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Landscape Documents present innovative studio and research projects by the faculty and students in the Department of Landscape Architecture, School of Design, University of Pennsylvania.

Layout and production by Richard Weller, Darcy Van Buskirk and Diane Pringle, and the landscape architecture students who provided images of their work.

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Front cover image: Michael Biros, Nanxi Dong and Boyang Li, print installation for Terrain of Water course

FOREWORD

The work collated in these pages offers a glimpse into the Master of Landscape Architecture program at the University of Pennsylvania. This is the twenty-first volume in a series of end-of-year reviews, outlining the coursework and events of the past academic year. We have included sections with information about the MLA program including the history of the program, its philosophy, curriculum requirements, as well as MLA and dual-degree plans of study. During the 2016-2017 academic year the department continued to refine the curriculum modifications approved by the faculty in early 2014. While this publication is an extremely edited and partial form of summary, it communicates not only the richness of the MLA program at Penn but also the department's commitment to advancing the field through inquiry and design-based research.

In addition to coursework in history and theory, media and visualization, ecology, horticulture, earthworks, water management and construction technology, studio work captures the full ambitions of a program committed to design. Last year, studio sites included several locations in Philadelphia as well as the slate lands of the Lehigh Valley in eastern Pennsylvania; the Port of Los Angeles; San Francisco Bay; the cities of San Diego, Tijuana, Pienza and the new city of Cherafate in Morocco. We also worked on an urban park in Milan; disaster recovery in Pedernales, Ecuador; and the Colombian Caribbean coast in Cartagena.

The geographic reach, variety of scale and complexity of issues with which students and faculty have engaged in these studios is testament to our ambitions for landscape architecture in the twenty-first century.

Richard Weller Martin and Margy Meyerson Chair of Urbanism Professor and Chair Department of Landscape Architecture October 2017

HISTORY OF LANDSCAPE ARCHITECTURE AT PENN

The School of Fine Arts at the University of Pennsylvania was started in 1890 with programs in architecture and fine arts (including music and art history). Landscape architecture was first introduced as a subject in 1914-15 through a series of lectures by George Bernap, landscape architect for the United States Capitol. In 1924, a new department of landscape architecture was founded, with Robert Wheelwright as director, and authorized to award the BLA. Wheelwright was co-founder and co-editor of Landscape Architecture magazine and a practicing landscape architect. He outlined his definition of the profession in a letter to the New York Times in 1924:

There is but one profession whose main objective has been to co-ordinate the works of man with preexistent nature and that is landscape architecture. The complexity of the problems which the landscape architect is called upon to solve, involving a knowledge of engineering, architecture, soils, plant materials, ecology, etc., combined with aesthetic appreciation can hardly be expected of a person who is not highly trained and who does not possess a degree of culture.

This first phase of the department's history was brief. It was suspended for ten years during the 1940s; from 1941-1953 no degrees were awarded in landscape architecture. Though a single course was offered in 1951, it was incorporated into a land and city planning department founded by the new Dean, Holmes Perkins. Perkins also recruited lan McHarg to rebuild the program in landscape architecture.

In 1957, landscape architecture was set up once again as an independent department offering the BLA (for a few years only) and a one-year MLA for architects. McHarg obtained scholarships to support eight students and advertised the new program in Architectural Review; the first class of fourteen students came from around the world (including eight from Scotland!). In 1962, McHarg, in partnership with David Wallace, founded Wallace McHarg (later Wallace McHarg Roberts and Todd), initiating a close connection between the department and professional practice that has persisted to this day. Tenured faculty in the 1960s, with a single exception, were all practicing landscape architects.

The decade from 1965-1975 was one of growth in universities throughout the country, from which Penn's Department of Landscape Architecture and Regional Planning also profited. In 1965, a large grant from the Ford Foundation enabled McHarg to found a new regional planning program and to assemble a faculty in natural sciences (meteorology, geology, soils science, ecology, and computer science). In the early 1970s a grant from the National Institute of Mental Health permitted McHarg to add several anthropologists to the faculty and to integrate social sciences into the curriculum. The integration of research and practice in community service has been a long-standing tradition in the

department from the 1970s, when faculty and students produced an environmental plan for the town of Medford, New Jersey, and the landscape architecture master plan for the Penn campus.

While enrollment in landscape architecture remained stable during the 1970s, with only modest increase, enrollment in the regional planning program soared and shaped faculty tenure appointments (all three tenure appointments from the late 70s to early 80s were natural and social scientists). By 1985, however, with changes in governmental policies and reduced funding for environmental programs, the enrollment in regional planning collapsed to two to three students per year. Meanwhile, landscape architects on the faculty, with the exception of lan McHarg, had reduced their teaching commitment to half-time or less. Yet the department has served as a laboratory and launching pad for new professional practices, nationally prominent firms include: WMRT (now WRT) and Collins DuTot (now Delta Group) in the 1960s, Hanna/Olin, (now OLIN) in the 1970s, Andropogon Associates in the 1970s, and Coe Lee Robinson (now CLRdesign Inc.) in the 1980s.

In 1986, Anne Whiston Spirn was recruited to succeed McHarg as chair with the mandate of extending the department's legacy and renewing its commitment to landscape design and theory. The task of the next eight years was to reshape the full-time faculty in order to teach landscape architects, now the vast majority of students in the department, and to rebuild the regional planning program in collaboration with the Department of City and Regional Planning. In the 1980s and 90s the department's tradition of community service continued with the West Philadelphia Landscape Plan and Greening Project that engaged faculty and students with neighborhood residents in planning and with the design and construction of local landscape improvements.

The 1990s was a period of growing deficits and shrinking financial resources in universities throughout the nation; Penn's Graduate School of Fine Arts was no exception. Despite these constraints the department has continued to respond to the needs of landscape architecture education and practice. Indeed, since the late 1960s a central idea sustaining the curriculum has been process - process in terms of design, ecology and social ideas, especially as these relate to the needs of the profession. The addition of humanist and artistic perspectives to natural and social scientific emphases culminated in a major revision of the curriculum during 1993 and 1994.

In 1994, John Dixon Hunt was appointed professor and chair of the department. He continued the department's strong tradition of chairs as authors and editors and brought an established international reputation as perhaps the world's leading theorist and historian of landscape architecture. Between 1994 and 1999, the faculty developed significant advances in the collaboration between design and conceptual or theoretic inquiry, giving landscape architectural design a fresh visibility at the critical edge of practice. Hunt also launched what has now become an internationally recognized publication series on landscape topics, the University of Pennsylvania Press Penn Studies in Landscape Architecture.

In May 2000, James Corner was named the chair of the department. Corner is a graduate of Penn's MLA program (1986, under lan McHarg). He was first appointed to the faculty as an assistant professor in 1989, and was promoted to professor in 2000. His commitment to advancing contemporary ideas and innovative design sets the current tone of the department, where renewed emphases upon ecology, technology, digital media, theory and urbanism drive the design studio sequence. Corner also brought a commitment to enhance the international flavor and stature of the department, situating it at the center of contemporary global discourse and practice. His own practice, James Corner Field Operations, based in New York, is widely recognized as one of the leading design firms in the world, with major projects such as the High Line, Fresh Kills Park and Lake Ontario Park. Together with other recognized practices affiliated with the program such as OLIN, WRT Design, Andropogon, Stoss, Mathur/ da Cunha, PEG office of landscape + architecture, KBAS and Ryan Associates, this strong presence of

professional practice greatly enriches the landscape architecture program. The number of applications nearly doubled during the period 2000 to 2010, and actual enrollments increased by nearly fifty percent.

In July 2003, the Graduate School of Fine Arts changed its name to the School of Design. This change reflected the broader nature of the departments and programs under its domain together with the School's emphasis upon design. Under the previous Deans, Gary Hack and Marilyn Jordan Taylor, the School has enjoyed a renewed commitment to cross-disciplinary work, scholarly and professional leadership and international visibility – all of which have directly benefited and enriched the landscape architecture program.

Since 2008, significant changes have taken place with regard to faculty composition. Professor John Dixon Hunt was promoted to professor emeritus in 2009; associate professor Anita Berrizbeitia left to assume a position at Harvard; and various adjunct and lecturer positions changed. These losses led to new gains and new appointments - assistant professors Karen M'Closkey in 2007 (now associate professor), Raffaella Fabiani Giannetto in 2010, and Christopher Marcinkoski in 2010 (now associate professor); and associate professor of practice David Gouverneur in 2010. The department was honored with the "Best Program in Landscape Architecture" award at the Sixth European Biennial of Landscape Architecture held in Barcelona in 2010.

PROGRAM PHILOSOPHY

Richard Weller joined the faculty in January 2013 as professor and department chair. The department celebrated one hundred years of instruction in landscape architecture at Penn in 2014. Richard Weller and Meghan Talarowski, MLA '13, co-authored a book commemorating the history of the program *Transects: 100 Years of Landscape Architecture at the School of Design of the University of Pennsylvania.*

In 2013, PennDesign began an affiliation with the digital publication Scenario Journal edited by Stephanie Carlisle and Nicholas Pevzner, MLA '09. The journal investigates complex urban landscape and infrastructural issues. Then in 2014 the department launched a new print journal LA+ Interdisciplinary Journal of Landscape Architecture, which is published twice a year. Its mission is to reveal connections and build collaborations between landscape architecture and other disciplines. Tatum Hands, editor-in-chief, and Richard Weller, faculty advisor, work with groups of student editors on each issue. The LA+ issues include Wild, Pleasure, Tyranny Simulation, Identity and Risk.

