A CASE STUDY COMPARING CHINESE AND AMERICAN INTRODUCTORY DESIGN STUDIO PEDAGOGY

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1 ABSTRACT
This paper compares Chinese and American introductory landscape architecture studios at Huazhong University of Science & Technology, China and the University of Washington, USA. The authors, two Chinese and one American, co-taught studios as visiting scholars at these institutions over a three-year period. We highlight the influences of physical environments and socio-cultural contexts on studio pedagogy in each country and compare and contrast the curricula, pedagogical methods and learning objectives of introductory design studios in these two institutions. Student work from Chinese and American studios is used to illustrate the main conclusions of the study and in-class student reflections and reflections of Chinese students two years after completing a co-taught introductory studio provided insight into the motives, attitudes of mind, and practices of Chinese students. Large increases in the numbers of Chinese graduate and undergraduate students attending American universities make it increasingly important to understand the differing pedagogical practices and goals of American and Chinese institutions and how these are manifested in teaching methods, styles and curricula. The paper draws general conclusions about the similarities and differences between Chinese and American first year design studio pedagogy.

1.1 Keywords
Chinese and American design studio pedagogy, design studio curricula & assessment.
2 INTRODUCTION

This paper describes the experiences of three design faculty, two Chinese and one American, who co-taught and participated in introductory landscape architecture studio courses at Huazhong University of Science and Technology (HUST) and the University of Washington (UW) over a three-year period. Extensive involvement in each other's classes and long discussions of design pedagogy gave us deep insights into the similarities and differences between the curricula, pedagogical methods and learning objectives of Chinese and American introductory design studios. Co-teaching studios also provided insight into the motives, attitudes of mind, and practices of Chinese and American students. Specifically, Sun Jing and Liu Juanjuan, faculty from HUST were visiting scholars at UW during academic years 2014-15 and 2010-11 respectively, and Iain Robertson, a UW faculty member, co-taught two three-month long classes at HUST while on sabbatical in 2012-13. Our understanding of introductory design studios draws on the work of Tammy Tasker, Ph.D. whose dissertation examined teaching methods and goals used in UW introductory landscape architecture studios.

Introductory studios are a crucial step in design students' education as they not only introduce design skills, theories and practices which are new to students but significantly they employ methods of instruction that are often very different from those that students are familiar with from other classes. In addition, design studios have a radical goal of turning students into "designers", i.e. they introduce new attitudes of mind, ways of observing, ways of living in the world, and ways of being. (Tasker, 2011)

We begin by comparing the institutional and campus contexts of the two programs and how these affect studio teaching and briefly sketch their socio-cultural, historic and environmental contexts to suggest how these larger societal contexts influence studio pedagogy, curricula, faculty and students. We then describe and compare some of the characteristic practices in these studios, recognizing that the programs are constantly evolving in response to changing internal and external circumstances, opportunities and needs. We use students' work to illustrate these larger points and end with general conclusions about the programs.

The sources of information for this paper come from the experiences of three visiting scholars/faculty co-teaching and observing introductory design studios in each other's country; from lengthy discussions among us before, during and after classes; from the work of students in these studios (typically 28-30 students/studio); and from HUST student reflections made during the 2012-13 course at HUST and two years later.

3 CONTEXT

HUST, one of China's top 10 technical universities, is located in Wuhan, an industrial city with a population of 11 million, on the Yangtze River in the center of eastern China. UW is a similarly sized university, located in Seattle, a city of 650,000, in the Pacific Northwest of the USA. Both universities are large research institutions with well-regarded landscape architecture programs located in units with allied design disciplines. An imposing statue of Mao Zedong greets arrivals at HUST and an equally magisterial statue of George Washington looks westward from the entrance to the UW campus.
Compared with Seattle, the scale of Wuhan is, in every respect, vast. HUST’s main entrances face onto a large and busy road with an enormous shopping mall close by. In comparison, the adjacent shopping street to UW, “The Ave.”, is a narrow street with small two to four story buildings and store-fronts along its
length. Without hyperbole, the entire commercial extent of UW’s “University District” could be lost in the streets and circle of HUST’s shopping mall (Figures 1 and 2).

