ONLINE EDUCATION: TEACHING IN A TIME OF CHANGE

• Paper / Proposal Title:
Zoom Off but Zoom In | The integration of video game technologies in architectural pedagogy in a physically distanced classroom

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• Abstract (300 words):
Architecture has defined culture since the dawn of human civilization. It is a medium that simultaneously manifests and responds to societal needs while epitomizing cultural identity. Over the centuries, media including music, literature, and cinema have emerged in tandem as diversifying the robust framework of contemporary culture. Recently, the surge in video games as a cultural phenomenon has become a component of the contemporary zeitgeist. As with other visual media, video games have inevitably developed a symbiotic relationship with architecture. Computer games ranging from the Assassins Creed Series through to Sim City, function as a reflection of urbanism and architecture in the present, past, and projections of the future as depicted in video game franchises such as Grand Theft Auto, Civilizations, and Watch Dogs respectively. While architecture has defined the framework and context for countless virtual worlds in computer games, conversely, video games now afford emergent architects a range of successful pedagogical opportunities in developing the future of the built environment.
With the evolution of video game technology, social media, and digital influence in the arts, video games have in turn become a catalyst for architectural praxis and education. The tools developed for video games have steadily encroached into the arsenal of architecture students thereby providing them with greater fidelity and immersion capabilities in their design work. As physical distancing and online learning pervade current pandemic pedagogy, video games hold the promise as an accessible resource for historic reference and construction methodologies, providing a platform where students can interact with architectural subjects in a digital space. This paper examines the dyadic relation between architecture and video games and the integration of the medium in architectural education through video game engine tools, as a resource for the experience of historical urban spaces, demonstration of constructability, and as a tool for immersive representation of current and unbuilt architecture. This paper serves as not only an overview of the pedagogical potentials of gaming within architectural education, but also presents successful pedagogical strategies for implementation.

• Author(s) Biography (200 words each):

Vincent Hui holds several degrees including a Masters of Architecture (Waterloo) and Masters of Business Administration (Schulich at York). As a faculty member in Ryerson’s Department of Architectural Science, he teaches a variety of courses, from design studios to advanced architectural computing and digital fabrication. He has been awarded several teaching distinctions across different universities, including the 2015 Ontario Confederation of University Faculty Associations’ Teaching Award and most recently, Ryerson University’s 2018 President’s Award for Teaching Excellence. He has cultivated an extensive record of publications and research on design pedagogy, advanced simulation and rapid prototyping, and technological convergence in design praxis. A proponent of increasing connections to industry and the greater community, he has developed the Architectural Science Co-op program as well as multiple summer programs for aspiring young designers. He currently serves as a co-director of Ryerson University’s Design Fabrication Zone where he has mentored several award-winning projects and innovative startups.

Tatiana Estrina is a Research Assistant at Ryerson University in Toronto. She has had her design work displays in several exhibits including the 2019 Icebreakers Festival, 2018 Grow Op Exhibition and the Whitchurch-Stouffville Museum. She has been able to win various honors, most notably three placements in the ACSA Design Competitions, the Award of Merit in the CISC Design competition as well as several academic awards. Her exhibitions have also won awards including Ontario Museum Association Award of Excellence in Exhibitions and the Seed Development Award. She has been a part of several publications on virtual reality experiential learning.
Alvin Huang is a research assistant within the Architectural Science Program at Ryerson University. Alvin has won several academic honors including the Toronto Society of Architects awards, Toronto Construction Associations Award, and the Industry Supported Architecture Scholarship in Honor of Stewart Crawford. His participation in various architectural competitions has won him the Canadian Center for Architecture Charette First Prize along of the First Prize in the RAIC Emerging Practitioners Competition.

Shengnan is a research assistant who has accumulated a range of architectural experiences based in Toronto. Her academic works exhibited at school year-end shows, and one of her competition projects received CCA at the First Place, a national award in Canada. Shengnan has also participated in a number of academic curriculums in design-build fabrication, collaborating and working with other students from architectural departments. Working at NEUF Architect(e)s, Shengnan was able to put her theoretical knowledge into practice.