Jesse Colin Jackson

Synopsis of Research, Teaching, and Service

September 30, 2016

The information that follows summarizes creative research, undergraduate and graduate teaching, and institutional, professional, and community service activities accomplished in my career to date, weighted towards achievements since my appointment at the University of California, Irvine in 2013. Details and documentation of these activities can be found in my illustrated curriculum vitae, attached, and at my website: jessecolinjackson.com.

Overview

I am an assistant professor in the Department of Art at the University of California, Irvine (UCI), where I serve as Director of the campus-wide Minor in Digital Arts and the head of the Electronic Art and Design area. I was previously an assistant professor in the Faculty of Design at OCAD University (OCADU), Canada's leading post-secondary art and design institution, where I served as the head of the Sustainability Office. I have also taught at the University of Toronto and Ryerson University.

My creative research practice is focused on object- and image-making as alternative modes of architectural production, manipulating forms and ideas found in virtual and built environments through use of digital visualization and fabrication technologies. My ambition is for my projects to make notable and visible contributions to interdisciplinary knowledge, while retaining their autonomy as artistic production. To this end, my creative process is propelled by collaborative engagement with allied intellectual frameworks, including anthropology, ethnography, informatics, speculative design, and urban studies. The objects and images that result embody knowledge that inhabits the space between disciplines, while also creating novel opportunities for meaning. The original posting for my position at UCI sought an individual "working at the forefront of interdisciplinary design practices and with a proven record of engagement and collaboration with members of the public and the academy outside of their artistic disciplines." This was, and continues to be, an accurate description of my practice.

My work has been the subject of several solo exhibitions, including *Marching Cubes* (Pari Nadimi Gallery and the Experimental Media Performance Lab, 2016), *Radiant City* (Pari Nadimi Gallery, 2014), *Automatic/Revisited* (Latitude 44 Gallery, as part of the Toronto Design Offsite 2013), *Usonia Road* (Larry Wayne Richards Gallery, 2009), *West Lodge* (Convenience Gallery, 2009), and *Automatic* (Larry Wayne Richards Gallery, 2009). I am represented by Pari Nadimi Gallery, where my first solo exhibition received a full-page review in Canada's newspaper of record. I have received project funding from the Canada Council for the Arts, the Ontario Arts Council, the Social Sciences and Humanities Research Council of Canada, the California Institute for Telecommunications and Information Technology, the Centre for Innovation in Information Visualization and Data Driven Design, the Digital Media Research and Innovation Institute, and the Ontario government's Applied Research and Commercialization Initiative. I was a 2014-2015 Hellman Fellow at the University of California, a 2008-2010 Howarth-Wright Fellow at the University of Toronto, and a 2009 nominee for the Canada Council for the Arts Prix de Rome for Emerging Practitioners.

Research

Pari Nadimi Gallery (PNG) in Toronto, Canada has represented my creative practice since 2013. PNG represents a diverse and distinguished roster of artists including, most notably, new media pioneers Jim Bailey and David Rokeby. PNG artists that are tenured faculty at post-secondary institutions include: George Legrady, Distinguished Professor of Interactive Media at the University of California, Santa Barbara; Joe McKay, Associate Professor of New Media at the State University of New York at Purchase; and Jennifer Stillwell, Associate Professor of Sculpture and Video at the University of Victoria.

Since 2008, I have secured over $450,000 in direct support for my independent projects and research initiatives, including $219,500 from external grants and competitions. A selection of these projects and initiatives—*Radiant City*, *Figure Ground*, *West Lodge*, and *Landmarks and Monuments*; *Mackenzie Place*, *Arctic Passage*, and *Visualizing Canada's Urban North*; the *Speculative Prototyping Lab*, the *Spandrel Lab*, and *Making it Real*; and *Marching Cubes*—is described below.

