Fostering Cosmopolitan Citizenship through a Multi-Country Joint Studio Project

OLIVIER CHAMEL Florida A&M University

JUNNE KIKATA Kagoshima University **BO CAUSER** Kagoshima University

Keywords: Architecture Pedagogy-Cross-Cultural Studio Project-VR Technology.

The issues of global justice and cultural diversity in architectural education have been discussed for a number of years as our field continues to lack diversity when compared to other professions, and to society as a whole. An important tenet of architectural education is to expose students to a broad range of views and ideas across various cultures, and with the acceptance of this tenet, it is relevant for architectural education to foster cultural diversity and therefore activate the precept of cosmopolitan citizenship. This case study examines how cross-cultural collaboration supports students in their development of cosmopolitan citizenship through the shared story of an architectural design project.

We are constantly exposed, through social media and various online platforms, to works and ideas outside our cultural sphere, but it does not mean that we gain the kind of insight that can be applied in a professional context by way of these external stimuli. In the context of the globalization of culture, and considering our innate tendency to view foreign ideas through the lens of our cultural pre-conceptions, we can ask the following question: how can we create the conditions for a meaningful cultural experience that would lead to understanding a position different from our own? This paper will discuss an experimental studio project developed in the summer of 2022 aimed at introducing students to a different set of cultural positions through a design brief with a strong narrative premise. This approach allowed students to extend the story in various ways according to their own cultural and design backgrounds. We postulate that this experience would help students appreciate diversity of thought through the design of an architectural project, while providing the opportunity to engage in cosmopolitan citizenship.

INTRODUCTION

The issues of global justice and cultural diversity in architectural education have been discussed for a number of years, as our field continues to lack diversity when compared to other professions, and to society as a whole. An important tenet of architectural education is to expose students to a broad range of views and ideas across various cultures, and with the acceptance of this tenet, it is relevant for architectural education to foster cultural diversity and therefore activate the precept of cosmopolitan citizenship. This case study examines how crosscultural collaboration supports students in their development of cosmopolitan citizenship through a shared story that supported the execution of an architectural design project.

William Smith describes the idea of Cosmopolitan citizenship as follows: "The idea of worldliness entails the possession of certain qualities that condition our relationship to this man-made world. It denotes a particular mode of being in the world, a heightened care for the world"1. Smith also describes Cosmopolitanism as a commitment towards global justice, democracy, and cultural diversity. While education towards such values has traditionally been grounded in international education and study abroad programs, these are issues which architects regularly face in their practice, therefore making a case for including these goals in architectural education.

For architecture students, formal education about overseas architecture practices and their relationship to local cultures is largely limited to lectures by visiting academics and architects. If conditions are favorable, professors might take their students on a tour abroad. These trips can be costly, and the focus is often on well-known European or North American destinations, to visit architecturally important sites of classical antiquity, or of the modernist tradition. Despite best intentions to broaden students' horizons, this kind of traditional focus has the potential to reinforce the uniformity of architecture education. Shortterm study abroad programs offered through general education courses aimed at developing cosmopolitan citizens often target humanities students, and the architecture studio workload presents a hurdle to participation for many architecture students. Furthermore, admission to these types of institution-supported study abroad programs often hinge on student language ability,



Figure 1. Spatial VR environment. Image credit. Olivier Chamel

favoring students in language or international relations programs. Individual long-term study abroad also offers a way for students to learn about cultures outside that of their home institution, but may require students to delay graduation, and are not affordable options for many students. Though the benefit of overseas experience for architecture students is significant, the ways in which formal architecture education supports this is circumscribed by the conditions outlined above.

This paper discusses an intercontinental experimental studio project developed in the summer of 2022 aimed at introducing students to a different set of cultural positions through a well-structured design narrative but with a certain amount of flexibility in the design methodology and deliverables. This approach allowed students to extend the story in various directions according to their own cultural and design backgrounds. The aim of this experience was to provide the opportunity for students to engage in cosmopolitan citizenship by applying and appreciating diversity of thought through the design of an architectural project.