In July 2016, Frederick "Fritz" Steiner joined the school as Dean and Paley Professor. Under Steiner and Weller's leadership we expect to continue to expand and evolve the long traditions of the program at Penn, we believe that our students and faculty will continue to meaningfully contribute to the field in the twenty-first century, helping to advance new ideas and new forms of practice.

Initially established in 1924 and later revitalized under the leadership of Professor Ian McHarg in the 1960s, the Department of Landscape Architecture and Regional Planning is recognized around the world for its pioneering contributions to ecological planning and design. Today, the Department advances this legacy through its commitment to innovative design as informed by ecology, the history of ideas, techniques of construction, new media, and contemporary urbanism. The work of both faculty and students reflects the ambitious character and intense design focus of the Department, and continues to be deeply influential internationally. Rapidly changing social and cultural conditions around the world require that future professionals will be able to respond with new concepts, forms and methods of realizing projects, and it is to the global future that we look.

The diversity of the profession of landscape architecture is well represented at Penn. Students are introduced both to the varied scales of practice (from gardens and small urban parks to larger territories such as city sectors, brownfields, regional watersheds, megaregions and world heritage conservation areas) and to its broad scope (from formal and material issues to techniques of reclamation, management, and communication). These concerns are most developed in the design studios, where students are encouraged to explore and expand their own creativity while learning the

necessary conceptual, visual and technical skills to properly develop their work. Seminars and workshops in history and theory, technology (ecology, horticulture, earthwork, construction, and project management), and visual and digital media further complement and are designed to synchronize with the creative work being undertaken in the studios. Advanced, speculative work takes place in the final year of study, where students may choose from an array of offerings across the School and/or pursue independently conceived research projects.

The faculty is internationally distinguished and provides expertise in design, urbanism, representation, technology, and history and theory. Faculty specialize in subjects such as advanced digital modeling, global biodiversity, landscape urbanism, urban ecology, form and meaning of design, cultural geography, representation, brownfield regeneration and detail design. In addition, leading practitioners and theorists around the world are regularly invited to lecture, run seminars, or teach advanced studios. Together with very strong links to the other departments in the School and the wider university the Department is exceptionally well served by talented and committed teachers, each a major authority or emerging voice in the field.

The department is represented in the broader public and academic arenas by a prolific array of important books from faculty and two biannual journals devoted to advancing ideas and critical inquiry in landscape architecture: *Scenario* and *LA+*.

Similarly, Penn faculty are renown for the exceptional quality of their built works of landscape architecture, for example; James Corner's High Line and Laurie Olin's Bryant Park both in Manhattan.

The Department offers two primary courses of study leading to a professionally accredited Master of Landscape Architecture (MLA). The first professional degree program is three years in length and is designed for students with an undergraduate degree in a field other than landscape architecture or architecture. The second professional degree is two years in length and is designed for those who already hold an accredited bachelors degree in either landscape architecture or architecture. Students may be admitted with advanced standing into either of these programs depending upon their respective backgrounds. Dual degree programs with architecture (MLA/MARCH), city planning (MLA/MCP), historic preservation (MLA/ MSHP) or fine arts (MLA/MFA) are also available. All of the above named degrees may be combined with certificate programs in Historic Preservation, Urban Design, or Real Estate and Development. The Department also offers a Certificate in Landscape Studies, designed for students who may wish to augment or focus their prior work through research into landscape topics.

FACULTY

Standing Faculty

Richard Weller, Professor and Department Chair, Martin and Margy Meyerson Chair of Urbanism Raffaella Fabiani Giannetto, Assistant Professor Christopher Marcinkoski, Associate Professor Anuradha Mathur. Professor Karen M'Closkey, Associate Professor Frederick Steiner. Dean and Paley Professor Dana Tomlin, Professor Aaron Wunsch, Assistant Professor (HSPV)

Associated Faculty

Dilip da Cunha, Adjunct Professor David Gouverneur, Associate Professor of Practice Valerio Morabito, Adjunct Professor Ellen Neises, Adjunct Associate Professor Cora Olgyay, Adjunct Associate Professor Laurie Olin, Professor of Practice Lucinda Sanders, Adjunct Professor

Emeritus Faculty

James Corner John Dixon Hunt Dan Rose Full-Time Lecturers Lindsay Falck Nicholas Pevzner Keith VanDerSys

Part-Time Lecturers (2016-2017) Kira Appelhans

Kira Appelhans Javier Arpa Megan Born Molly Bourne Matthijs Bouw Greg Burrell Darrell Campana Stephanie Carlisle Ed Confair Candace Damon Kate Farguhar Oscar Grauer Tatum Hands Marie Hart Taran Jensvold Anneliza Kaufer Agnes Ladjevardi Michael Luegering Karli Molter Todd Montgomery Misako Murata David Ostrich Rebecca Popowsky Eduardo Santamaria Cynthia Skema Alex Stokes Abdallah Tabet Maria Villalobos Sarah Willig William Young

THREE-YEAR MLA CURRICULUM REQUIREMENTS

For students with a Bachelor of Arts or Bachelor of Science degree, the total course units required for graduation in the three-year first professional degree program are twenty-eight.

Required Courses

Course L	Jnits
----------	-------

Studios LARP 501 LARP 502 LARP 601 LARP 602 LARP 701 LARP 702	Studio I Studio II Studio III Studio IV Studio V Studio VI	2 2 2 2 2 2 2
Workshops LARP 511 LARP 512 LARP 611 LARP 612	Workshop I: Ecology and Built Landscapes Workshop II: Landform and Planting Design Workshop III: Site Engineering and Water Management Workshop IV: Advanced Landscape Construction	1 1 1 1
Theory LARP 535 LARP 540	Theory I: The Culture of Nature Theory II: History and Theory of Landscape Architecture	1 1
Media LARP 533 LARP 542 LARP 543 LARP 544	Media I: Drawing and Visualization Media II: Digital Visualization Media III: Flows: Linear / Non-Linear Media IV: Futures: Trends and Trajectories	1 1 1 1
Studio Co-F LARP 761 LARP 781	Requisites Urban Ecology (co-requisite with LARP 601) Contemporary Urbanism (co-requisite with LARP 602)	1 1
Electives Students mu	ist select four elective courses.	4
TOTAL		28

Students with adequate prior experience may substitute Landscape Architecture elective courses for required courses with the permission of the instructor and with approval of the department chair.

Students who waive required courses must earn at least 24 LARP credits plus the 4 elective credits needed to graduate with the first professional MLA degree.

THREE-YEAR MLA PROGRAM OF STUDY

Plan of Study		Course Units
YEAR 1 Fall LARP 501 LARP 511 LARP 535 LARP 533	Studio I Workshop I: Ecology and Built Landscapes Theory I: The Culture of Nature Media I: Drawing and Visualization	2 1 1
Spring LARP 502 LARP 512 LARP 540 LARP 542	Studio II Workshop II: Landform and Planting Design Theory II: History and Theory of Landscape Architecture Media II: Digital Visualization	2 1 1 1
YEAR 2 Fall LARP 601 LARP 761 LARP 611 LARP 543	Studio III Urban Ecology Workshop III: Site Engineering and Water Management Media III: Flows: Linear / Non-Linear	2 1 1 1
Spring LARP 602 LARP 781 LARP 544 Elective	Studio IV Contemporary Urbanism Media IV: Futures: Trends and Trajectories	2 1 1 1
YEAR 3 Fall LARP 701 LARP 612 Elective	Studio V Workshop IV: Advanced Landscape Construction	2 1 1
Spring LARP 702 Elective Elective	Studio VI	2 1 1
TOTAL		28

TWO-YEAR MLA CURRICULUM REQUIREMENTS

For students with a professionally accredited Bachelor of Landscape Architecture or Bachelor of Architecture degree, the total course units for graduation from the two-year second professional degree program are nineteen.

Course Units

Studios LARP 601 LARP 602 LARP 701 LARP 702	Studio III Studio IV Studio V Studio VI	2 2 2 2
Workshops LARP 611 LARP 612	* Workshop III: Site Engineering and Water Management Workshop IV: Advanced Landscape Construction	1 1
Theory LARP 535 LARP 540	Theory I: The Culture of Nature Theory II: History and Theory of Landscape Architecture	1 1
Digital Med LARP 543 LARP 544	a ** Media III: Flows: Linear / Non-Linear Media IV: Futures: Trends and Trajectories	1 1
Studio Co-I LARP 761 LARP 781	Requisites Urban Ecology (co-requisite with LARP 601) Contemporary Urbanism (co-requisite with LARP 602)	1 1
Electives Students m	ust select three elective courses.	3
TOTAL		19

Students with adequate prior experience may substitute Landscape Architecture elective courses for required courses with the permission of the instructor and with approval of the department chair. Students who waive required courses must earn at least 16 LARP credits plus the 3 elective credits needed to graduate with the second professional MLA degree. Students may register for up to 5 course units per term.