Radiant City is an image-making project focused on Toronto's tower apartment neighborhoods, a subject I have been depicting since 2006 in the earlier projects *Figure Ground*, *West Lodge*, and *Landmarks and Monuments*. The images evoke the designed and lived intensities of these conflicted sites: essential housing for one quarter of the city's population, arrival destinations for immigrants, the decaying location of much of Toronto's urban poverty, products of modern ideologies gone awry, and locations of past glory, current dynamism, and future potential. The images invite the viewer to consider the evolving presence and status of these buildings in our collective consciousness. The *Radiant City* exhibition at PNG received a full-page review in The Globe and Mail, Canada's newspaper of record, in which art critic John Bentley Mays reaffirms the project's intentions: "Jackson is too young to remember the time when the buildings he documents were new. Distance from that moment, and resistance to the condescending opinion common in our own day, perhaps explain the resemblance of his image-making to the photography of themselves that elderly people often appreciate—frank about wrinkles and blemishes, but not ruthless; not a cover-up, but respectful."

PNG's forthcoming catalog of the exhibition, featuring an essay by architect Graeme Stewart, is the first step towards a forthcoming monograph, for which I have secured essay commitments from Stewart, The Globe and Mail architecture critic Alex Bozicovik, and landscape architect and Harvard University faculty member Jane Hutton. Images from *Radiant City* and its precursor projects have been published over 20 times in books (e.g. Concrete Ideas, 2012), periodicals (e.g. Metropolis, 2015), film (e.g. HIGHRISE: Universe Within, 2015), and online (e.g. Doggerel, 2016), and are the visual basis for several community initiatives in tower apartment neighborhoods.

My interest in the legacies of modern architecture led to five years of fieldwork in Hay River, a small town one of in Canada's arctic territories. The completed creative product, *Mackenzie Place*, will consist of a four0channel immersive video installation that compiles five million images captured over twelve months by four cameras installed on a uniquely tall building that presides over the center of town. The installation will permit the viewer interactive access to all that is witnessed by this singular structure. The challenges associated with large scale data collection from a remote arctic site have delayed the first exhibition of this project until 2017, but preliminary results have already precipitated a $150,000 grant application for an ambitious follow-up project, *Arctic Passage*, which will extend and refine the methods developed for *Mackenzie Place* to five further circumpolar sites in the United States, Canada, Greenland, Norway, and Russia, and permit viewers access to the variety of lived experiences present in these extreme and ecologically threatened environments.

Mackenzie Place and *Arctic Passage* emerge from Visualizing Canada's Urban North (VCUN), a research initiative funded by at the intersection of media art and anthropology that seeks to inform our understanding of circumpolar urban life. The Centre for Innovation in Information Visualization and Data-Driven Design and the Social Sciences and Humanities Research Council of Canada provided primary funding for this initiative. Through the production of visual texts—compositions derived from digital image collection—VCUN elucidates the structures of use and occupation in northern urban environments that either connect or distinguish these spaces from their southern counterparts. The research also provides a platform for exploring the opportunities that new media representational strategies provide the social sciences. In 2013, the VCUN team was invited to participate in Ethnographic Terminalia, a residency organized at the Arts Incubator in Washington Park on Chicago's South Side. As articulated by Monique Scott in her review in Visual Anthropology, we used the residency to create "several works that interrogated the possibilities for reading the intersection of art and anthropology and how we perceive the instability of urban spaces: the work provided an opportunity for the research team to refine their collaborative strategies for translating urban information into visual form." These and other VCUN results have been published in several articles (e.g. Spacing, 2013) and catalogues (e.g. Lines and Nodes: Media, Infrastructures, and Aesthetics, 2014).

The Speculative Prototyping Lab (SPL) at UCI is a more recent research initiative that pursues social practice and pedagogy at the intersection of media art and speculative design. The SPL supports collaborations between artists, designers, engineers, scientists, humanists and the general public. SPL projects to date include: a pedal-powered 3D printing and print recycling station, for which an SPL student won one of six national Brower Youth Awards for Environmental Leadership; a sponsored project to digitally fabricate furniture for a local community group from recycled cardboard; and a Tool Room of the Future for Casa Del Sol, Team Orange County's entry for the United States Department of Energy (DOE) Solar Decathlon solar-powered house competition. Casa Del Sol won a prize in the engineering category, and the DOE jury cited the Tool Room as a major contribution. More recently, the SPL has secured matching funds from five units on campus (Arts, Engineering, Information and Computer Science, the Division of Teaching and Learning, and the California Institute for Telecommunications and Information Technology) for One 3D Printer Per Student, which will permit students to "operate at the forefront of digital design and fabrication, by eliminating the bottleneck these technologies typically present." SPL projects have received coverage in the Los Angeles Times and will be published in The 3D Additivist Cookbook, forthcoming in December 2016.