Both campuses are extensive and contain many open spaces that may be used for teaching, (i.e. they provide opportunities for observation and study and sources for design ideas and inspiration), although the UW campus is more varied in the qualities and characters of spaces than the grided HUST campus with uniform Platanus street trees throughout and blocks of monoculture tree plantations.

UW’s campus and adjacent urban environments are more immediately and conveniently accessible and provide more diverse opportunities for use as outdoor learning environments than do HUST’s campus and surroundings. As a result UW studios tend to use more parts of their campus for studio project sites, and make more frequent visits to campus and urban locations for study, than is common at HUST.

Despite unprecedented development and growth in recent decades, China still does not enjoy the depth and breadth of wealth that is taken for granted in the USA. Thus space, furnishings and technical facilities available for UW studios are more extensive and abundant than those at HUST. Specifically, UW introductory studios provide each student with a dedicated desk for the entire year and easy access to computing facilities in several labs, while HUST studios take place in classrooms with small desks that are available to students only during class time. UW studios meet for 12 contact hours per week, over three days in 11-week quarters. HUST studios meet for 8 hours per week, over two days in 15-week semesters. UW’s longer and more frequent meeting times allow for a wider range of activities during any single studio session although its shorter terms limit the length of design projects. On a daily basis Chinese faculty and students successfully surmount, without complaint, obstacles that Americans would find intolerable and unacceptable impediments.

4 STUDENTS

Students in HUST and UW studios are dramatically different. HUST students are recent high school graduates and are very similar in age; although they come from many parts of the vast and enormously varied country of China and may exhibit some ethnic diversity, they are all Chinese. It would be unusual to walk into a contemporary American university classroom and not encounter enormous racial diversity and varied countries of origin. UW design studios are typical in this respect, their students exhibiting diversity of race, country of origin and social background, not to mention diverse economic and marital status. The UW introductory studio we co-taught comprised graduate and undergraduate students thus exhibiting a much wider age range (typically 20s and 30s but not infrequently students in their 40s and 50s) than the uniformly youthful Chinese students of the HUST studios. As a result the enormous variety and depth of experience that exists in UW studio populations--and that can be drawn upon to enrich understanding and perspectives on design--is lacking in HUST studios.

What HUST students lack in diversity of experience they make up for in the intensity of effort expended to get admission to the university and program. Harvard University’s 6% offer rate to undergraduates in the “class of 2018” may be taken as a measure of how difficult it is to gain admission to one of America’s most exclusive schools. This figure pales in comparison with the intensity of the competition to gain access to a top Chinese school such as HUST.

Students taking the national gaokao exam in China endure years of intense study throughout high school. Those who succeed in gaining a place at HUST are among the best students in a country with a population of over 1.3 billion. These facts are significant because the background, diversity of life and education experience, passion and intelligence, work ethic, etc. of the students in a design studio materially affect the success of the class, what is learned, how it is learned, and how deeply it is learned. Chinese students have endured competition that is more fierce, unrelenting and competitive than American students have experienced and know that the stakes for failure are higher. Having gained admission to university, however, Chinese students may experience fewer financial concerns than do many American students who incur debt to pay for ever-rising tuition and living expenses, adding economic tension that may adversely affect their education. Similar economic concerns may be experienced by Chinese students studying in America.

Teaching studios with students of similar backgrounds is very different from studios in which students differ in age, education experience, life histories, race, language, nationality, etc. What the former gain in cohesion, and mutual understanding, they lose in diversity of viewpoints, thus education
experiences differ. Although this will likely change in the future, Chinese students are less widely-traveled than their American counterparts further reducing the variety of life experiences that are brought to the studio and into design work.