* All two year MLA students entering with bachelor's degrees other than a BLA from an accredited program are required to attend the Natural Systems / Ecology Week of the Summer Institute; to audit LARP 512: Workshop II – Planting Design (the schedule of classes is arranged to allow for these session to be offered during the first half of the fall term); and have the option to attend the Workshop II Spring Field Ecology week of field trips following final reviews in early May. With the chair's consent, students that can show sufficient previous experience with these materials, may apply for a wavier.

** Students who find themselves unprepared for Media III must discuss alternative options with the instructor of Media III.

TWO-YEAR MLA PROGRAM OF STUDY

Plan of Stud	ły	Course Units
Year 1 Fall LARP 601 LARP 761 LARP 611 LARP 543 LARP 512	Studio III Urban Ecology (co-requisite with LARP 601) Workshop III: Site Engineering and Water Management Media III: Flows: Linear / Non-Linear Workshop II Planting Design: 6 audit sessions (see spring LARP 512) For 2 yr students entering with degrees other than BLA degrees	2 1 1 Audit
Spring LARP 602 LARP 781 LARP 540 LARP 544 LARP 512	Studio IV Contemporary Urbanism (co-requisite with LARP 602) Theory II: History and Theory of Landscape Architecture Media IV: Futures: Trends and Trajectories Workshop II: Spring Field Ecology week fieldtrips (follows spring final reviews) For 2 yr students entering with degrees other than BLA degrees	2 1 1 1 Optional
LARP 535 Elective	Studio V Workshop IV: Advanced Landscape Construction Theory I: The Culture of Nature	2 1 1 1
Spring LARP 702 Elective Elective	Studio VI	2 1 1
TOTAL		19

ARCHITECTURE [19 cu]		JOINT ARCHITEC / LANDSCAPI [4 cu]		LANDSCAPE ARCHITECTURE [17 cu]	
Studio 501 Studio I 502 Studio II 602 Studio IV	2.0 2.0 2.0 6.0			Studio 501 Studio I 502 Studio II 601 Studio III	2.0 2.0 2.0 6.0
History & Theory 511 History & Theory I 512 History & Theory II 611 History & Theory III	1.0 1.0 1.0 3.0	Joint Studio or LARP 701 Joint Studio or ARCH 704	2.0 2.0	History & Theory 535 Theory I 540 Theory II	1.0 1.0 2.0
Visual Studies 521 Visual Studies I 522 Visual Studies II 621 Visual Studies III Technology	0.5 0.5 0.5 1.5		4.0	Media 533 Media I 542 Media II 543 Media III 544 Media IV	1.0 1.0 1.0 1.0
531 Construction I 532 Construction II 535 Structures I 536 Structures II	0.5 1.0 0.5 0.5			Workshops 511 Workshop I	1.0 4.0 1.0
631 Case Studies in Technology 633 Environmental Systems I 634 Environmental Systems II 636 Material Formations 732 or 736 Tech Designated Elective	0.5 0.5 1.0 1.0			512 Workshop II 611 Workshop III 612 Workshop IV	1.0 1.0 1.0 4.0
Professional Practice 670 Professional Practice I 771 Professional Practice II	6.0 0.5 1.0 1.5			Required 600-level Studio Co-Requisites 761 Urban Ecology (with 601) OR 781 Contemporary Urbanism (with 602)	1.0 1.0
Electives ARCH Elective I	1.0 1.0			Electives None	1.0
	19.0	Sub-total	4.0	Sub-total	17.0

TOTAL COURSE UNITS REQUIRED 40

Recommended plan of study: first year ARCH 500-level; second year LARP 500-level; third year fall LARP 600-level, spring ARCH 600-level; fourth year fall LARP 700-level, spring ARCH 700-level. Students should confirm their individualized study plans with both departments. Waived Landscape Architecture course requirements must be replaced with Landscape Architecture elective courses.

MLA / MASTER OF CITY PLANNING DUAL-DEGREE CURRICULUM

CITY PLANNING [15 cu]

Core

Oole	
500 Introduction to Planning History	1.0
501 Quantitative Planning Analysis	1.0
502 Urban Redevelopment OR	
509 Law of Planning*	1.0
503 Modeling Gegraphic Objects	1.0
506 Negotiation and Conflict Resolution OR	
CPLN 505 Planning by Numbers* OR	
CPLN 504 Site Planning* OR	
CPLN 508 Urban Research Methods OR	
CPLN 560 Intro to Graphics	1.0
510 Urban Planning Theory	1.0
600 Workshop	2.0
7XX Planning Studio	2.0
-	10.0

* These courses may not be used to meet BOTH core and concentration requirements

Concentrations (Please refer to each specific concentration requirements.) **CPLN** Concentration CPLN Concentration **CPLN** Concentration **CPLN** Concentration **CPLN** Concentration or Elective 15 CPLN course units are required for the MCP

degree under the PAB accreditation.

Sub-total	15.0
TOTAL COURSE UNITS REQUIRED	36

LANDSCAPE ARCHITECTURE [21 cu]

Studio

501 Studio I 502 Studio II 601 Studio III 602 Studio IV 701 Studio V (702 Studio VI)	2.0 2.0 2.0 2.0 2.0 10.0
History & Theory 535 Theory I	1.0
540 Theory II	1.0 2.0
Media 533 Media I 542 Media II 543 Media III 544 Media IV	1.0 1.0 1.0 1.0 4.0
Workshops 511 Workshop I 512 Workshop II 611 Workshop III 612 Workshop IV	1.0 1.0 1.0 1.0
·	4.0
Required 600-levelStudio Co-Requisites 761 Urban Ecology (with 601) 781 Contemporary Urbanism (with 602)	1.0 1.0 2.0
Electives None	
Depending on the student's background, a	

D 1 cu course will be waived so there are a total of 21 cus taken in LARP.

Waived Landscape Architecture course requirements must be replaced with Landscape Architecture elective courses. Dual-degree students should confirm their individualized study plans with both departments.

Sub-total

1.0

1.0

1.0

1.0

1.0 5.0

For more specific information on dual-degree and certificate programs, please consult the departments and the website: www.design.upenn.edu.

21.0

STUDIO I LANDSCAPE PROCESS: IMAGINATION AND CRAFT BREWERYTOWN GATEWAY, EAST FAIRMOUNT PARK

Critics Rebecca Popowsky, Nicholas Pevzner, Megan Born and Kira Appelhans Assistant critic Lindsay Falck Teaching assistants Prakul Pottapu, Joshua Ketchum, Yang Zhao, Le Xu

This studio explored the design language of landscape. The site for this studio was a wooded stretch of East Fairmount Park in Philadelphia, wedged between the developing Brewerytown neighborhood and the Schuylkill River. The studio asked students to traverse and record the found landscape, and to then re-imagine and project a transformed landscape. As the first core studio of the curriculum, this studio was particularly focused on seeing and experiencing landscape through drawing, and in utilizing representation as a fundamental driver of design. This studio presented a design methodology by which projects were understood not as complete or final constructs, but as negotiations of fixity and change that could disrupt, emphasize or redirect existing site dynamics. At the same time, spatial and material specificity in all proposed design interventions were required. Using site-based investigations, mappings, drawings, and models, students experimented with new ways of seeing, experiencing, and transforming the landscape. Out of an in-depth analysis, each student was encouraged to develop their own agenda for the site, drawing out particular qualities of the landscape.



Yang An Jessica Arias Rena Biel James Billingsley Paolo Brindley-Pantalone Lindsay Burnette Yaqun Cai Yifan Cai Nikki Chang Jiacheng Chen Anna Darling Sihong Deng Zuzanna Drozdz Yang Du Aaron Edelson Yihua Fan Sarah Gaines Zachery Hammaker Dorothy Jacobs Susan Kolber Matthew Liebel Alexandra Lillehei Jing Liu Ce Mo Margarida Gomes Mota Shannon Rafferty Naeem Shahrestani Yini Tang Haowei Wang Andrew Ward Lucille Whitacre Boya Ye Chendi Zhang Jinyu Zhang Aihong Zhong



Chendi Zhang, photowork (opposite page)

STUDIO II GROUNDWORK: PROJECTS FOR THE SOUTH PHILADELPHIA RIVERFRONT PHILADELPHIA, PA

Critics Karen M'Closkey, Karli Molter, Misako Murata, and Keith VanDerSys Teaching assistants Anni Lei, Qi Wang, Yiqing Wu, and Yang Zhao

This core studio concentrated on developing skills and creative sensibilities for transforming a section of the Delaware riverfront in south Philadelphia. Through the design of a park, students studied the roles of concept, organization and physical form in the formation of new assemblages of public space and the natural world, and in the creation of new relationships among the site, its immediate edges and the larger region. The theme of "groundwork" provoked thought about the relationship of the existing site and the students' proposed projects. The studio explored this thematic in three ways: as the foundation and framework for change, as "thick surface" in terms of the cultural and material layers of the site, and as topographic manipulation (this latter aspect of the studio was studied directly in the concurrent Media II and Workshop II courses). The goal of the studio was for students to unite imagination, creative speculation, pragmatic analysis and technical competency toward full engagement of the broad range of considerations that come into play when making a landscape project.