The SPL's current focus on digital fabrication is inherited from the *Spandrel Lab* at OCAD University, which authored a report to government on the commercialization potential of digitally-fabricated objects designed with generative algorithms. The SPL is also informed by *Making it Real*, a curatorial project in which virtual objects, submitted electronically from around the world, were made real locally using a variety of 3D printing technologies. *Making It Real* was one of the first international exhibitions of innovative examples of fine art, material art, and product design that take maximum advantage of direct digital manufacturing. The *Making it Real* collection and catalogue was featured three times as part of international events: the annual conferences of the Association for Computer Aided Design in Architecture and the Society of North American Goldsmiths, the Toronto International Jewelry Festival, and Toronto Design Offsite 2014. The initial *Making it Real* exhibition at OCAD University's Open Gallery hosted over 1000 visitors.

Featured in *Making it Real* was an early prototype of *Marching Cubes*, an interactive installation that permits direct physical engagement with the Marching Cubes algorithm—a language that defines our virtual environments—and generates dialogue about the ways in which information technologies can create the building blocks of contemporary culture. The installation is comprised of 3D printed construction units that permit participants to, through playful interaction, directly experience the algorithm and the virtual language it represents. *Marching Cubes*, which has

received funding from the Canada Council for the Arts, and for which I was named a Hellman Fellow, emerges from two previous explorations of experimental unit-based construction systems, *Automatic* and *Automatic/Revisited*. This sequence of projects has been the subject of four solo exhibitions between 2009 and 2016, and several publications including the conference proceedings of the Association for Computer Aided Design in Architecture, a leading venue for work at the intersection of architecture and computation. At The Museum of Modern Art's request, I recently prepared a proposal to install *Automatic* as part of a forthcoming exhibition.

Given the interdisciplinary nature of my practice, conference leadership at the intersection of disciplines has become an important part of my research. At UCI, I played a substantial role in organizing two recent conferences: *Design & the Anthropocene,* which brought together scholars working across boundaries in response to the design challenges of our future; and *Campus Architecture, City Planning, and the Legacy of William Pereira,* which explored Pereira's legacy and influence on contemporary architecture and urbanism. These activities benefitted from previous conference leadership experience at OCADU, where I was the co-chair and chief organizer of *Urban Ecologies 2013*, the first in a series of three international conferences examining intersecting themes that are shaping the future of design in our cities. For this event, I was responsible for securing $45,000 in external support and for managing the total event budget of $195,000. I was subsequently the lead editor of an anthology of the same title, compiling ecological urbanism projects from 60 thought and action leaders.

Since 2008, I have delivered 21 invited talks, including at Harvard University, The Ohio State University, the University of California, Santa Cruz, the University of Victoria, Simon Fraser University, and the University of Jyväskylä in Finland; 12 conference presentations including at New York University, Pennsylvania State University, the California College of the Arts, and the Emily Carr University of Art and Design; and 32 invited course lectures and critiques.

Since 2002, I have maintained commercial design and photography practices, most active between 2009 and 2014. As a photographer primarily focused on architecture, I have served over fifty clients throughout North America, ranging from individual artists and designers (e.g. Adrian Blackwell) to major institutions (e.g. Harvard University). This professional work, in turn, has been published in books and periodicals published in the United States, Canada, Ireland, the United Kingdom, the Netherlands, Austria, Ukraine, China, and South Korea. These activities inform both my teaching and research practices. For example, as part of UCI's 50th anniversary celebrations, I produced *Turning 50*, a sequence of stills depicting the chronological evolution of UCI's campus architecture.

