

LOCAL: THE UNIVERSITY AS DESIGN CULTIVATOR AND CITY BUILDER

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ABSTRACT:

Universities have both the capacity and the responsibility to serve as a design cultivator that empowers its students with the ability to draw upon genius loci not only as a creative catalyst but as a venue for design innovation and mentorship.

Ryerson University in Toronto, Canada has embarked on a series of innovative initiatives to facilitate its mandate to play a critical role as a “city-builder” while maintaining a connection to its globalized network. The local sense of place has become a source of differentiation from the homogeneity of globalized design pedagogy, effectively a genius local. Ryerson University’s academic and extracurricular design initiatives epitomize this. Through a series of pilot initiatives undertaken, the presentation will highlight strategies on how design educators can encourage students to draw and build upon the genius local of their vernacular contexts.

Keywords: Pedagogy, Vernacular, Catalyst, Genius Local, Design Commodification

1. GLOBALIZATION: THE DOUBLE EDGED-SWORD

Over the past two decades institutions have shifted their mandates from isolated academic silos to community partners in larger local and global networks. Though this shift is applauded, the latter has been prioritized. With the hyper-connectivity of ubiquitous computing, the rapid exchange of ideas, mass collaboration, rapid prototyping, international markets, and offsite production have all been hallmarks of an unprecedented globalized design economy.

That a teen in Germany can watch an American film starring Indian actors on his Chinese-made television is a testament to the ubiquity and fluidity of contemporary globalized culture. Within daily life, from recreation to industry, globalization has yielded many benefits ranging from cost-effective production and world markets to standardization and consistency; unfortunately it is the latter that has become a critical point of discussion especially pertaining to cultural commodities (Cowen, 2002). This internationalization has made an impact in academia that has been critical in moulding global citizens of tomorrow and empowering students with invaluable skills such as cultural sensitivity and global interconnectivity, from foreign partnership programs to exchange programs (Altbach, 2001).

Unfortunately these benefits have diminished the potency of resources and opportunities within the localized context post-secondary institutions have established themselves in.

The inevitability of the integration of globalization in design pedagogy is something that must be embraced on account of mobilizing students with necessary skills in global organization, manufacturing trends, and technology (Bohemia & Harman, 2010); the authors agree that these are critical to creating future designers, however in many instances the focus tends to be on the appeal of exposure to the global context at the cost of local values. Though the application of ideas from one part of the globe to another is both appropriate and inescapable, the allure of transplanting ideas at best comes across as kitschy imitation, or at worst embarking on design imperialism. For students and professionals alike, the preoccupation with globalized phenomena trumping vernacular matters has recently come to the forefront in design and brought about discussions on “ethical considerations” mandated in practice (McNeil, 2006).

1. 1. COMMODIFICATION OF CULTURE

Genius Loci is a critical part of design, however it has lost its means as design became globalized, reduced to a cliché that doesn't speak to the built environment. The increased interdependence among nations on economic, environmental, and socio-political matters has inevitably precipitated homogeneity of culture. Sharper views from the likes of Klein and Chomsky critically look to the political and economic impacts on peoples' daily lives. A similar tide of criticism has come to the forefront on cultural commodities ranging from movies and music to art and architecture (Klein, 2009) (Chomsky & Herman, 2002); the scope of discussion in this framework will focus on architectural pedagogy and its ability to leverage local conditions to reinforce vernacular contextual factors.

In his seminal catalogue of contemporary houses, Postiglione claims that there “is indeed a shared international heritage, despite location of the houses in specific places and thus their positions in specific national identities.” However, this situation has devolved into a platform whereby design spectacle has become a commodity (Postiglione, 2004); as much as contemporary architectural theorists claim that the successes and global exposure to design that globalization has afforded to practitioners and students alike, it has also led to students fixating on emulating the current popular architects with little awareness of the appropriateness of the response to the local context. At the other extreme there are institutions delivering curricula that is immersive and bring students to real world conditions for effective design-builds; these groups may be sent to assess and address challenges faced in places after disasters such as the massive turnout for the plight of people from Hurricane Katrina or the annual devastation of flooding in Jakarta. Though these are extremely lauded on humanitarian and social dimensions, the outcomes for these initiatives often are insensitive to real world context on sourcing of materials, assembly, and vernacular design traditions (Charlesworth, 2014).