The commonality of Chinese students' backgrounds and the intensity of competition for admission to university leads to a greater desire to stand out from the crowd and to do something unique or different with their designs. As a result Chinese students' design proposals are often radical and fanciful in ways rarely found in American students' work. The balance between competition and cooperation, always an important consideration in studio pedagogy, may play out differently in China and America and also among students from different countries in American studios.

5 WORLD-VIEWS AND DIVERSITY OF EXPERIENCE

Before we discuss the two programs it is important to place them in their larger socio-cultural and historic contexts as these have profound influences on institutions, programs, students and faculty and affect attitudes toward questions of how?, why? and what? in design. It would not be unreasonable to assert that Chinese and American students live in, and are therefore the products of, radically different worlds and that these influences affect all aspects of their lives including their performance in design studios.

Americans' self-image of their country is of a fast-paced, flexible society at the cutting edge of technological and cultural development. However, in comparison with the monumental, not to say revolutionary, changes that China has experienced since Deng Xiaoping's economic reforms began 1978 (i.e. throughout the lifespans of students in our programs) change in America has been slow and incremental. Relative to China's turbulent 20th century history, the evolution of America has been steady. The pace, scale and depth of change to China's society and the transformation of its urban and rural environments throughout the 20th century have been monumental. Chinese students have grown up in a period of unprecedented economic development and change whose scope is literally unparalleled in human history. By contrast, American students have grown up in relative security and comfort in one of history's wealthiest civilizations. What is normal to each group is fantastical to the other. Quite naturally, each group regards the conditions in which they live as "normal" and bring to design programs attitudes of mind and world-views shaped by, and developed in, these conditions. Cultural backgrounds inevitably and fundamentally shape students' world-views and influence how they receive their education in general and specifically how they respond to studio design exercises.

Although only superficially sketched here, this point has profound implications for how design is taught in each country. For example, the prolonged construction boom in China (whether "real" or a "bubble" need not concern us here) has resulted in enormous amounts of work and huge demand for design program graduates and for the development of new programs throughout China. (International design firms have also seen this boom as a huge and lucrative opportunity for work.) What this means for Chinese students is that there is a huge demand for them on graduation and they must be able to "hit the ground drawing" and expect to work rapidly for long hours. The USA has experienced recent construction booms, too, notably in Seattle, but the scale and transformative effects of even the most ambitious of these are modest in comparison with what has happened, and continues to happen, throughout China. Boston's "big dig" is but a prod compared with the transformation of city like Chongqing. HUST's urban doorstep provides a potent example of the results of China's economic boom. What was farmland two or three decades ago is now an urban environment with mid- and high rise buildings extending as far as the eye can see through the polluted air. Immediately adjacent to the HUST campus is a huge traffic circle containing a newly-opened subway line and surrounded by high rise offices, hotels and a shopping mall that boasts a "Spanish Street" and a replica of Florence's Il Duomo, none of which is more than 10 years old. It is hardly surprising that students growing up in such contexts may conceive of their job as designers as one of proposing designs of monumental scale and that it is not just permissible but obligatory to copy examples of famous designs from around the world.

Chinese students, products of a mass society changing at break-neck speed, must differentiate themselves to be visible in the crowd and to gain admission to prestigious schools. Not surprisingly, the attitudes of mind that ensure success in this competition carry over into, and color, their design studio work. American students familiar with a more stable society have developed different perceptions of the meaning, purpose and possibilities of design and bring these perceptions and preconceptions to their
studio work. As a result, and making a very broad generalization, the work of Chinese students in UW studios often seems bold, or fantastical, to American sensibilities while the work of American students seems restrained and conventionally dull to Chinese eyes. "How could you propose these outrageous changes?" vs. "How could you be so timid in your proposals?"

6 COMPARATIVE STUDY

We discuss each of the aspects of studios found in Table 1 separately but begin with the assumption that both HUST and UW introductory studios possess the same fundamental goal: they seek to introduce students to design thinking in ways that provide a robust foundation for their subsequent studies and professional careers. We also acknowledge that introducing students to design thinking can be a confusing and frustrating experience because design processes and goals are more ambiguous and subjective than other topics students have studied throughout their education. We recognize that, while we seek to reduce the ambiguity of learning design thinking, ambiguity is, nevertheless, inherent in the kinds of problems designers address and cannot be entirely eliminated.