BACKGROUND

Pedagogy and Space

Architecture is the study of space, so when virtual space is used as the site of the architectural studio crit, it becomes necessary to interrogate that space: its educational potential and limitations, and the ways in which people (in this case students and professors physically located in four different countries) are able to interact in that space.

In this section, we examine the dimensionality of the virtual space as a presentation venue. Next we consider its relationship to other virtual spaces such as those found in video games. This invites us to consider other similarities to video game play, including roleplay, narrative and immersion, and examine how virtual space supports the collaboration of actors in diverse locations. We then outline the narrative premise which guides the project.

Since the mid '80s digital technology has played a significant role in architectural design, facilitating the sharing of design concepts, architectural drawings, and computer-generated 3D models. For various logistical reasons, the printed poster has maintained a stronghold in the architecture school crit. However, the COVID-19 pandemic necessitated a shift to online education, creating the impetus to make fuller use of already standard digital design technologies. Initially, slide presentations showing drawings and 3D renderings as a presentation method were replicated in ZOOM or a similar synchronous video meeting app, allowing students to share their work without being physically present in the architecture school studio.

As online options became more familiar, there has been more space in higher education to adopt innovative online practices, such as the use of virtual worlds for education. For over a decade, various educational institutions have been building virtual teaching spaces in apps such as Second Life2, and more recently Mozilla Spaces or Spatial. The degree to which these spaces conform to existing teaching practice is of interest. Regardless of the subject area, there is usually a gathering place which stands in for the classroom, such as seating around a fire, and 'screens' are erected as needed, where participants can show their slides. The participants themselves appear within the scene as avatars, and the avatars can be selected and customized to varying degrees depending on which level of payment the hosting institution has chosen. The avatars can move around inside the scene at different speeds using the arrow keys on the keyboard, and in some cases can fly. In this way elements of fantasy are combined with elements which correspond to real-world learning spaces, and this helps to create a sense of immersive space3. Learning within these spaces has been compared to learning which occurs in video games, and narrative analysis shows that challenge, fantasy and curiosity are key components in driving engagement in



Figure 2. Wood structure section. Bernd Dahlgruen.

game play4. In their 2010 paper on roleplay in higher education, Russel & Shepherd give the following definition: "Role-play is a form of experiential learning where students adopt different personas and work through a given scenario together, interacting in their assumed roles."6

In architecture education, the design brief is the narrative or story through which we imagine new ways of thinking, making and being in space. This narrative forms a strong part of the architecture design assignment, providing the framing for the problem. Furthermore, architecture students are not yet professional working architects, and most studio assignments are not actually built, thus it can be argued that there is an element of role play to the architectural design assignment, even without the use of online virtual spaces. Throughout the virtual world presentation, students take turns assuming 'the mantle of the expert'7 as architects presenting their work, and lead the other participants around the virtual space they have built while referring to posters for more detailed explanation. In this role they demonstrate to the other 'players' how their designs relate to the given narrative, and how they have extended the story, reflecting it in the virtual space they have created. In the current study, the narrative centers on a historical Japanese setting. By placing themselves in this position, they must also try to understand the specific cultural setting of the narrative in order to propose a design solution that would best respond to these unique conditions. This requires students to evaluate the many project drivers through the filter of a different culture. In addition to this primary goal, students then have an opportunity to

witness how their peers approach the same task and therefore gain insight into someone else's culture, and design strategy. Seeing how others solve a similar challenge in different and unfamiliar ways can be valuable, presenting students with new ways of thinking.

Narrative Premise

The premise behind this multi-country studio project was to have student groups from different institutions develop a design, set in a cultural context different from their own. The project asked students to design a small community and craft center in the town of Izumi located in the southern part of Kyushu Island in Japan. The narrative premise relates to the historical and cultural context of the site, and was given as follows:

The current town of Izumi extends around the original 'fumoto' or historical samurai district dating from the 1600s. Izumi was a strategic outpost established to protect against invasion from what was then Higo province. This original neighborhood was built on an elevated land platform so it would enjoy unobstructed views for local defense. A nearby fort provided views into the samurai neighborhood itself, as an additional safety feature. Now located away from the modern town center, this neighborhood can be described as a residential area with relatively large samurai residences between 2000-3000 ft.² still in situ. The neighborhood streets are organized in a grid pattern and roads are bordered with low stone retaining walls and thick shrubs, providing privacy to the residences. The orientation of the streets is such that they are clearly visible from the nearby fort. The exact lot chosen for this project sits adjacent to a small Shinto shrine which served the samurai village, and which is still in use today, receiving regular visitors. With an approximate latitude of 32°, the area enjoys hot and humid summers, mild winters, and is exposed to seasonal flooding during the summer rainy season.