1. 2. THE PEDAGOGICAL CHALLENGE IN DESIGN

Within design pedagogy, styles, materials, techniques, and technologies from around the world have proven to be far more seductive than collaborators, opportunities, and resources found within robust nearby networks. When leveraging these local prospects, institutions often at best collaborate on initiatives that struggle to maintain sustainability and at worst are superficial projects that fail to genuinely draw upon inspirations native to the local environment. Universities, specifically their design programs, have both the capacity and the responsibility to serve as design cultivators that empower their students with the ability to draw upon genius loci not only as a creative catalyst but as a venue for design innovation and mentorship.

Over the past two decades institutions have shifted their mandates from isolated academic silos to community partners in larger local and global networks. Though this shift is applauded, the latter has been prioritized. With the hyper-connectivity of ubiquitous computing, the rapid exchange of ideas, mass collaboration, rapid prototyping, international markets, and offsite production have all been hallmarks of an unprecedented globalized design economy. Unfortunately these benefits have diminished the potency of resources and opportunities within the localized context post-secondary institutions have established themselves in. Within design pedagogy, styles, materials, techniques, and technologies from around the world have proven to be far more seductive than collaborators, opportunities, and resources found within robust nearby networks.

2. GENIUS LOCAL: UNIVERSITY AS CITY-BUILDER

Ryerson University in Toronto, Canada has embarked on a series of innovative initiatives to facilitate its mandate to play a critical role as a “city-builder” while maintaining a connection to its globalized network. The local sense of place has become a source of differentiation from the homogeneity of globalized design pedagogy, effectively a genius local. Ryerson University’s academic and extracurricular design initiatives epitomize this. From collaborations with local not-for-profit agencies and cultural institutions to developing an ecosystem of vernacular- and context-driven entrepreneurship and innovation, the university has established a symbiotic relationship with a host of stakeholders within the city through design, using different strategies.

3. GENIUS LOCAL STRATEGIES

Ryerson University in Toronto, Canada has embarked on a series of innovative initiatives to facilitate its mandate to play a critical role as a “city-builder” while maintaining a connection to its globalized network. The local sense of place has become a source of differentiation from the homogeneity of globalized design pedagogy, effectively a genius local. Ryerson University’s academic and extracurricular design initiatives epitomize this. From collaborations with local not-for-profit agencies and cultural institutions to developing an ecosystem of vernacular- and context-driven entrepreneurship and innovation, the university has established a symbiotic relationship with a host of stakeholders within the city through design, using different strategies.

3. 1. SITUATIONAL ANALYSES TO DISCOVER & IDENTIFY UNIQUELY LOCAL CHALLENGES AND CHARACTERISTICS

An established awareness of design based upon local characteristics, specifically with respect to regional climatic conditions has risen to prominence within architectural design over the past thirty years; bioclimatic and vernacular design have epitomized this local sensitivity and allowed students to engage their local design paradigms with a distinct set of parameters (Labaki & Kowaltowski, 1998). One need only look to the utter failure of the indiscriminant mushrooming of glass towers from the cold Canadian climates to the hot, arid regions in the Middle East as an example of this; with these towers creating greenhouses with incredible solar heat gains in Middle East while creating effective heat sinks with glass literally popping off the elevations due to thermal expansion and contraction in cold climates; a basic understanding of local characteristics would have ensured such practices would not continue (Foruzanmehr & Vellinga, 2011). As architectural pedagogy strives to embrace sustainability and ecological thinking based upon local traditions and climatic challenges, this has served as an introduction to design-critical factors including considerations of the aesthetics, materials and methods, and programming of vernacular traditions.

