis of THE OPUS PROJECT resulted from a discussion among first-year faculty about the importance of teaching beyond classroom and studio boundaries toward a more synthetic presentation of material and a more cohesive experience for first year students in our program. The result, an interface among three courses – first-year studio, a perception and communication course, and the first semester of the history/theory sequence – suggested a constructed digital world, a place to transform social networking by adapting its foremost premise of relationship-making to an academic setting.

Positioned around a blog, the weekly practice of reacting to ever-evolving visual and text prompts provide students an active digital place for a public journal of their work as well as a place for selfreflection and commentary on the work of others. More than a blog, THE OPUS PROJECT brought elements of individual experience into focus imbedded within the energy of the whole, a group enterprise to which 65+ students and a faculty team contribute in regular, measured ways. Getting people reading and raising awareness of work represented the chief outcome of THE OPUS PROJECT, with the added benefit that such a public act on a blog elevates the quality of work in the class because students compared their work/progress with others directly. Importantly, checking in online also encouraged dialogue about design, conversations both in and out of class.

The chief outcome of THE OPUS PROJECT, the blog itself, became the subject of much derision and frustration by students as the semester unfolded.

Their interest waned in constantly and regularly recording studio and drawing class work, thinking about it, and tying it to ideas introduced in the history. Nonetheless, one successful outcome of the undertaking, a conversation at the time of their oral history final, indicated that the first year faculty's collaborative efforts and commitment to engaged learning paid off. At this final, students posted two 24x36" boards and accompanying model as the deliverables for their PRECEDENT ANALY-SIS of a contemporary building. In their drawing course, students planned and executed the boards based on strategies that they amassed throughout the semester. Tangentially, their studio project a sacred space - originated from pattern making at the windows of their studio and translated into three-dimensional spaces to suggest connections to four key ideas, community, innovation, authenticity, and stewardship, coincidentally the four core values of the department. In their last entry online for THE OPUS PROJECT, first year faculty asked students to stitch together their precedent analysis with their studio work, a preparation for the final exam in history class.

At the exam itself, students posted their work around all four walls of our critique space, literally shaping an environment that immersed us all in the world of design (Figs. 3, 4, 5). With that total plunge, teaching assistants, fellow faculty, and the 65 members of the class turned our attention to the subject at hand: a dialogue about how the hopes and values of chosen designers resulted in buildings and spaces set within their place contexts. Though the range of projects and student skill sets varied greatly, all gathered invested in a higher-level conversation about design intentionality, perception and communication, representation, signs and symbols, and the presence of design as a form of thinking. In that the goal of the history course is to explain design in culture in order to form opinions and articulate about them so that students may hypothesize about their own work and link it to the designers that they studied, this final conversation unfolded over the course of three hours.

Deliverable models and boards populated the room while animated students queried one another, engaged in spirited critique, and appraised the approaches to design taken by designers of the past and present, all forms of learning espoused as EVALUATIVE in Bloom's taxonomy, the highest or-



Figures 3, 4, 5 : At the iar221 final oral examination, students and faculty speak together about the promise of design across the world and through time. Photographs courtesy Suzanne Cabrera.

der of learning possible. In this self-evaluation, students brought full circle the lessons from the history classroom, the studio, and the drawing table into an integrated glimpse at design for one afternoon. Thus, while the process of undertaking THE OPUS PROJECT throughout the semester was criticized by some students, all agreed at the end of the exam session that the conversation that took place in a few hours helped them to see how their design community within the program fostered innovation and understanding, alongside making and doing, linking themes of stewardship and human relations to the authentic practice of design in the everyday. By engaging in such dialogue, THE OPUS PROJECT reminded us all that talking and drawing and writing and making all take hard work and all require a tremendous balancing act of information, intention, and ideation. In preparing slowly over the semester in their weekly blogs to link studio, drawing, and history, students built up design vocabulary and sense of inter-connections within the design world to make the multi-layered discourse in the critique room possible that day.

As suggested through THE OPUS PROJECT, the kind of integrated teaching and learning requires greater coordination among faculty with divergent teaching strategies and challenged us to aspire to cohesive learning throughout the semester. With THE OPUS PROJECT, we combated the tendency toward segmentation and emphasized continuities and opportunities among the courses, an approach that resonates not only with individual class goals but also rings true with departmental and institutional strategies that impact quality of instruction and the demand for measurable modes of assessment. Based on my experiences, I cannot help but thinking that the history/theory sequence in any program stands poised to open this important conversation about design education pedagogy and the central place of history and theory in our programs and to all we do as designers.

ENDNOTES

 "Powers of 10" by Ray + Charles Eames (1977) : http://www.powersof10.com
Bloom, Benjamin S. (1956). *Taxonomy of Educational Objectives, Handbook I: The Cognitive Domain.* New York: David McKay Co, Inc.
Davis, Howard (1999). *The Culture of Building.* New York: Oxford University Press.
Roth, Leland (2007). *Understanding Architecture: Its Elements, History, and Meaning.* New York: Harper-Collins. Kostof, Spiro (1985). A History of Architecture: Settings and Rituals. New York: Oxford University Press.
Clay, Grady. Close Up: How to Read an American City. New York: Praeger, 1983

7. Blakemore, Robbie G. (2006). *History of Interior Design & Furniture (Second Edition)*, New York: Wiley; Ching, Francis D.K (2007). *Architecture: Form, Space, Order.* New York: Wiley; Massey, Anne (2008). *Interior Design Since 1900 (Third Edition).* Thames + Hudson; Roth, Leland (2007). *Understanding Architecture: Its Elements, History, and Meaning (Second Edition).* New York: Harper-Collins.