Yifan Cai, plan (above); Yaqun Cai, renderings (opposite page)

Yang An Jessica Arias Rena Biel James Billingsley Douglas Breuer Paolo Brindley-Pantalone Lindsay Burnette Yaqun Cai Yifan Cai Nikki Chang Jiacheng Chen Anna Darling Sihong Deng Zuzanna Drozdz Yang Du Aaron Edelson Yihua Fan Sarah Gaines Clay Gruber Zachery Hammaker Dorothy Jacobs Susan Kolber Alexandra Lillehei Jing Liu Ce Mo Margarida Gomes Mota Shannon Rafferty Kazi Sumaiya Saifee Naeem Shahrestani Yini Tang Haowei Wang Andrew Ward Lucille Whitacre Boya Ye Chendi Zhang Jinyu Zhang Aihong Zhong

studio II philadelphia, pa

17

STUDIO III GREEN STIMULI: SLATE LANDS

Critics Ellen Neises, Molly Bourne, Todd Montgomery, David Ostrich, and Mark Thomann Teaching assistants Colin Curley, Jieping Wang, Xinyi Ye, Zhiqiang Zeng, and Sean McKay

The 2016 Green Stimuli studio investigated the problems and potentials of the Slate Belt, a 22-square mile area of the Lehigh Valley along the Appalachian Trail. This core studio focused on seven specific sites in the region that the 2015 Slate Lands studio helped to identify as the most promising sites for design and action in the immediate future. The studio took on design problems where soil, terrain, geology, mineral resources, climate, water, plants, wildlife, and living systems interactions were major drivers. Studio projects explored one or more of these dimensions in depth to reach high levels of design exploration, strategic thinking, technical resolution and physical expression. The studio's topics intersected with a broad universe of practical concerns, including land use, local and regional economies, real estate development and public policy, as well as philosophical and artistic questions about nature and ecology. The Green Stimuli studio had two primary objectives: to develop awareness about how best to operate within a given context, and to explore methods for the study and redirection of ecologies and large-scale landscapes. The intention was to unite pragmatic analysis, imagination, creative speculation, and technical skill toward full engagement of the range of considerations that come into play in developing landscape projects with agency.





Arianna Armelli Douglas Breuer Ya Chen Chaowei Chiang Bo Dong Katherine Engleman Cody Erhart Qin Fang Melissa Flatley Han Fu Tiffany Gerdes Margaret Gerhart Clay Gruber Jieru He Jingyi Hu Yushan Huang Nicholas Jabs Meichun Jia Joshua Ketchum Cyrus Khan Aaron King Allison Koll Ishaan Kumar Da Hee Lee Anni Lei Hong Li Zhexuan Liao Shuhan Liu Stefan Molinaro Hallie Morrison Sofia Nikolaidou Jungjae Park Lingyu Peng Prakul Pottapu Krista Reimer Michael Rubin Kazi Sumaiya Saifee Xinxin Shen Benjamin Summay Xiaochi Tang Luke Van Tol Qi Wang Rivka Weinstock Sarai Williams Xiao Wu Ellen Xie Hanting Xie Nandi Yang Sarah Yassine Tianjiao Ye Ao Zhang Huiyi Zhang Yang Zhao Zhoufei Zhu Arianna Armelli, model (above); Allison Koll, diagram (opposite page)

STUDIO IV PILOT PLOTS: INTERIM URBANISMS IN THE PORT OF LA PORT OF LOS ANGELES, CALIFORNIA

Critics Christopher Marcinkoski, Megan Born, Nicholas Pevzner, and Javier Arpa Teaching assistants Sean McKay, Shilei Lu, Ishaan Kumar, and Albert Chen

This studio, the fourth and final in the core studio sequence, was an introduction to the fundamental competencies of contemporary urban design. The studio focused on the detailed elaboration of a public realm landscape framework as an instrument of urban design logic and organization. The site of the studio was the approximately 400-acre Planning Area 1 at the Port of Los Angeles, adjacent to the community of San Pedro. Comprising roughly 6-miles of waterfront, the current uses of the site include an active cruise terminal; a decommissioned battleship and associated maritime museums; kitschy retail; public marinas; and a future aquatic research center. The studio presumed the future of the Planning Area 1 was in play, other than the research center at southern end and the cruise terminal at its northern terminus; students were welcome to make individual project arguments for retaining or removing any or all of the existing uses. The site was considered a laboratory to experiment with interim landscape and public-realm typologies, as well as temporary building typologies and programs. The intention was that through near-term experiments, longer-term innovations in waterfront urban form and use could be developed. Counter to the intent of the preceding Studio III, this studio was less about solving problems or addressing issues at the community level, as much as it focused on developing capacity and proficiency in shaping urban from through well-articulated public realm frameworks and the landscape typologies that comprise them.



Da Hee Lee and Meichun Jia, aerial view (above); Han Fu and Stefan Molinaro, plan (opposite page)



Arianna Armelli Ya Chen Bo Dong Cody Erhart Qin Fang Melissa Flatley Han Fu Tiffany Gerdes Jieru He Jingyi Hu Yushan Huang Nicholas Jabs Meichun Jia Joshua Ketchum Cyrus Khan Aaron King Da Hee Lee Anni Lei Hong Li Zhexuan Liao Shuhan Liu Stefan Molinaro Hallie Morrison Sofia Nikolaidou Jungjae Park Lingyu Peng Prakul Pottapu Michael Rubin Xinxin Shen Benjamin Summay Xiaochi Tang Luke Van Tol Qi Wang Rivka Weinstock Xiao Wu Ellen Xie Hanting Xie Nandi Yang Sarah Yassine Tianjiao Ye Ao Zhang Huiyi Zhang Yang Zhao Zhoufei Zhu

STUDIO V TESTING THE WATERS: PHILLY FUTURES

Critics Karen M'Closkey and Keith VanDerSys

Tidal flooding events are projected to increase more than ten-fold in the City of Philadelphia in the next three decades. Vast portions of the waterfront are already experiencing major flooding and storm surges, which will only increase with a warming planet. The objective of this option studio was to reimagine Philadelphia's "edge" along and eight-mile stretch of the Delaware River, both to examine the lines that have been constructed to separate land from water, and to expand the city's waterfront vision by looking at alternatives under various climate change scenarios. Students developed detailed designs on selected sites, which were strategically chosen based on insights gleaned from geo-spatial analytics, site visits, and hydrodynamic simulations. The studio utilized physical and digital models, including flume models and hydrodynamic software, coupled with the conceptual frameworks of analogous structures and analogous habitats to develop hybrid multi-functional infrastructures/prototypes for reconfiguring the intertidal zone. Given the complexity of issues, the studio teamed with critical partners including environmental engineers, the Nature Conservancy, PennPraxis, and the Delaware River Waterfront Corporation. Studio projects, developed in collaboration with these organizations through lectures, reviews, and workshops, served as a catalyst for developing design proposals that have the potential to reshape portions of the waterfront. During designated travel week, the studio traveled to Amsterdam and Rotterdam to meet with key officials and designers who are working on infrastructural projects for climate change adaptation.





- Jihee Choi Rong Cong Esther Hah Nicholas Parisi François Poupeau
- Karli Scott Yuzhou Shao Xiaoyang Wang Hang Yung Elvis Wong

Rong Cong, Esther Hah, Nicholas Parisi, Karli Scott, Xiaoyang Wang, and Yuzhou Shao, simulations (above); Karli Scott, diagrams (opposite page)

4 hurricane S.L.O.S.H model pre

STUDIO V STRATEGIES AND INSTRUMENTS: SETTLEMENT PRODUCTS IN THE AGE OF SPECULATION, VILLE NOUVELLE CHERAFATE, MOROCCO

Critic Christopher Marcinkoski

This option studio used Morocco's ongoing new towns program (Ville Nouvelle) as the laboratory for its work. The Ville Nouvelle program – first proposed in late 2004 and actively undertaken in early 2007 – proposes the development of 15 new towns of greater than 150,000 residents to be initiated throughout Morocco by 2020. This studio focused specifically on the "new town" of Ville Nouvelle Cherafate 20km outside of Tangier. Initiated in January 2009 during the depths of the financial crisis, very little of the Cherafate project has been installed. With this site as its laboratory, the principal interest of the studio was the conceptualization and elaboration of settlement products – the administrative activities and physical constructs that have become the basis of contemporary urbanization activities. Studio proposals presumed that urbanization projects could be stopped at any time, for any reason – political, economic, environmental or otherwise – at which point the proposed system of urbanization must be able to "successfully function" despite not reaching its preferred end state. As such, this studio was less interested with the outcome of a project than in the elaboration of novel systems of urbanization that rely on revised settlement products, dynamic infrastructures and urbanization strategies with the capacity for adaptation and adjustment over time. While students immersed themselves in the Moroccan milieu, they were also challenged to experiment with methods and strategies that might be abstracted and potentially translated to other contexts.