Ryerson University works with awareness to context and genius local, challenging students to design based not on globalized methods of form finding, but based on local context and unique problems within the region. Students given real world conditions, in a tangible context they are familiar with, are able to design for place, not based not only on vernacular, but also on site and region specific demands and characteristics. In the winter of 2015 students were asked to design a solution for unoccupied lifeguard stations that are left desolate during the winter. These stations are on beaches that are host to a vibrant community and multiple activities during the summer, but are abandoned and barren for the rest of the year. Snowcone, designed by students in the Department of Architectural Science, took advantage of this unique situation and along with 4 other designs from various offices brought warmth back to these empty stations. These were designed not with a preoccupation for globalized phenomena, but with a condition unique to their immediate landscape, answering a question that is more contextual than global. Snowcone provided students with a unique opportunity to work on a real world design build project that seeks to answer the localized problem of bringing life to the beaches of Toronto during the winter. Students are encouraged to work with the collaborators, opportunities, and resources that are available to them within their surroundings. Successful projects function as catalysts for design that give students the opportunity to contribute to the *genius loci* of their city.



Figure 1: Snowcone. Image © Remi Carreiro

One such project that empowered students with the opportunity to contribute to a large scale collaboration within the city of Toronto is the Arch-App. The Arch-App, known also as RULA Maps, arose from identification of Ryerson's unique context of being in the city and possessing connectivity with surrounding communities interested in our research. The app was born academically, integrated for a structures class in the Architectural Science program, along with other programs in several departments throughout the university; it incites the collaboration between several fields towards the creation of a unique framework of contextual information that is made available to all. The project extended toward more localized projects with the creation of the Discover St. Clair App, an extension of the Arch-App that was built from the ground-up and served as a catalyst in the evolution of the existing app. Discover St. Clair was a joint venture between Ryerson and a large Toronto community, the Wychwood Barnes Community Association (WBCA), celebrating the centennial of the St. Clair Streetcar. The WBCA wanted to celebrate their 100th anniversary with the creation of a framework of information recording and mapping the history of their vibrant community, putting historical information of the St. Clair West area in the hands of the people who make up the community. These apps are successful examples of initiation between the city and academia, fostering the cultural development of the community.