Table 1. Comparison of main characteristics of UW and HUST introductory design studios.

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<thead>
<tr>
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<th>UW</th>
<th>HUST (old system)</th>
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<tbody>
<tr>
<td>Teaching methods</td>
<td>From experience to design</td>
<td>From abstract knowledge to design</td>
</tr>
<tr>
<td>Course structure</td>
<td>Exercises → projects</td>
<td>Skill → composition → design training exercise project</td>
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<tr>
<td>Use of time</td>
<td>Shorter &amp; quicker</td>
<td>Longer time</td>
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<td></td>
<td>More efficient use of class time</td>
<td>Students spend more time on products</td>
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<tr>
<td>Relationships between people</td>
<td>More cooperation</td>
<td>More competition</td>
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<td></td>
<td>Teamwork &amp; individual work</td>
<td>Individual work</td>
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<tr>
<td></td>
<td>Learn from each other</td>
<td>Learn from teacher</td>
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<tr>
<td>Evaluation</td>
<td>Focus on process (thinking)</td>
<td>Focus on products (graphic skills)</td>
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<tr>
<td>Design process</td>
<td>Site analysis (reasonable)</td>
<td>Big ideas (sometimes seem crazy)</td>
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<tr>
<td>Learning Objectives</td>
<td>Think like designers</td>
<td>Demonstrate graphic design skills</td>
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<tr>
<td></td>
<td>Acquire basic skills</td>
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The problems all students face in introductory design studios are similar: they are learning not just a new language but a new way of looking at and understanding the world—a "designer's perspective". This is an integrative view that combines understanding of diverse perspectives—social, cultural, ecological, economic, etc.—and technical skills of design and communication. These cannot be taught all-at-once and must be approached one part at a time. Thus students in introductory design studios learn "pieces" of the puzzle of synthesizing designs but do not yet have a command of the whole picture. Not surprisingly, confusion is common until students learn to synthesize design solutions, i.e. see the whole picture, rather than just analyse problems. All introductory design studios face the same dilemma but they differ in how they try to minimize the confusion that characterizes the first steps in teaching design. For example, teaching students graphic competency—i.e. tangible skills with demonstrable outcomes of skillful drawings—may provide them with confidence as they learn to design. Focusing on learning the design process through repeated, short, simple trial and error iterations is far less tangible but may make students comfortable with using the "design process". Regardless of whether we focus on first acquiring skills, or teaching theory, or engaging in a process of learning by trial and error, building robust self-confidence and self-understanding remains an important goal for all introductory studios—even if this goal is more often implicit rather than explicitly stated.

6.1 Teaching Methods—Experience vs Theory/Precedents as Foundation

HUST and UW studios are grounded in fundamentally different assumptions: HUST students proceed from abstract knowledge to design understanding while UW students proceed from personal
experience to design understanding. HUST students are provided with design theories at the outset and are encouraged to study successful historic and contemporary designs as precedents to emulate. UW students are encouraged to observe their everyday environments and use their own experiences as sources of design ideas. HUST students are provided with ideas and exemplary examples in the belief that this will reduce the chance of them making mistakes in their initial designs. UW students are encouraged to "jump in", with admittedly limited knowledge and understanding, and try something, on the assumption that they will make mistakes and learn from these experiences. This characterization is, perhaps, overly simplistic; HUST students cannot but draw from their life experiences as they learn to design and UW students are encouraged to look for "precedents" that may inspire their work from visiting projects, published work or internet sources.