The concepts of neighborhood community, lifelong learning, historical continuity, and the practice of crafts all have an important place in Japanese life. Thus the function of the project itself, a community and craft center, was chosen as a vehicle to bring awareness to important aspects of Japanese culture and society, and having to address these programmatic requirements would open a window into Japanese culture for Japanese and non-Japanese students alike. The idea of the importance of traditional craft was further emphasized by requiring students to use a structural system based on the traditional Japanese post and beam model, and encouraging them to develop a contemporary interpretation of that model including the use of existing or development of new wood joinery systems.

While a prescriptive narrative can be helpful when the aim is to direct students to address a specific design problem and develop a creative process within a clearly defined set of parameters, a less structured narrative can be helpful when collaborating

381

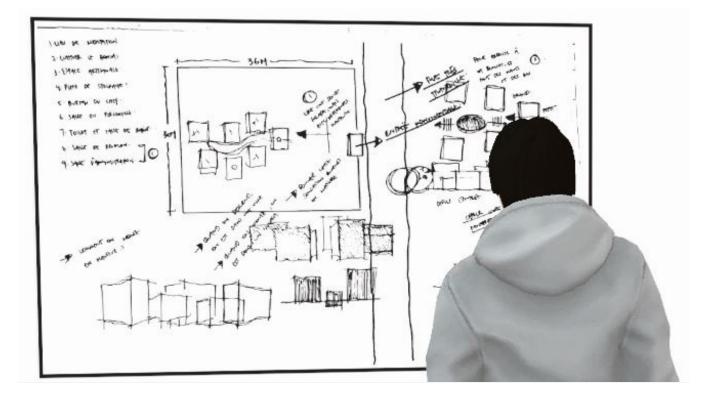


Figure 3. Process sketches. Olivier Chamel.

between institutions since fewer restrictions are presented. The narrative presented to the students for this project was not highly structured, yet it provided a challenge, and elicited a certain amount of fantasy and curiosity while also allowing each tutor to meet their curricular aims.

METHODS: PROJECT DESCRIPTION AND CHRONOLOGY

This multi country studio project was conceived as a six-week design exercise and occurred in May and June 2022. It involved students from 4 schools of architecture, the Hafen City University School of Architecture in Hamburg, Germany, the Ecole National Superieure of Architecture Mauritius in Mauritius, the Kagoshima University Department of Architecture and Architectural Engineering in Kagoshima, Japan and the School of Architecture and Engineering Technology at Florida A&M University in Tallahassee Florida. Participating students came from 3rd and 4th year undergraduate and first year graduate courses.

The project schedule had two phases, a conceptual development phase and a design development phase. In the first phase, students were provided with access to a database with information about the physical requirements of the project, and began to research Japanese history and culture to introduce broader contextual elements to their design. The project site along with its historical, geographic and social context was then presented to all students via a Zoom meeting led by a Professor of Architecture from Kagoshima University, who has strong professional familiarity with the context of the town. From this point students began the design development phase. The size of the overall project was kept small at around 1000 ft.² so that the design would focus on the quality and appropriateness of the architectural solutions rather than solving a complex program. The programmatic requirements included a lobby, administrative offices, workshop, classrooms, along with appropriate support spaces. The project also called for an outdoor space to be used for community events or crafts demonstrations.

The main objectives of this exercise were for students to try to understand the local circumstances of the project and the current needs of the local community through the narrative of the design brief. They were also asked to give a contemporary expression of traditional Japanese wood construction and space planning principles, building on the context provided by the story of the site. This required students to interpret the narrative through the lenses of their own cultural background, and design education. The group of Japanese students were operating within their own cultural environment, while the students from Mauritius, the US and Germany had varying degrees of familiarity with the context of the narrative. Each tutor was bound by the learning objectives set out in the courses which corresponded to this project, which in turn were related to the position of the course within the curriculum of each architecture school. As such, each group of students were being guided in slightly different directions, within the overarching parameters set by the narrative described above.