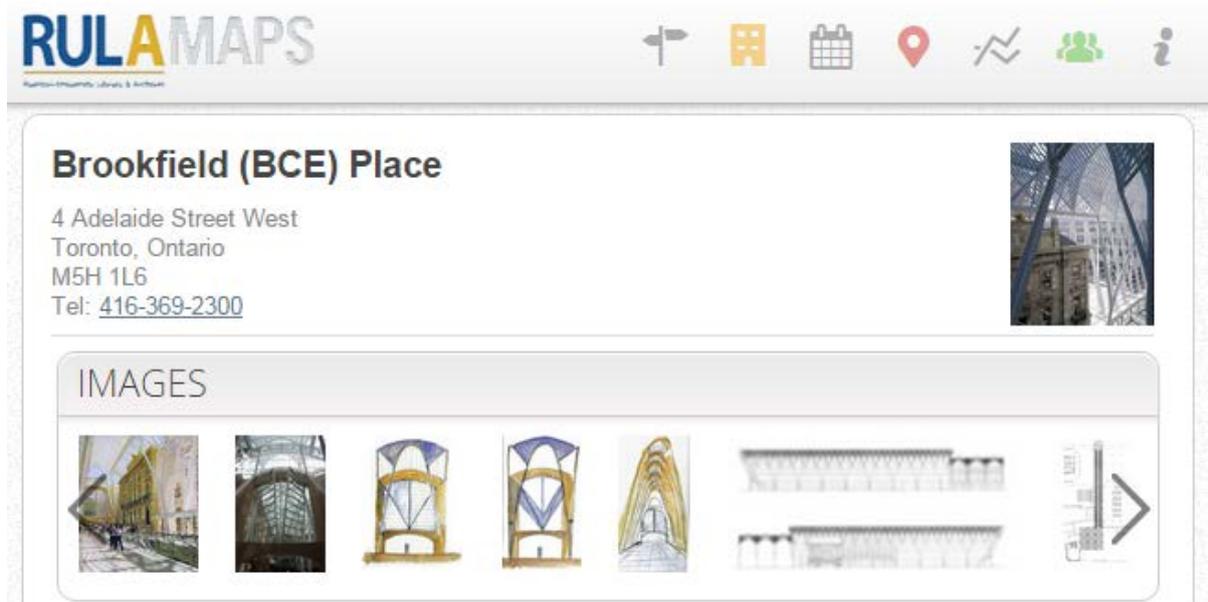


Figure 2: ArchApp showcasing information on Toronto Architecture.

3. 2. CAPITALIZE ON & COLLABORATE WITH PARTNER INSTITUTIONS FOR LOCAL OPPORTUNITIES

In his book *Vernacular Architecture*, Glassie states, “Buildings like poems and rituals, realize culture... All architects are born into architectural environments that condition their notions of beauty and bodily comfort and social propriety.” (Glassie, 2000) A similar point could be said about global competitions in architecture; though they serve to elicit a range of design responses, they often lack an awareness of local context including its populations’ zeitgeist or cultural anchors. If architectural praxis claims to embrace Glassie’s ideal, then its pedagogy must engage a local, rather than global scope. Whether through collaborations with the general public or cultural fixtures in a local community, emerging architects must understand the multivalent microcosm of design response in a smaller, but no less complex context, before reasonably entering the global landscape. Synergies that arise from partnerships with institutions have been widely hailed as symbiotic (Krishna, 2003); in addition to these initiatives there are many interdisciplinary opportunities within institutions that also may serve to inculcate Glassie’s desired outcomes (Mieg, 2000). Synergetic relationships such as these have the ability and the responsibility to, as Glassie states, realize culture.

The Do-It-Yourself Mesopotamian City exhibit was one such collaboration between institutions that served as a catalyst for cultural development within the city. The exhibit was a joint venture between the Royal Ontario Museum in Toronto, a small 3D printing start-up, and Ryerson University. The exhibit was hosted for 4 nights during a weekly event hosted at the ROM called Friday Night Live; this event opens the doors of the museum at night allowing people to experience and engage with the exhibits in a lively environment. The Do-It-Yourself Mesopotamian City exhibit was unique to this context, as visitors were invited to design a small piece of Mesopotamian architecture through the use of predesigned

architectural components, allowing them to draw directly from local traditions and transforming them into a unique structure. The event not only showcased Ryerson students' 3D skills, but also made 3D modeling and 3D printing technologies available to the general public in an engaging and interactive environment.



Figure 3: Collection of custom 3D Printed Mesopotamian structures.

The Stop's Night Market, a charity event hosted in Toronto with the goal to raise money for several food related charities in the city, is another such collaboration. This activity brings together designers and culinary experts from around the city to create several unique food carts in which food will be presented and served. Ryerson University has taken part since the event's inception in 2012, successfully bringing together students and city renowned chefs, and drawing from the vernacular in order to create a unique dining experience. Ryerson's designs take cues from Canadian heritage in the use of wood and the construction methods of the food cart, drawing inspiration from early settlements and canoe design. The Stop's Night Market is an extremely popular event, attended by hundreds of guests and covered in major media outlets. It is a symbiotic relationship that brings together multiple talents from all over the city, serving as a cultural catalyst for not only design, but also for social impact.



Figure 4: Night Market Carts for 2012, 2013, & 2014 collectively.