Anhua Liang, sections (this page and opposite page, bottom) and plan (opposite page, top)



Ruyi Chen Jingshi Diao Zitong Feng Chen Hu Yiling Li Anhua Liang Boya Lu Shilei Lu Yuxia Zhou

studio V cherafate, morocco

STUDIO V BEAUTY AND FORM: A NEW URBAN PARK IN MILAN, ITALY

Critic Valerio Morabito

This option studio explored the role and significance of beauty and form in contemporary landscape architecture, using Milan as an emblematic site for investigation. Specifically, the studio site was located in the middle of Porta Genova, a neighborhood adjacent to the city center. The site extends a new public space system including the revitalized Darsena, a historic canal port that was recently transformed into an urban park, and Naviglio Grande, a remaining portion of the city's centuries-old canal system. The renewed portion of the city includes a combination of shops, pubs, and restaurants, which contribute to a lively nightlife scene. The Porta Genova neighborhood is currently divided by a railway line and station that are to be decommissioned, allowing the area to adopt a new, unified spatial identity. This studio challenged students to propose coherent spaces through the invention and reuse of innovative forms for strategic functions. As a historical city with a stratified urban and landscape architectural evolution, students had to redraw the relationship between the studio site and the neighborhood, characterized by a multitude of new and old fashion ateliers, museums, and art galleries. During a studio trip, students visited the site, met with professors from the Polytechnic of Milan, and made additional stops in Venice and Florence.





Albert Chen Nanxi Dong Wenqian Jiang Boyang Li Jieping Wang Yiqing Wu Le Xu Liqiu Xu Xinyi Ye Jingya Yuan Zhiqiang Zeng Tianjiao Zhang

Nanxi Dong, diagrams (this page); Jingya Yuan, rendering (opposite page, left); Zhiqiang Zeng, rendering (opposite page, right)

studio V milan, italy

STUDIO V THE PEDERNALES ECUADOR STUDIO: REBUILDING URBAN LANDSCAPES FOR RESILIENCE

Critics Maria Villalobos and Oscar Grauer

This interdisciplinary option studio brought together participants from the departments of Landscape Architecture, City and Regional Planning, Architecture, and Historic Preservation. The Municipality of Pedernales, Ecuador comprises several small cities with a total population of around 55,000. The economy of this coastal region depends mainly on fishing, shrimp farming and tourism, attracting visitors to beaches and a network of national parks and protected natural areas. The geology of the region makes it vulnerable to natural disasters including recurrent earthquakes. The extent of damage inflicted by such events is exacerbated by the informal growth pattern of the region, which contributes to poor construction standards and low architectural guality of many buildings. In the devastating earthquake that struck the region in April 2016, over 660 people died, many more were injured, damage surpassed three billion dollars, and an estimated 80% of the buildings collapsed. The aim of this studio was to address issues of sustainable development in guiding the rehabilitation of Pedernales. This studio addressed a number of considerations including the viability of rehabilitating the affected communities in a sustainable manner; the regional, metropolitan, and local strategies and design considerations that would enable reducing risks; the protection and adequate use of local ecosystems and natural and cultural landscapes as drivers of the new urban patterns; and the enhancement of the socio-economic and cultural conditions of the population that was affected by the earthquake. In an effort to engage communities in formulating and implementing design proposals, students interviewed community representatives, participated in a workshop/charrette with local actors and created a temporary landscape installation during a trip to the site.





Laura An Elizabeth Bland Daniel Fachler Di Fan Scott Jackson Aubrey Jahelka Taeyoun Lee Matthew Lewis Muyang Sun Shuwen Ye

Daniel Fachler, aerial view (above); Muyang Sun, photos (opposite page)

STUDIO V BAY AREA RESILIENT TRANSPORTATION

Critics Matthijs Bouw and Kai-Uwe Bergmann

This collaborative Landscape Architecture and Architecture option studio aimed to improve the resilience of the Northern California Bay Area by leveraging its infrastructure. The resilience challenges in the region are immense, not only because of natural shocks like earthquakes, droughts, and sea level rise, but also stresses like housing affordability and social inequity. The infrastructural perspective adopted by the studio allowed for a systemic view of these challenges. Simultaneously, new developments in infrastructure such as automated and electric vehicles, the Hyperloop and myriad other options advanced by the region's tech industry make it possible to radically rethink its urban future. Students started with group research into resilience, future transportation infrastructure and the dynamics of urban change. They subsequently developed "urban" or "infrastructural" architecture and/or landscape architecture projects that could help re-think the Bay Area's transportation infrastructure. Some projects were visionary in scope, showing possibilities and effects on city and landscape, while others took the form of proposals for pilots that could trigger large-scale change. During the designated travel week, the studio traveled to the Bay Area, met with local stakeholders, explored local opportunities and sites and participated in a Resilience by Design University conference and workshop organized by PennDesign in collaboration with New York University, Stanford University, San Jose State University, Rebuild by Design and 100 Resilient Cities.



























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Call



Michael Biros Chih-Kai Chan Baihe Cui Sneha Easwaran Jinah Kim Sean McKay Emma Molloy

Nan Mu Tong Niu Natasha Sanjaya Michael Shafir Agustina Sklar Emily Tyrer Lei Yu

Chih-Kai Chan and Michael Shafir, renderings (above and opposite page)

STUDIO VI CROSSING BORDERS: STATIONS & TRAJECTORIES

Critic Anuradha Mathur Consultants Teddy Cruz and Fonna Forman

We find ourselves in a moment when building walls and reinforcing lines of separation have re-entered the public imagination, particularly in the context of the US-Mexico border. While this process of separation began as far back as the mid 1800s with the imposition of an artificial line across a complex landscape, it continues to unfold today in ways that diminish the agency of communities, human and non-human, within and beyond the line's immediate environs. This studio built on the work done by designers, scholars, and activists in border regions, in particular the San Diego-Tijuana area that anchors the western extent of the US-Mexico border. This option studio addressed the role of design in re-visualizing territories of conflict and initiating material and cultural practices that could lead to conditions that are unbound. The aspiration was to test new ideas of interdependency, exchange, citizenship, and infrastructure through an engagement with particular places and trajectories that have been disrupted by massive constructions already in place. An underlying thread was a concern for how water or wetness was visualized and engaged in ways that could lead to conditions of its excess and scarcity, as well as the opportunities that its ubiquitous fluidity offers for new visualizations of terrain, design imagination, and design activism. The studio traveled to the San Diego-Tijuana border region where students experienced and documented a range of occupancies, ecologies, economies, and infrastructure along and across the border. Students gathered and edited their field work into a series of photo-works, plots, drawings, films etc. towards constructing a terrain and articulating an issue. They identified particular sites for initial intervention, and developed an agenda and strategy for its deployment.



Baihe Cui, rendering (above) and diagram (opposite page)



STUDIO VI EVERY LANDSCAPE HAS A HISTORY: PIENZA, ITALY

Critics Laurie Olin, Rebecca Popowsky, and Frederick Steiner

The Val D'Orcia region of southern Tuscany is a historically rich, physically attractive place, regarded for its special character and value. Pienza, a World Heritage Site and the first Renaissance planned city, is a microcosm of the dilemmas of a place which attracts visitors from around the world, but that is fragile and struggles with accommodating the necessity of change. A paucity of economic endeavor outside of the three-month tourist season, the cost and problems of energy production, physical problems with historic structures and the long-term effects of climate change all posed planning and design problems that the residents and authorities in the town and region are keen to address. The Mayor and Minister of Culture in Pienza identified several areas of concern including what to do with an abandoned brick and tile works on the edge of town; how to accommodate the quantity of motor vehicles that descend upon the town in the summer season; and a possible redesign of the Dante Alighieri Plaza. These challenges and opportunities required that students exercise imagination, boldness, subtlety, and sensitivity in their designs for this historic setting. This elective studio of landscape architecture students worked in concert with a group of historic preservation students led by Randy Mason. Dean Frederick Steiner also joined the studio at intervals. The groups traveled together to Italy, visiting and working briefly in Pienza, as well as traveling to several other locations for greater understanding of the cultural and historical context of the work.




Albert Chen Jingshi Diao Chen Hu Scott Jackson Jinah Kim Boya Lu Shilei Lu Karli Scott Yuzhou Shao Muyang Sun Sarai Williams Le Xu Yuxia Zhou Shilei Lu, plan (above) and rendering (opposite page)

URBAN DESIGN RESEARCH STUDIO THE COLOMBIAN CARIBBEAN COAST STUDIO: FOSTERING URBANIZATION WITHIN RESILIENT ECOSYSTEMS

Critics David Gouverneur and Maria Villalobos

This interdisciplinary urban design research studio focused on a region along the Caribbean coast of Colombia facing strong urbanization pressures and encroachment upon a diversity of fragile natural systems. The studio sites included various locations along the band between the cities of Cartagena and Barranguilla, where the coastal population is largely concentrated. A number of factors have driven rapid, often informal, growth of these cities. First, decades of violence associated with drug production and trafficking precipitated internal migration from rural areas. Subsequent administrative reforms and new leadership have led to the gradual reduction of conflict and economic growth, which in turn have stimulated increased imports/exports and the revitalization of the shipping ports in the region. Additionally, the climate, beaches, historic districts, festivals/carnivals, and diversity of protected ecosystems have made the area a highly competitive destination for tourists and a desirable locale for second residencies. Meanwhile, a lack of comprehensive environmental and urban planning has resulted in fragmented and/or incomplete processes of formal and informal urbanization. The objective of this studio was to explore sustainable urbanization paradigms by addressing: use of transitional space between urbanized and protected lands; quality of life disparities; articulation of a system of open spaces; resilience to climate change and sea level rise; and the protection and rehabilitation of ecosystems in close proximity to existing and newly urbanized areas. Students worked in cross-disciplinary groups to develop preliminary research, criteria, and overall strategies during the first third of the semester. They then pursued individual work that was refined to fit within a larger group strategy proposal.