Progress design reviews were conducted internally at each school in either a traditional pinup format or using hybrid media such as zoom slideshows and VR. Final projects were presented in 2 sets of reviews to accommodate the time zones of the various teams. These were structured either as zoom slideshows or a VR walk-through using the Spatial platform. Students using the VR platform presented drawings pinned up in a virtual space within the interactive 3-D model of the project. The choice to use VR was initially up to the professor, who needed to provide teaching on how to use the platform. All information was presented in English as a common language, although it was not the first language of most participants, including faculty.

RESULTS OF PROJECT OUTCOMES

Though the overall design process had a well-defined structure, each school's unique approach reflected their local design culture. The variety of design solutions was a key component of this project and allowed students to see different positions within a shared design exercise. Diversity of thought was therefore desirable and encouraged. Students stretched their imagination and creativity as they tried to come to terms with a somewhat unfamiliar historical setting, which is tangentially referenced in popular culture through anime, manga, and gaming subcultures worldwide. This was necessary, because there is very little accessible reference information for students to draw on in their research. Much available information has not yet been translated from Japanese, and with the example of Izumi City, even Japanese reference materials about the site and neighborhood are scarce. Although students were engaging with the unfamiliar, falling back onto stereotypes was somewhat inevitable. Additionally, the degree to which each tutor shouldered the mantle of authority varied between each school, due to local cultural norms and expectations, as well as personal comfort, and this had a strong influence on the outcomes of the project and on the degree to which student groups within each school conformed to the norms of their studio.

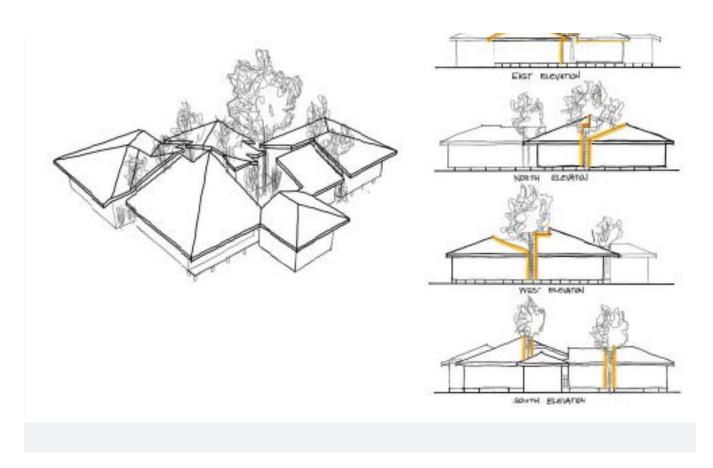


Figure 4. Project example. Olivier Chamel.

Students from Germany emphasized a constructive approach inspired by traditional Japanese joinery systems as their main contextual reference. Their interpretation of Japanese culture was through technological understanding. They developed a variety of structural systems, based on the Japanese post and beam model. This approach led to the creation of sophisticated spaces defined by a strong materiality and the intricate modularity of custom structural systems. Some students created custom joinery systems, and graphically displayed the detailed assembly process within VR.

Students from Mauritius approached this project from a more conceptual perspective as they identified ideas inspired from Japanese arts or crafts. They transposed these ideas into viable and meaningful architectural projects. These ideas came from aspects of Japanese culture they researched in the first phase of the project. For example, students found inspiration in the art of bonsai, the structure of a samurai armor, kintsugi (the art of repairing broken pottery with a golden lacquer). Their design approach incorporated elements from traditional Japanese building forms, materials and construction techniques, but in very unique conceptions.

The student groups from the US focused on traditional Japanese proportional systems in plan and section as the foundation for their design proposals. They investigated this modular conception of space both in 2D and 3D structured building components, and therefore the overall spatial experience. They also paid attention to the relationship between the structure of the modules of the built environment, and the nature of Japanese gardens. In this way the projects acknowledged the idea that the relationship between things, such as the space and path between buildings, was as important as the buildings themselves.