Teaching

I have been teaching at the post-secondary level for ten years. For the past three years at UCI, I have taught thirteen sections of eleven different courses. These range from lecture courses with nearly 200 students, to graduate and undergraduate special topic seminars, to basic and advanced studio courses, all of which were either new or substantially revised. I was the 2016 Dean's Honoree for Teaching Excellence for the Claire Trevor School of the Arts, and I have taught an average of 265 students per year with evaluation scores averaging 6/7. Courses of note include: graduate and undergraduate seminars on the architecture and urbanism of Orange County; three different General Education courses with large enrollments focused on the history and theory of media art and design; and FAB/ART, a biannual course for which I have secured $2500 in funding towards a collective digital fabrication experiment. This year I will launch new courses in environmental design, advanced digital fabrication, and experience design. I will also begin teaching duties as a founding faculty member of UCI's new Master of Human Computer Interaction and Design program, which has led to cross-appointment in the School of Information and Computer Sciences.

Prior to coming to UCI, I taught for eight years at OCADU, the last three as a full-time assistant professor. Over this period I taught 35 sections of 13 different courses in 2D and 3D design principles, environmental design, experience and interaction design, visual communication, and digital fabrication. Most notably, for six years I taught and later coordinated up to 19 concurrent sections of the experimental course Principles of Experience Design, about which I authored a short film and conference paper (National Conference on the Beginning Design Student, 2012). I also supervised graduate students in OCADU's graduate programs in Digital Futures and Interdisciplinary Art, Media and Design. I also previously taught in the Master of Architecture program at the University of Toronto, and provided undergraduate thesis mentorship at Ryerson University.

One instructional innovation common to most of my courses is the inclusion of frequent guest speakers and critics, either in person or via live stream. Recent highlights include: Matt Blackett, Marcin Kedzior, and Greg Smith, editors of Spacing, Scapegoat and HOLO magazines, respectively; media artists David Rokeby and Tori Foster; artists Mariangeles Soto-Diaz and Cognate Collective; designers Greg Sims and Spencer Rand; curators David Familian, Grace Kook-Anderson, and Kevin Staniec; historian Alan Hess; filmmaker Lev Anderson; and Beth Krom, former Mayor of Irvine. Another innovation is extensive use of contemporary teaching technologies, such as participatory course websites, facilitated online discussion groups, and real-time audience response technology.

Service

Since arriving at UCI, I have served as Director of the Minor in Digital Arts, a campus-wide program that focuses on technology as a gateway to creativity. Several hundred students participate in Minor courses every year. Since 2014, I have served as the head of Electronic Art and Design, coordinating course offerings in this area for our Art Major and Master of Fine Arts (MFA) students. In this capacity, I also allocate and supervise graduate student teaching activities. I serve or have served actively on UCI committees at the department (undergraduate, space utilization), School (technology, space utilization), campus (Task Force on Sustainability Education, Educational Technology Initiative Advisory Committee) and system (subcommittee of the University of California Global Climate Leadership Council) levels. I was a member of the executive committee for Team Orange County, a consortium of four local institutions, dozens of faculty members, and hundreds of students who prepared an entry for the Department of Energy Solar Decathlon: I supervised the final assembly of the solar powered house on a full-time basis for six weeks. I also recently served on the hiring committee for my department's tenure-track search in sculpture.

At OCADU, as a key member of the Environmental Design program curriculum committee, I oversaw the introduction of new course sequences at the freshman and senior levels. In my final year at OCADU, I served in a 50% administrative appointment as Director of the campus Sustainability Office, during which time I launched sMarch, a month-long series of talks, exhibitions, screenings, and workshops, and initiated the development of a five-year sustainability master plan for the university.

I also employ my photography and design skills in a service capacity, and I have provided images and graphics for several events on campus, including two UCI conferences and a yearly recruitment poster for my department's MFA program. I am active in local communities, and within my professional communities, having organized weekend and evening workshops on architectural photography, entry into the architectural professions, and 3D printing. In 2016, my *Speculative Prototyping Lab* team presented their creative projects to several community groups: a high school class, a retirement community, and as part of Earth Day and TEDxUCI. The SPL will be hosting its first weekend academy for middle and high school students on creative applications of 3D printing in April 2017.