UW's method assumes that students will learn & develop their ideas primarily from their own experiences while HUST's methods assume that students can best learn by studying and copying the processes and approaches of experts and the work of teachers. Initially, HUST faculty provide students with knowledge through lectures and subsequently they discuss ideas with students individually. UW faculty provide minimal theory at the outset preferring to let design understanding arise out of practicing the process and encouraging students to discuss their work and process after completing design exercises. Discussion is an integral part of learning to design in UW studios, thus UW students, unlike their HUST counterparts, frequently talk more than teachers. Initial designs created by Chinese students tend to be more uniformly competent than American student's work, which may range from excellent to incompetent. The goal of UW studios is to develop the design thinking process not the product. The goal of HUST studios is to master and apply theoretical or abstract understanding. Students at UW are encouraged to learn for themselves and teach each other. One of our authors, Sun Jing, describes her experience of adopting a different approach at HUST:

"I taught [introductory architecture studio] classes several time but students didn't know the graphic rules for how to draw plans and sections correctly. [I tried to teach these] Finally I realized that it is no use to teach rules first as they don't understand them because they have no context within which to understand them."

6.2 Course Structure--Practice vs Skills

Another fundamental difference between Chinese and American studios is the relative emphasis placed on learning graphic communication skills and practicing the process of design--i.e. the focus on skills vs. design thinking. At HUST it is assumed that graphic competence leads to design confidence: students who possess strong graphic communication skills will not only be better prepared to express design ideas but will be more confident about exploring design ideas. At UW student confidence is developed through repeated trial and error practice of the design process on the assumption that increasing familiarity with the process will result in growing competence which will build confidence. The relative importance of hand-drawing graphic skills compared with computer generated drawings will continue to change and these changes will affect the content and emphases of work in introductory design studios.

In general, students at HUST are provided with a pre-existing and prescribed design process that they learn to apply, while at UW students are encouraged to develop their own design process. Again in very general terms, we may say that HUST faculty attempt to reduce the messy, mistake-filled and confusing aspects of learning to design by teaching students theory and developing competence in communication skills while at UW students are asked to embrace, or at least tolerate, ambiguity, mistakes, confusion and messiness as they are thrown into simple design problems with minimal skills. We may characterize these philosophies in general terms as teaching students everything they need to know to become designers in HUST and requiring students to discover things for themselves through a series of structured exercises at UW. These different teaching philosophies result in different structures for studio exercises and different relationships between faculty and students and among students.
6.3 Equations Use of Time--Length of Exercises

A typical UW introductory studio begins with a series of short (1-3 day) and simple exercises with different focuses--seats, steps, paths, social spaces, entrances, etc. All emphasize careful observation, drawing on personal experience, and an iterative analysis/synthesis/presentation process. They encourage self-expression, or group conclusions, and minimize the importance of products. Exercises are followed in the second half of the quarter by two longer and more complex design projects where the quality of graphic presentations becomes more important. Although high quality graphic products are significant in final projects, the primary objective of introductory studios remains the process.

HUST introductory studios start with skill training exercises and theory, such as abstract knowledge about space. These are integrated with composition exercises in which students learn rules of space composition and conduct case studies of famous designs. They are followed by design projects that tend to be longer than typical UW projects, in part because their semesters are longer than UW quarters. HUST projects more closely follow the direction of teachers and place greater emphasis, and longer time, on production of high quality products.

The short, focused exercises used at UW result in frequent deadlines which ensure a steady workload and diminish opportunities for slacking off that may occur in the middle of longer projects, followed by a spike in workload at the end. A consistent workload leads to better learning of how to design and encourages healthy work habits. Short exercises also tend to be less stressful for students because assessment and explanation cycles happen faster and less time is invested in the exercise so students are less concerned about making mistakes.

6.4 Relationships between People--Participant Structures/Discussions

In her study of UW introductory design studios, Dr. Tammy Tasker identified a wide variety of "participant structures", i.e. contexts and situations within which students interact with teachers and with each other. (Tasker, 2014) These ranged from meeting around a central table for class discussions, or presentations, to small student group meetings and individual desk crits. The also included much less formal interactions outside the classroom such as casual conversations while "hanging out" over the balcony, meeting in the coffee shop, or talking in vans or on site during field trips. In each of these situations the roles and responsibilities of students and faculty change. Her study suggested that the ways in which students learn in UW studios is fluid and opportunistic and that this leads to a richness and variety of learning opportunities. It also means that UW faculty play different roles and adopt a different attitude to their relations with students that may range from formal instruction through mentoring and critiquing to learning together. Seen through this lens, UW studio reviews (both internal during the studio and with external professionals and other faculty) are simply continuations of the learning process rather than formal presentations and judgments by expert reviewers.