Students from Japan, operating within their own cultural environment, submitted designs very much consistent with traditional Japanese typology especially in terms of building structure and envelope, though unconventional site layouts were presented. Of all the students the Japanese group was particularly engaged in finding ways to connect their project with the nearby Shinto Shrine by means of sophisticated paths and landscape features. They were also sensitive to the relationship between the new buildings and the existing residential neighborhood in terms of visibility, access, and scale. One obvious explanation for this was that these students had an opportunity to physically visit the site and get a better sense of the physical context.

The goal of this experimental project was the production of contextually thoughtful designs from different cultural perspectives. The hope was that students would be able, to a certain extent, to place themselves and their design process within an environment different from their own and therefore produce unexpected work. The final projects demonstrated a general understanding of Japanese design principles and of the specific context and circumstances of the site. While students successfully applied certain concepts of space planning, proportional systems and structure, the fabric of the historical samurai neighborhood was challenging in terms of its materiality, scale and street structure, so that students struggled to articulate a clear and appropriate strategy to connect their project to its context. In particular, the difference between designs by students working with the imperial measurement system and students working in metric was notable in that although the students working in metric had designs which corresponded more closely to the materiality of their local tradition, the proportions corresponded to a common scale. In contrast, designs by students using the imperial measurement system were different both in materiality and proportion. In addition, participants from each school came from different grade levels, and this affected their ability to understand and interpret the importance of materiality and proportion in relation to architectural tradition.

CONCLUSION

Though largely positive, the project presented a number of challenges on a variety of levels. The overall context of the project was completely foreign to most students and despite the digital tools and resources available it was still difficult for students to gain a thorough understanding of the site conditions. Since presentations were conducted in English, students hesitated to explain their designs at the level they might have in their first language. Additionally, the final project presentations were conducted using VR, yet not all students had the opportunity to prepare VR-supported presentations, and the sense of exchange that the immersive VR platform allows would have been stronger had all students been able to present their work in the VR format. That said, the gap between a 3D rendered building and a physical model contributed to a sense of ambiguity as to whether the students had really understood how an architect creates a sense of space. Although the platform allows for idea sharing and exchange, VR is a controlled encounter. The only spaces that exist are those that have been intentionally created, and participants only see what is presented to them. In this sense it is not as robust as a real-world exchange, where unplanned incidental encounters, either with people or objects in space, may have a significant effect on developing the student's thinking.

Beyond the design outcomes of the project, seeing how each group adopted various design approaches was invaluable. Both students and faculty realized that unexpected and effective, though not always entirely appropriate, design solutions came from this unfamiliar design process, thereby reinforcing the idea that design thinking from a different cultural position can be of value. Using the design brief as a story to create the conditions for students to identify work produced from a different cultural and design perspective was key to instilling a deeper understanding and appreciation of someone else's position and as such contributed to the idea of cosmopolitan citizenship.

By taking advantage of online platforms, and by incorporating narrative and roleplay elements, it is not necessary to limit participation to members of the same studio, or even the same local, making it possible to develop international collaborations between studios in different institutions and countries. Joint projects between institutions in different countries can offer a way to introduce students to practices outside their home studio, and interactions with architecture students in different studios allow students to witness and compare the dynamic within their home studio with the dynamics in partner institutions. The narrative also offers an invitation to tackle a design problem while considering issues that take them beyond their immediate local and to consider how to develop a culturally sensitive design in unfamiliar territory. We argue that this approach has a strong potential to contribute to the development of students as cosmopolitan architecture professionals, working in a global context.

ENDNOTES

- Smith, W. (2007). Cosmopolitan Citizenship: Virtue, Irony and Worldliness. European Journal of Social Theory, 10(1), 37–52. https://doi. org/10.1177/1368431006068755
- In addition, one of the authors regularly participated in seminars held in Second Life during their masters' degree in 2010. The Second Life entry portal https:// secondlife.com/destinations/learning/universities (access 7/14/2023) currently shows 14 universities with active spaces in Second Life.
- For a full understanding of this process see: Ojeda, C. M. (2007). In The Game : An Exploration of the Concept of Immersion in Video-Games and its Usage in Game Design. https://ro.ecu.edu.au/theses_hons/1298
- 4. 'Mantle of the Expert' is a concept introduced by Dorothy Heathcote in the early 1990s, and reflects how students can gain new perspectives which contribute to their learning by roleplaying the expert. When architecture students present their works in the crit, they are not yet architects yet there is a sense in which they are learning by roleplaying the activities of professional architects.