urban design research studio cartagena, colombia



Michael Biros
Nanxi Dong
Sneha Easwaran
Zitong Feng
Yumeng Gu
Katrina Healy
Wenqian Jiang
Cari Krol

Ishaan Kumar Boyang Li Sean Mckay Nicholas Parisi Hang Yung Elvis Wong Wenhao Wu Xinyi Ye Tianjiao Zhang Tianjiao Zhang, sections (above); Ishaan Kumar, axonometric view (opposite page)

Before

WORKSHOP I ECOLOGY AND BUILT LANDSCAPES

Instructors Sarah Willig, Rebecca Popowsky, Marie Hart, Kate Farquhar, and Lindsay Falck Teaching assistant Nicholas Parisi

The purpose of Workshop I was to continue the work of the Summer Institute, during which students explored the Coastal Plain at the John Heinz National Wildlife Refuge, Bristol Marsh, Delhaas Woods and the Piedmont in the Wissahickon Valley and at Valley Forge National Historic Park. During the fall students continued to visit natural areas representative of regional physiographic provinces with sites extending from the barrier islands of New Jersey to the first prominent ridge of the Appalachian Mountains. The goals of Workshop I were to introduce students to the varied physiographic provinces and associated plant communities of the greater Philadelphia region; to characterize and analyze plant communities considering the connections between climate, geology, topography, hydrology, soils, vegetation, wildlife, and disturbance, both natural and anthropogenic; to learn the local flora including plant species identification, an understanding of preferred growing conditions, and potential for use; and to draw and examine the concepts of ecology and design through representation, culminating in a regional cross-section that synthesized field observations.



Fieldtrips included: Mount Holly and Rancocas Nature Center, NJ; Pine Barrens of New Jersey; Island Beach State Park, NJ; Studio site in Fairmount Park, Philadelphia; Nottingham County Park, PA; Ringing Rocks County Park and Mariton Sanctuary, PA; Hawk Mountain Wildlife Sanctuary, PA; Quarryville Lumber Yard

Sally Willig, field trip photo (this page); Yang Du, soil profile (opposite page)



WORKSHOP II LANDFORM AND PLANTING DESIGN

Instructor Cora Olgyay Assistant instructors Taran Jensvold and Anneliza Kaufer Teaching assistants Michael Biros, Jingyu Hu, and Prakul Pottapu

Workshop II examined two of the primary tools in the practice of landscape architecture: grading and planting design. The course incorporated a combination of lectures, guest speakers, discussions, field trips, and student presentations. Students had the opportunity to apply the principals of grading and planting to their concurrent Studio II projects.

LANDFORM AND GRADING:

This portion of the course aimed to provide an appreciation of landform as an evocative component in the design vocabulary as well as a critical tool in solving difficult design problems. The basic techniques and strategies of grading design were introduced and reinforced so that grading design became an integral part of the students' design approach. Landform and grading topics included: reading the surface of the earth (contours and signature landforms), grading basics (calculation of slope, interpolation, slope analysis), leveling terrain (creating terraces on slopes), the flow and management of water, circulation, grade change devices (stairs, ramps, and retaining walls), grading the road, and the process of grading design.

PLANTS AND DESIGN:

This component of Workshop II provided a working overview of the principles and processes of planting design. Plants were considered both as individual elements and as part of larger dynamic systems. Key ecological concepts from Workshop I – the natural distribution of plants, plant community, successional patterns, the relationship of planting and topography – were used as the initial framework. Planting design typologies were examined as an outgrowth of these "natural" patterns. The role of plants as a key element in the structural design of the landscape was explored through a combination of modeling, plan and section drawing, temporal studies, writing, and case studies. Emphasis was placed on process and evolution of planting design, the temporality of planting (daily, seasonal and annual changes), and the establishment and maintenance of plantings.



Yihua Fan, Jing Liu, Yini Tang and Aihong Zhong, model

WORKSHOP II SPRING FIELD ECOLOGY: POSITIVE ENVIRONMENTAL CHANGE

Instructor Sarah Willig

The purpose of this five-day field course was to build on Summer Institute and Workshop I, which focused on natural and human factors shaping a variety of landscapes. This week focused on management of landscapes to effect positive environmental change. The aims of Spring Field Ecology were to foster a greater understanding of the varied physiographic provinces of the region including the Coastal Plain, Piedmont, and Ridge and Valley; increase awareness of the fundamental importance of soil in natural and degraded areas; create an expanded view of the local flora, native and non-native, with many plants in flower; provide additional insight into the diversity of approaches and techniques using plants to promote positive environmental change; and to offer some ideas and inspiration from the dedicated, thoughtful individuals met along the way.



Fieldtrips included: Moores Beach in Delmont, NJ and Commercial Township PSEG Site in Bivalve, NJ (Outer Coastal Plain); Palmerton Zinc Smelter Land Reclamation, Pennsylvania (Ridge and Valley); Stroud Water Research Center and Longwood Gardens "Meadow Garden" (Piedmont Uplands); Rushton Woods Preserve (Piedmont Uplands); Village of Arts and Humanities, Greensgrow, and Greenland Nursery

Sally Willig, field trip photo

WORKSHOP III SITE ENGINEERING AND WATER MANAGEMENT

Instructors Anneliza Kaufer, Ed Confair, and Abdallah Tabet Teaching assistants Anhua Liang, Shilei Lu, and Michael Shafir

Building upon the skills and concepts developed in Workshops I and II, this intermediate workshop focused on the technical aspects of site design, with an emphasis on landscape performance. Technical proficiency with basic grading principles and site engineering systems – ranging from general site grading to more complex systems such as stormwater management and roadway alignment – is a critical component of landscape architecture. Functional considerations related to landscapes and their associated systems including circulation, drainage and stormwater management, site stabilization and remediation were explored as vital and integral components of landscape design, from concept to execution. Lectures, case studies, field trips, and focused design exercises enabled students to develop facility in the tools, processes and metrics by which landscape systems are designed, evaluated, built and maintained. In concert with the concurrent design studio, students considered the means by which functional parameters could give rise to the conceptual, formal, and material characteristics of designed landscapes.



Margaret Gerhart, model

workshop III site engineering and water management

WORKSHOP IV ADVANCED LANDSCAPE CONSTRUCTION

Instructors Greg Burrell and Darrell Campana Teaching assistant Yiqing Wu

Building upon the skills and concepts developed in the Workshop series, this final workshop focused on construction documentation, materiality, and the process of communicating a design concept through the life of a project. To highlight the importance of construction documents, the first half of the semester explored three major factors that influence the development and documentation of a project. First, students studied the complexities of the client, designer, and contractor relationships that must be fostered to achieve a successful project. Secondly, students reviewed contractual relationships, how projects get started, the phases of a typical job, and the various ways a project team can be structured. Finally, students reviewed a broad range of material systems, their physical characteristics, modes of production, assembly sequences, maintenance needs, and ultimate recyclability where appropriate. With a clear understanding of project relationships, material systems and process, students then developed a set of construction documents during the second half of the semester. As a basis for this work, students selected a past study project to develop further. The course included lectures, discussions, site walks, and two multi-stage assignments designed to build familiarity and proficiency in the documentation process.



Le Xu and Zhiqiang Zeng, material layout plan and prototype

MEDIA I DRAWING AND VISUALIZATION

Instructors Rebecca Popowsky and Megan Born Assistant instructor Lindsay Falck Teaching assistants Zhoufei Zhu and Rivka Weinstock

This first course in the Media sequence explored visual representation as a mode to communicate as well as to generate and deepen design ideas. The course strove to balance craft and precision with exploration, experimentation and invention through the creation of hand drawings, digital visualizations, physical models and mixed media compositions. The course gave students a foundation in measured design drawings including plan, section, axonometric and constructed perspective, and challenged students to critique and reinterpret conventional drawing and modeling techniques. Lectures covered such topics as the use of the hand in the thinking process, how to connect hand movement with computer flexibility, the importance of imagination in the landscape process and precedents in design methodology. While Media I was distinct from Studio I, the two courses were coordinated to maximize thematic and technical synergies.



Chendi Zhang, model photos

MEDIA II DIGITAL VISUALIZATION

Instructor Keith VanDerSys Teaching assistants Bo Dong, Le Xu, and Nicholas Parisi

This second course in the Media sequence provided an intensive hands-on inquiry into the exploration, enhancement, and extrapolation of digital media and the subsequent modes of conceptual, organizational, and formal expression. Through a series of working labs, students were introduced to various software applications and numerically driven techniques as a means to learn rigorous surface construction and control through form processing. Instead of understanding computer modeling simply as an end, this course considered digital media as a compulsory tool in design processes. The course provided students with the necessary digital modeling techniques to explore and examine precision surface profiles and land-forming strategies. These models provided a basis to speculate on what processes and programs might be engendered or instigated. Through an emphasis on generative analysis, Media II addressed the increasing recognition that temporal and relational techniques are explicit components of analysis and formation. This course addressed appropriate strategies for managing and converting data and methods for streamlining workflow through various computer applications. Rhino was the primary modeling platform, but associated plug-ins of Grasshopper, Rhino Terrain, Sonic and Bongo extended the toolset; GIS facilitated the collection of extant data. Adobe CC Creative Cloud was also used for documenting and expressing modeling processes through static and time-based visualizations.