The expectation at HUST is that students learn primarily from their teachers, established authority figures, and only secondarily from each other. Roles are more formal, defined and hierarchical and students are less comfortable engaging in back and forth discussions with teachers and with critiquing each other's work than is typical at UW. The ways exercises are structured and the frequency of informal in-class reviews at UW also provides more time for students to talk about their work and critique each other's efforts than is common at HUST. The lingering effects of the intense competition to gain entry to university means that HUST students may be predisposed to adopt competitive rather than cooperative relationships with each other unless studio teachers make strong efforts to encourage group work, collaboration and peer to peer critiques.

In both China and America some students are more comfortable talking than others and some are more open to receiving critiques of their work than others. At UW students are required to sign up for individual in-class crits during some studio sessions. At HUST students may avoid receiving advice on their work by not participating in crits; this would be unacceptable at UW.

6.5 Evaluation--Process vs. Product

A quick comparison of the products of HUST and UW studios would leave UW students’ work wanting in comparison with the skilled graphic presentations of HUST students. However, the issue is more complex if one considers success in learning the design process as well as success in generating beautiful products. In most HUST studio presentations students are expected to present finished designs
that meet polished and high professional standards. Expectations differ at UW depending on the kind of review. Informal in-class reviews of work in progress encourage UW students to present "working" models or "in-process" drawings while final studio reviews establish higher standards and expectations.

Although the goal of developing competent and skilled designers is the same at both HUST and UW, the balance between concern for learning the process and producing high quality products are different in introductory design studios in part because of different understandings of what constitutes competent, professional designers.

### 6.6 Design Process--Site/Program Inspiration vs. Big Conceptual Ideas

A HUST introductory design studios tend to consist primarily of in-class work rather than on going outside and learning from local environments or visiting exemplary designs. In part this is because, as noted above, the campus is relatively uniform and provide a limited range of educational opportunities in comparison with UWs richer and more varied campus and surrounding district. Travel to places of interest in and beyond the urban environment is easier in Seattle, a much smaller and more compact city than Wuhan. There are other reasons for this difference: HUST emphasizes traditional design, which is focused on the creation of physical objects and spaces suitable for human use while UW design is increasingly influenced by ecological and environmental considerations. These considerations lead to a view of landscape design, at UW, as the creation of (living) systems as well as the giving of form to tangible objects. Living systems can best be understood by observation of them in the field rather than studying them in the classroom. The ecological perspective also emphasizes the necessity of being sensitive to the sites on which designs are created. Visiting sites and studying them in detail is an important studio activity that occupies considerable time at UW. Students' designs are expected to be responsive to site conditions and site conditions may be stronger influences on spatial and formal design solutions than abstract compositional and conceptual considerations.

The idea that students may learn about design in any context, not just in the studio, is fundamental to the philosophy of introductory design studios at UW and relates to the idea of "lifelong learning" that is a goal of American higher education. Successful designs in UW studios are ones that arise out of and respond to site conditions and program needs, while successful designs at HUST may express the bold visions of their designers.

### 6.7 Learning Objectives

Both programs recognize that the process of reflection is an essential step for students to demonstrate understanding of what they have learned and to make the lessons their own by integrating them with other experiences. Thus they both require students to reflect on their work following the completion of exercises and projects. This may take the form of written notes with diagrams submitted to teachers each week or at the conclusion of a project, or keeping a journal throughout the quarter. In addition, UW faculty meet with each student following the final studio review to reflect together on the successes and problems of the quarter. For faculty and student reflections can be and important way to assess whether lessons have been adequately learned and assimilated.

