

PROMETHEUS: JOURNAL OF THE PHD PROGRAM IN ARCHITECTURE

Dean's Introduction

Welcome to the new edition of *Prometheus*! This publication is the work of students in our PhD program, directed by Professor Michelangelo Sabatino. In addition to demonstrating that peer-reviewed architectural research can win awards for design (as we did from AIA New York | Center for Architecture in 2020), *Prometheus* reflects the content of our annual "International Graduate Student Symposium" — held in person at IIT last fall for the first time since the global pandemic. This unique, two-day gathering of young scholars assayed the subject "Regenerative Cities" and included work by more than a dozen participants — including keynote presentations by Professor Gail Fenske of Roger Williams University and City of Chicago Planning and Development Commissioner Maurice D. Cox. With the symposium and *Prometheus*, our PhD students continue to demonstrate their energy and commitment, their promise as future leaders in education, and their contributions to IIT's vibrant learning community. Enjoy!

Author

Reed Kroloff, Dean and The Rowe Family
College of Architecture Endowed Chair
College of Architecture, Illinois Institute
of Technology



The 2022 Regenerative Cities Symposium button distributed to participants was conceived by Professor Sabatino and designed by Alexis Arias Betancourt.

Director's Introduction: Why *Prometheus*?

Prometheus is a peer-reviewed PhD student journal that showcases research-in-progress presented during our annual symposium (which returned to an in-person format after our 2020 virtual edition and a 2021 hiatus due to ongoing COVID-19 concerns) hosted by IIT College of Architecture's PhD Program. This year's symposium — titled "Regenerative Cities: Infrastructure, Landscape, Buildings, and Technologies" — was co-organized by Alexis Arias Betancourt, Amjad Alkoud, Alejandro Saldaña Perales, and Piyush Khairnar. Organizing an annual symposium has various objectives. In addition to presenting new, interdisciplinary research, we seek to remind undergraduate and graduate students of the CoA and beyond, and perhaps more importantly, design faculty, of the power of in-depth research to inform, and transform contemporary design. As a historian and preservationist of the twentieth-century built environment, it is not my role to predict the future. But, as part of my leadership role here at IIT, I have worked to emphasize the need to ground contemporary design in a much deeper understanding of the past in order to identify sources of truly radical innovation, both present and future.

The sixth issue of *Prometheus* features papers presented during the symposium by PhD students and keynotes by experts in the field focused on how regenerative approaches at varying scales might contribute positively toward better living conditions for inhabitants of cities. This year we were especially grateful to have welcomed two distinguished keynote speakers: Maurice D. Cox (Commissioner of the Department of Planning and Development, City of Chicago) and Gail Fenske (PhD, Professor of Architecture, Roger Williams University). Here in Chicago, we know what regenerative practices have meant for the city in historic terms. The single greatest crisis witnessed by Chicago with the Great Fire in 1871 served as a catalyst for the remarkable city we call home today.

Author

Michelangelo Sabatino, PhD, Professor and Director of the PhD Program in Architecture and Inaugural John Vinci Distinguished Research Fellow
College of Architecture, Illinois Institute of Technology

PROMETHEUS: JOURNAL OF THE PHD PROGRAM IN ARCHITECTURE

Director's Introduction, cont.

In addition to presenting student research, each issue of *Prometheus* includes a yearly “PhD Program Overview” to showcase the achievements and activities of our community of students and affiliated faculty; this section presents academic programming highlights such as our weekly Architecture Research Forum lecture series and news about the ongoing research and accomplishments of our students and recent graduates. Each year, the PhD students who organize the symposium also serve as guest editors for the journal. Our hope is that the experience gained from these curatorial, organizational, and editorial activities associated with hosting a symposium and editing *Prometheus* will serve our students well when they enter academia and/or professional practice. We hope our *Prometheus* will continue to serve as a platform for emerging researchers who, like its symbol and masthead, defy the status quo by taking risks that lead to game-changing innovation in service to humankind, especially in times of crisis like the one we are experiencing now.

In 2020, *Prometheus* received the Douglas Haskell Award for Student Journals from AIA New York | Center for Architecture. In his letter informing us of the award, Benjamin Prosky, the then Center for Architecture’s Executive Director, wrote “The jury was particularly impressed with the fresh and relevant content, beautiful design, and diverse viewpoints in the journal.” Even as digital publications currently play an important role in disseminating research, we continue to believe in the value of offering a digital format along with a beautifully designed printed issue.

Why did we select Prometheus as the symbol and masthead of our journal? He was the irreverent Titan who stole fire to pave the way for the advancement of humankind. From our vantage point in Chicago, we understand fire as a tool for both destruction and creation. The Great Fire of 1871 leveled our city but also provided Daniel H. Burnham and Edward H. Bennett with a reason to devise the widely influential “Plan of Chicago” (1909). Without the fire of modern blast furnaces, the fabrication of the distinctive steel girders and columns of our Ludwig Mies van der Rohe-designed S. R. Crown Hall (and many of the other buildings on the IIT campus) would not have been possible.

Since the early 1940s, research aimed at advancing practice has been generated by Master of Science Program students such as Myron Goldsmith (Arch 1939, MS 1953) who was eventually appointed faculty member at IIT. Our PhD Program in Architecture was established in the late 1990s as a continuation of the research conducted by former MS students like Goldsmith in collaboration with former faculty like Dr. Fazlur Khan who went on to develop the “bundled tube” structural system first deployed in the Sears Tower (1973; currently known as the Willis Tower). In the intervening years, we have trained researchers who have made significant contributions within academia and in practice across the globe.

Our students arrive here at IIT from all over the world. They come to us with language skills, life experiences, and different mindsets that enable us to collectively consider issues from multicultural and multidisciplinary perspectives. Here, we don’t only teach them to formulate worthy research hypotheses and to pay attention to footnotes and primary sources. Here at IIT’s PhD Program, we assist and mentor our students as they craft their identities as future research leaders in academia and the profession. Our ambitious and talented graduates are impacting professional practice as well as research and pedagogy nationally and around the globe in countries ranging from Colombia to Korea. Several of our graduates have also been appointed in various American universities. Based on these results, we continue to be proud of the mentorship we provide our students and are optimistic about the future of our program.

Nota bene: A full review of the program is available on the website specially designed for the symposium (www.iit-igss.com). A heartfelt thanks to contributors from universities and research institutions across the country, and to IIT students and faculty.

Funding for this publication and for our PhD program is provided by the John Vinci Distinguished Research Fellowship. I would like to express my gratitude to the co-editors of this issue: Alexis Arias Betancourt and Piyush Khairnar. Special thanks to our scientific committee members who brought rigor to the peer-review process and to all the keynotes and panelists. Christine Manuel from the Dean’s Office deserves thanks, as does our PhD administrative assistant Alejandro Saldaña Perales. Thanks also to Provost Kenneth Christensen and Dean Reed Kroloff for their kind support of the symposium. Melinda Van Leer deserves a special thank you for her editorial review, as do designers Bud Rodecker and Alyssa Arnesen of Span for their continuing efforts to make *Prometheus* both easily readable and visually engaging.