Anna Darling, matrix

MEDIA III FLOWS: LINEAR / NON-LINEAR

Instructors Keith VanDerSys and Michael Luegering Teaching assistants Boyang Li, Yiling Li, Karli Scott, and Jingya Yuan

Media III continued the curricular emphasis on visual communication and methods of generative analysis for design; the course's theme was dynamics and flows. In Media II, students embraced iteration as a process of computational praxis and as an attribute of landscape systems. This course delved deeper into the collection and control of information – from the scale of GIS to sited metrics and embedded sensors – and focused on modeling, parsing, and simulating landscape systems/media as topological, recursive, and spatio-temporal patterns. Students worked with rich fields of landscape attributes (i.e. data) and created parametric tools to draw out significant thresholds and distinguish areal effects. By using parametric attributes, terrain, surface, and site were treated as integrated with the larger geophysical, ecological, and environmental exchanges of landscape. Labs incorporated GIS, Rhino/Rhino Terrain, Grasshopper and AfterEffects. Each software package was approached in terms of creating recursive interactions of attributes within a single program/range of scales and in handling attribute data such that it could be accessed, re-integrated, and represented across software/scales. The overlap of parametric tools enabled the testing of site-scale grading, surfacing, and planting alterations in terms of both local and regional effects, drawing out the non-linear potentials and new patterns catalyzed by site manipulations. In addition, animation software and cinematic collation were explored for their ability to both notate and incorporate diagrammatic duration.



Qi Wang, matrix

MEDIA IV FUTURES: TRENDS AND TRAJECTORIES

Instructor Michael Luegering

Teaching assistants Rong Cong, Anhua Liang, and Shuwen Ye

The theme of Media IV, the final course in the Media sequence, was trends and trajectories. This course continued the use of the computational methods for analysis, representation and generation of contextual, environmental and geometric conditions that were established in Media II and III. Media IV broadened the use and refinement of these tools to understand the complex range of conditions that inform patterns of urbanization. The use of the particular tools and methods in this course were developed to broaden students' ability to evaluate as well as design through relational and conditional modeling. Parametric modeling offered the opportunity for students to rapidly iterate through as series of formal consequences spurred by criteria developed through the examination of established parameters founded in environmental, social, and political data. Constructing models and tools allowed students to refine their criteria for design evaluation. Material produced was a balanced composition of graphics and information, requiring a specific language and means to express spatial, temporal and cumulative qualities. The course primarily used Rhino, Grasshopper (including additional plug-ins) and AfterEffects.



Xinxin Shen, matrix

THEORY I THE CULTURE OF NATURE

Instructor Richard Weller Teaching assistants Billy Fleming and Luke van Tol

Drawing on wide-ranging aspects of science, philosophy and the arts, this course surveyed the historical relationship between the subjects of Culture and Nature. The course questioned the stability and historical construction of these binary referents by presenting an overview of the ways in which "nature" has been understood mythically, theologically, ideologically, philosophically, scientifically, artistically, ecologically and politically. The course connected this broad history of ideas to contemporary conditions of ecological crisis and in turn folded this into the history of landscape architecture and urban design. The lectures, readings and associated discussions and exercises were designed to encourage and assist students to develop an understanding of history as a prerequisite for understanding contemporary conditions of ecological crisis. The overriding purpose of this course was to encourage and assist students in developing a personal worldview as the epistemological basis upon which intellectually adventurous, professional careers in landscape architecture could be built.

Topics included:

Words: Nature/Culture/Anthropocene; Paradise: Allegory, Agriculture, Cities, Gardens; Utopia: Utopia, Dystopia, Ecotopia; Geometry: Cosmology, Maps, Grids, Space and Time; Machines: Scientific and Industrial Revolutions, Modernity; Arcadia: Romanticism, Landscape; Matter: Atoms, Cells, Light, Indeterminacy, Art; Resilient Natures (guest lecture by Billy Fleming); Earth: Evolution; Anthropocene: Postmodernity, Environmentalism, Feminism, Gaia, Conservation, Landscape Architecture/Stewardship; Cyborg: Planetary Urbanism, Post-Human, Bio-Art, Nature™ Inc., Futurama



Alexandra Lillehei, model

THEORY II HISTORY AND THEORY OF LANDSCAPE ARCHITECTURE

Instructor Raffaella Fabiani Giannetto

Teaching assistants Jieru He, Krista Reimer, and Michael Shafir

This theory course unfolded several contemporary issues that shape the profession, such as giving form to environmental values, balancing science and art, ecology and design, reconsidering the need for the beautiful visà-vis the many sites challenged by pollution and abuse. Among the topics of discussion, this course also took into account recent phenomena such as the turn of the century increase in world population, sprawl, and environmental pollution, and how these have changed the reality described by the very word "nature" and have contributed to expand the domain of landscape architecture. This course was as much about landscape architectural discourse as it was about creativity and how the latter may be enhanced by a deep knowledge of past and present accomplishments. Talks presented by the instructor addressed the roots of contemporary ideas in earlier theoretical formulations while in-class exercises explored the propensity for the issues, constraints, meanings and design solutions of the past and present to generate new ideas.

Topics included: Landscape as representation and the representation of landscape; Landscape as process; Ecological design; Landscape urbanism; The sublime; Gardens as art; Balance without symmetry: Modernism; Ordering principles; Landscape as experience



Mount Airy, John Tayloe Plantation, c.1758. Painted by John Ariss, c. 1725-1799. The photo of the painting belongs to Fisher Fine Arts Image Collection.

URBAN ECOLOGY

Instructors Stephanie Carlisle and Nicholas Pevzner Teaching assistant Michael Biros

This course introduced students to the core concepts, processes and vocabulary of contemporary urban ecology. It aimed to provide a conceptual framework and grounding in an understanding of ecological processes, in order to empower students to develop and critique the function and performance of landscape interventions. Urban ecology describes the interaction of the built and natural environment, looking at both ecology in the city, as well as ecology of the city. Lectures, case studies, critical reading and design exercises enabled students to increase their ability to analyze and interpret ecological systems and processes. By analyzing the application of ecological concepts in the design and management of urban landscapes, urban ecology was explored as a dynamic, human-influenced system. Throughout the semester, invited speakers visited the class as part of a series of applied ecology panels on focused topics. Through a series of assignments, students interrogated a sequence of sites and applied principals gained in class to diagram and analyze the processes and mechanisms shaping site conditions. The course was designed to complement and support the work undertaken by students in the concurrent Studio III: Green Stimuli studio.



Joshua Ketchum, diagram

urban ecology

CONTEMPORARY URBANISM

Instructors Richard Weller and David Gouverneur with Maria Villalobos Teaching assistants Billy Fleming and Nanxi Dong

Over half of the world's population today lives in cities, many of them large metropolitan areas, megacities and urban regions. The urbanization trend is expected to continue throughout the 21st century, particularly in the nations of the Global South. Climate change, scarcity of cheap energy, food and water shortages, and social and political conflicts will be major urban issues. In order to be responsive to such challenges it is critical for architects, planners and landscape architects to understand the theoretical frameworks and related practices that have influenced city making throughout history. With an emphasis on the period from 1900 to the present day this course equipped students with a working understanding and appreciation of the major theories and practices of urban design. This course was divided into two parts. The first, The City in Theory concerned the history and theory of urban design in the developed world and was based on a series of five lectures by Richard Weller, with a wrap-up lecture by David Grahame Shane. The second, Applying Urban Theories in the Global South, concerned urbanization in the Global South and is led by David Gouverneur and Maria Altagracia Villalobos. The course was designed for students enrolled in PennDesign's Urban Design Certificate and students enrolled in Studio IV Design Studio but welcomed students from other disciplines.



Luke van Tol, diagram

ELECTIVE COURSES

Urban Design Certificate (fall) FUNDAMENTALS OF URBAN DESIGN Instructor Stefan Al

This course helped students acquire the principles that inform urban design practice. The course had three major objectives: to help students understand the contemporary city through a series urban design tools; to address both historical and modern urban design principles; and to consider all the scales in which urban designers operate, ranging from the fundamentals of social interaction in public space, to the environmental sustainability of the region. Students applied ideas from readings, weekly assignments and case studies throughout the semester into a culminating design project for a section of Philadelphia known as the "superblocks," a low-density development between the rapidly developing Old City and Northern Liberties neighborhoods. With development pressures from the surrounding area, students had the opportunity to provide a new vision for the superblocks that is compatible with twenty-first century Philadelphia.

Urban Design Certificate (spring) IMPLEMENTATION OF URBAN DESIGN

Instructors Candace Damon and Alex Stokes

This course focused on the various ways in which urban design is affected by opportunities and constraints associated with market conditions, development feasibility, political and community dynamics and the various incentives and restrictions applied by the public sector to influence development. The course walked students through the process of proposing and refining a redevelopment plan for a parking lot located in the vicinity of the University of Pennsylvania. Students were tasked with demonstrating the feasibility of their redevelopment plan from a market, financial, community and public policy perspective. Students furthered their understanding of key concepts that drive urban transformation through case studies, group presentations, class debates and conversations with leading design, real estate and public sector professionals from the Philadelphia region and beyond.