### 7 THE CHANGING NUMBERS OF CHINESE STUDENTS IN AMERICAN PROGRAMS

Figure 3 illustrates a trend that has occurred not only at UIUC but in Universities and Colleges throughout the USA: a huge, sudden, and recent increase in the number of mainland Chinese students enrolling in their programs. The Chronicle of Higher education reports (Neuman, 2014) that more than a quarter of a million Chinese students hold US visas in 2014 and that three of the five US universities with the most foreign students in 2012 are private--University of Southern California having the largest number of foreign students at 10,487 (26%) while Columbia has the largest percentage of foreign students at 35% (9,201). A similar increase has occurred at the UW and six of the twenty-eight students in the UW's Autumn Quarter 2014 introductory design studio were undergraduates from mainland China. In comparison with this "flood" only a trickle of American students enroll in Chinese universities. Part of our study included comparing the experiences of these Chinese students with those of native-born American students (many of whom are of Asian origin) in the UW introductory design studio. This was the first UW studio in which two visiting Chinese scholars (one this paper's prime author) both of whom had
participated in the studio throughout the quarter conducted some intermediate and final studio presentations in Chinese.

![Total Chinese Student Enrollment at UIUC](image)

**Figure 3.** Total Chinese Student Enrollment At University Of Illinois Urbana Champaign (Redden, 2015)

Whether the numbers of Chinese students enrolling in American universities continue at current levels or not, there is no doubt that increasing globalization of design services make it desirable for more communication between faculty American universities and Chinese universities. American faculty and students need to know more about China and vice versa.

### 8 CONCLUSION

"That is what learning is. You suddenly understand something you've understood your whole life, but in a new way." Doris Lessing

Lessing’s point is pertinent and apposite: our conclusions, based on three years of co-teaching and participating in each other’s introductory design studios, are in many respects trite clichés. However, in other respects they reflect a far deeper understanding of the complex predicament of learning about other cultures and students and how we introduce the design process to students in different programs. Individual cultural preconceptions, the product of a lifetime of experience, run deeper than the individual; they are embedded in the long and tangled histories of countries and societies. Cultural preconceptions are manifested in the physical and organizational structures of institutions and in the content and methods of delivery of curricula. Thus any one-on-one interaction between a faculty and student from different cultural traditions is fraught with the potential for misunderstanding and miscommunication.

One-on-one instruction through crits is a fundamental aspect of design studio education and "knowing" where a non-native student is "coming from" in a crit is essential to successful communication. When a Chinese student at UW, for example, produces a design that to American eyes seems ludicrously inappropriate, out of scale with the site, and insufferably grandiose in expression, it is necessary to step back and consider that the path that this student has traversed to this point. That path includes competing and succeeding in the brutally competitive *gaokao* exam, standing out in a vast crowd, and growing up in an environment of incessant and monumental change and development, at a scale and pace inconceivable to American experience. Further, the skyline of cities such as Shanghai (2013 population
approx. 24 million) that are the touchstones of contemporary Chinese design expression, are replete with buildings more extravagant, by orders of magnitude, than most student's work.

Contrast that scenario with the experience of a Chinese faculty looking at an American student's work in which the graphics are grotesquely incompetent, the design proposals timidly deferential to the features of an insignificant little site, and the whole having not the slightest chance of standing out in a crowd and withstanding the intense development pressures of contemporary China. This student has imbibed, from birth, contemporary American aspirations for a "sustainable" society and environment and the work on the desk is a distillation and product of all of these influences. The goal for the work of an American student may be to fit in, while that of a Chinese may be to stand out. Where does one begin these crits? While posed in rather extreme ways, these scenarios nevertheless capture the essence of the predicament of transcultural design studio teaching and learning: navigating design fits and misfits, and trying to provide students with useful advice about how to proceed. Context, (and contextual appropriateness) we concluded, is crucial both for defining meaning and for the meaning of design. Designs that fit in one context may be misfits in other contexts.

9 REFERENCES