3. 3. INSPIRE FROM LOCAL INTERESTS TO BECOME GLOBAL IDEA

Local context factors stimulate innovations from native populations that often get propagated through online channels to a global reach in relatively little time; often these local inspirations become the catalysts for global trends. Towards the conclusion of Heath's *Vernacular Architecture and Regional Design*, the author emphasizes that regardless of how or where an architect develops his design, it can neither be a pastiche of topical or currently popular global ideas, nor should it be an imposition of his ideas, but instead a strong design serves as synergy between an architectural response steeped in an understanding of contextual factors and the designer's own interests or ideas (Heath, 2009). In *Mapping Futures*, the authors contend that it is based upon local cultures spurring on global changes and initiatives that are sustainable and amenable to global application (Bird, Curtis, Putman, & Robertson, 2000); the logic and model of operation from local application before international showcase has been proven successful in a range of disciplines regardless of execution (McGinnis & Ostrom, 1992). Ryerson University has taken part in several projects that strive to stimulate and propagate local innovations through collaboration with institution; academia and other institutions develop a symbiotic relationship with the intention to serve as a catalyst for global trends.

Nuit Blanche is an annual art festival that takes over the city streets for one full night, covering sidewalks, streets, alleys, galleries, museums, and other spaces in temporary art installations from designers from around the world such as Ai Weiwei. Ryerson University takes part in the festival by contributing installations designed and built by students; one such project was *Stomata*, presented in the Bata Shoe Museum in 2014. It allowed students to create something based upon local contexts to display locally and, ultimately, to the entire world. The installation was visited by thousands of people, with lines wrapping around

the building as late as 4 in the morning. Media coverage of the event had a worldwide reach, allowing the work to be viewed by many more users. Stomata, much like a poem or ritual, created culture. It, along with many other exhibits, serve to not only bring international talent to the city, but also to propagate localized ideas and concepts worldwide.



Figure 5: Stomata. Image © Remi Carreiro

Projects that are born locally can propagate outwards on a smaller scale as well. Sterilization wall stemmed from local interests in embedded technologies and fabrication, along with a partnership between biomedical engineering in Ryerson and St. Michael's hospital. This symbiotic relationship was crucial in the development of a successful prototype, conceived by biomedical engineering students, designed by architecture students, and funded by St. Michael's hospital. The project allows for doctors to quickly and efficiently sterilize their tools, allowing their hands to remain sterile as well. This collaborative experience made use of 3D printed components, laser-cut acrylic armatures, CNC-routed framework, motion sensors, and arduino technologies, proving to be quite an educational experience for all involved. The concept was localized within the department of engineering, and propagated outwards to other departments and institutions through collaboration.

4. CONCLUSION

The value of the sense of place, *Genius Loci*, has been a critical component in design, specifically in the built environment. Unfortunately the term has become a cliché that has failed to become a key determinant in contemporary design. Rather than providing designs that uncomfortably situation themselves in a force-fit context, a greater awareness of localized factors should be adopted when proposing any design intervention. A localized sense of place, coined "Genius Local" by the authors, is critical in affirming strong, context-sensitive design work in light of the recent trends in practice of placing designs with indifference.

Globalization has been responsible for a range of benefits yet this interconnectivity and collective aggregation of normative cultural commodities has threatened the role of local and vernacular traditions. As design trends are increasingly fuelled by the pervasive and ubiquitous imagery accessible via the saturation of online networks, there is a need to calibrate design discourse from localized factors. Particularly in creative industries, it is imperative for designers to inculcate and ascribe a value to local catalysts that make designs context- and site-specific as opposed to transplanted. The authors posit three strategies in order to sustain the great potential that localized factors may play in reasserting vernacular design against the tide of the commodification of design and cultural properties as a result of the power of globalization. Design cannot develop in a vacuum; the authors ascribe value to the need to examine globalized precedents. There is a greater need for a renaissance in vernacular catalysts in design education. By leveraging unique characteristics or challenges from local contexts, capitalizing on partnerships with local groups, and encouraging a focus on robust and uniquely native enterprise as a catalyst for global initiatives, design pedagogy can reinforce the value of localized contexts. Though the precedents presented are driven by architectural contexts, the framework of "Genius Local" may also be applied to other creative industries and certainly can be implemented in institutions around the world.

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