REFERENCES

- Anderson, Kelly L. Ch. 5 Analytical Engagement Constructing New Knowledge Generated Through Storymaking Within Co-Design Workshops in Participatory Practice in Space, Place, and Service Design: Questions of Access, Engagement and Creative Experience / Edited by Kelly L. Anderson ; Series Editor, Graham Cairns. The Interdisciplinary Built Environment. Wilmington, DE: Vernon Press, 2022.
- Baker, Suzanne C., Ryan K. Wentz, and Madison M. Woods. "Using Virtual Worlds in Education: Second Life® as an Educational Tool." Teaching of Psychology 36, no. 1 (January 2, 2009): 59–64. https://doi. org/10.1080/00986280802529079.
- Dickey, Michele D. "Game Design Narrative for Learning: Appropriating Adventure Game Design Narrative Devices and Techniques for the Design of Interactive Learning Environments." Educational Technology Research and Development 54, no. 3 (June 2006): 245–63. https://doi.org/10.1007/ s11423-006-8806-y.
- Participatory Practice in Space, Place, and Service Design: Questions of Access, Engagement and Creative Experience / Edited by Kelly L. Anderson ; Series Editor, Graham Cairns. The Interdisciplinary Built Environment. Wilmington, DE: Vernon Press, 2022.
- Narasimha, Shraddhaa, Emma Dixon, Jeffrey W. Bertrand, and Kapil Chalil Madathil. "An Empirical Study to Investigate the Efficacy of Collaborative Immersive Virtual Reality Systems for Designing Information Architecture of Software Systems." Applied Ergonomics 80 (October 2019): 175–86. https://doi. org/10.1016/j.apergo.2019.05.009.
- Portman, M.E., A. Natapov, and D. Fisher-Gewirtzman. "To Go Where No Man Has Gone before: Virtual Reality in Architecture, Landscape Architecture and Environmental Planning." Computers, Environment and Urban Systems 54 (November 2015): 376–84. https://doi.org/10.1016/j. compenvurbsys.2015.05.001.
- Russell, Carol, and John Shepherd. "Online Role-Play Environments for Higher Education: Online Role-Play Environments." British Journal of Educational Technology 41, no. 6 (November 2010): 992–1002. https://doi. org/10.1111/j.1467-8535.2009.01048.x.
- Sapto Pamungkas, Luhur, Cinthyaningtyas Meytasari, and Hendro Trieddiantoro. "Virtual Reality As A Spatial Experience For Architecture Design: A Study of Effectiveness for Architecture Students." Edited by R.B. Santosa, N.C. Idham, N.G. Yuli, and P.Ap. Agustiananda. SHS Web of Conferences 41 (2018): 05005. https://doi.org/10.1051/shsconf/20184105005.
- 9. Ehud Belferman, Shulamit Beimel, Shoham Shefy. Ch. 10 Play and Plan: Play Mode as a Creative Experience Generator in the Potential Space of the Architectural Studio in Participatory Practice in Space, Place, and Service Design: Questions of Access, Engagement and Creative Experience / Edited by Kelly L. Anderson ; Series Editor, Graham Cairns. The Interdisciplinary Built Environment. Wilmington, DE: Vernon Press, 2022.
- Smith, William. "Cosmopolitan Citizenship: Virtue, Irony and Worldliness." European Journal of Social Theory 10, no. 1 (February 2007): 37–52. https://doi. org/10.1177/1368431006068755.
- Sopher, Hadas, Dafna Fisher Gewirtzman, and Yehuda E. Kalay. "Going Immersive in a Community of Learners? Assessment of Design Processes in a Multi-setting Architecture Studio." British Journal of Educational Technology 50, no. 5 (September 2019): 2109–28. https://doi.org/10.1111/bjet.12857.