Topics in Representation (fall)

LANDSCAPE DRAWING

Instructor Valerio Morabito

During this course, students used representation to explore the theme of time and its relationship to the city. Through a series of drawing exercises, students developed the vocabulary to represent an imagined city, beginning with mapping and then forming an armature of diagrams, axis, information, and symbols. The course emphasized use of intuition and gesture to represent the ideas of landscape and time.



Topics in Representation (spring) DESIGN IN THE TERRAIN OF WATER 2: A WORKSHOP IN PRINTMAKING AND MAKING LANDSCAPE Instructors Anuradha Mathur and Matt Neff

This interdisciplinary seminar/workshop invited students from the fine arts and landscape architecture departments to explore techniques in printmaking (intaglio in particular) as well as alternative printing techniques to engage time and materiality in landscapes. Rather than pictorial depiction, the focus of the course was in observing processes of transformation in the field and engaging processes of printmaking in the studio in an analogous relationship. The course emphasized iterative and serial ways of working, rather than the production of singular pieces of work.

Topics in Professional Practice (fall)

TRANSFORMATIONAL LEADERSHIP: RESEARCH AND ACTION FOR DESIGNERS Instructor Lucinda Sanders

Leading transformation in the 21st century is a complex process requiring individuals who are conscious, collaborative, secure in their vision, able to creatively extrapolate from traditional understandings of theory and practice, and have a balance of rational, intuitive and spiritual skills and aptitudes. Transforming perceptions is crucial to successful innovation and the key objective to change. The world of the 21st century needs more people who think like landscape architects and other conscious designers. This course aimed to deepen criticality and expose emerging landscape architects to the power of their own voices, and by doing so, to inspire more landscape architects to step forward and lead the significant conversations of the 21st century. This course provided a platform from which students could further this journey of transformation. The course format relied upon active participation in discussions, weekly writing assignments, and the development of a semester-long draft research proposal presented at the conclusion of the course.

Topics in Digital Media (fall) GEOSPATIAL SOFTWARE DESIGN

Instructor Dana Tomlin

The purpose of this course was to equip students with a selected set of advanced tools and techniques for the development and customization of geospatial data-processing capabilities. Students were introduced to the use of the JavaScript and Python computer programming languages in conjunction with Google's Earth Engine and ESRI's ArcGIS. The course was conducted in a seminar format with weekly sessions devoted to lectures, demonstrations, and discussions.

Anni Lei, design in the terrain of water 2 (this page and opposite page)



elective courses

Topics in Construction, Horticulture and Planting Design (spring)

DETAILING IN LANDSCAPE DESIGN

Instructors Lindsay Falck and Abdallah Tabet

The detail is the moment of intersection between the conceptual and the practical, born out of the designer's effort to merge an idealized vision with a set of imposed – and often conflicting – parameters and constraints. For some, the detail may contain the essence of a project, a representation of the idea made manifest. Yet it may also be the reason the whole thing falls apart. Through case studies of exemplary projects, lectures, discussions, and design exercises involving drawing, modeling, and fabrication at a range of scales, this seminar course explored detailing as an idea, as a process, and as a vital component of design practice and construction methodology. This course offered students the opportunity to develop a strong grounding in the logic and language of details, supporting continued inquiry and critical engagement with design over the course of a career.

Topics in Construction, Horticulture and Planting Design (fall and spring)

ISSUES IN ARBORETUM MANAGEMENT I AND II: UNDERSTANDING PLANTS / EVALUATING PUBLIC GARDENS Instructor Cynthia Skema

This year-long course, which met at the Morris Arboretum in the Chestnut Hilly section of Philadelphia, was designed as an introduction to all aspects of public gardens. Utilizing the plant collection of the arboretum as a living laboratory and the expertise of arboretum staff, students learned about plants from varied perspectives including the organismal, applied/practical, aesthetic, environmental and evolutionary. The course also covered the human element of public gardens, in the consideration of education, development, finance, and public programs. This interdisciplinary course looked at public gardens as a whole, integrating both theoretical and hands-on, practical coursework.

Topics in Ecological Design (spring) RECLAMATION OF LARGE-SCALE SITES Instructor William Young



Ishaan Kumar, landscape drawing

This course presented case studies and practical techniques for the restoration of large tracts of disturbed lands. The course began by introducing a background in scientific disciplines including chemistry, ecology and geology as they relate to ecological restoration. This course used examples of actual projects to practice the techniques for reclamation and development. There was a strong focus on site analysis and natural resource inventory, leading to informed and holistic site development and design.

Topics in Theory and Design (fall) DESIGN IN THE TERRAIN OF WATER 1 Instructor Anuradha Mathur

Designers largely image, imagine, and build on dry ground even when they are in water. They work with maps and images that are generally conceived when the rain has passed, ice has melted, and clouds have cleared and when water appears contained within or separated from land. To consider wetness as the terrain of design is a shift in emphasis to a sensibility that privileges ambiguity over clarity, fluidity over containment. In this seminar/workshop students explored traditional and contemporary practices through this sensibility, and, in parallel, developed artistic practices that engaged wetness as the ground of design. Material engagement and observation initiate ways of articulating the world and constructing the very basis of theory. With this in mind students explored places and projects that introduce new sensibilities to how we walk, draw, record, think, build, and consider design in the terrain of water. Students engaged with fieldwork, films, readings, class discussions, presentations, and demonstrations to build a body of work and a manifesto.

Topics in Theory and Design (fall) CLASSICS CONSIDERED

Instructors Laurie Olin and Raffaella Fabiani Giannetto

The purpose of the course was to familiarize students with aspects of the physical design and realization of landscape, emphasizing its properties as a medium of expression, its materiality, and issues of craft, composition, and construction in relationship to functionality and poetics. The sites chosen were among those frequently considered representative of particular movements, periods, or exemplars of design excellence. This was not a "history" course per se, but rather a "design" analysis endeavor similar to the way students and faculty in literature study exemplar texts by highly regarded poets or novelists, studying their structure, context, ideas, and craft. This approach offered a unique opportunity for learning not only about the ideas, design choices and motivations behind existing projects, but also how the latter have been received and interpreted by others, particularly historians and critics who have developed written narratives of built work. Criticism, as the students discovered in this course, is tightly linked to theory, but it is also a consequence of specific approaches to history. Students learned how to discern the latter while also writing their own assessments of both built and written work.



Ishaan Kumar, design in the terrain of water 2

Topics in History and Theory (spring) THE CULTURE OF CULTIVATION: DESIGNING WITH AGRICULTURE Instructor Raffaella Fabiani Giannetto

This seminar addressed the relationship between landscape design and the productive or working landscape. The course presented and discussed primary texts and projects by contemporary and past authors and practitioners who have explored the relationship and interaction between design and agriculture to achieve goals as broad and diverse as food production – particularly in urban context – ecological restoration, the improvement of biodiversity and conservation. The seminar also explored the dialectic of the good and the beautiful from a historical and theoretical perspective, taking into consideration examples of designed and written work in which the two philosophical lenses are seen as faces of the same coin and why their consonance is being rediscovered today. The course included talks by the instructor and invited landscape architects and academics and a trip to New York City to visit the office of Nelson Byrd Woltz.

Topics in History and Theory (spring)

WEIMAR LANDSCAPES

Instructors John Dixon Hunt and Liliane Weissberg

This cross-disciplinary course was designed for students of literature, landscape architecture and urban planning, and cultural history in general. It explored the ideas of and attitudes towards landscape in selected works by Johann Wolfgang Goethe, and considered his own substantial practical involvement in reshaping the town and gardens of Weimar. The course provided the larger context of German literature, aesthetics and landscape taste, and politics of the later 18th and early 19th centuries. The course considered the development of new gardens and parks in a "new" style (e.g. Wörlitz), which were regarded to be less formal and more "natural" than their French predecessors. Students studied English models for this movement, and paid particular attention to the major German theorist, C.C.L. Hirschfeld, who would soon become famous outside Germany as well.

Topics in Theory and Design (spring)

ENVIRONMENTAL READINGS

Instructor Frederick Steiner

This seminar explored the influence of literature on design and planning theory. The first part of the course focused on the three most important theorists in environmental planning and landscape architecture: Frederick Law Olmstead Sr., Charles Eliot and Ian McHarg. The second part of the course critically explored current theories in environmental planning and landscape architecture. The topics included: frameworks for cultural landscape studies, the future of the vernacular, ecological design and planning, sustainable and regenerative design, the languages of landscapes, and evolving views of landscape aesthetics and ethics. In the third and final section of the course, students built on the readings to develop their own theory for ecological planning or landscape architecture.

Topics in Theory and Design (spring) DESIGNING WITH RISK Instructor Matthijs Bouw

This research seminar investigated designing with risk, particularly as it relates to the problem of climate adaptation and resilience. The aim of this course was to explore potential roles and tools of design as a means of responding to risk in spatial, infrastructural and policy projects at a variety of scales. In collaboration with faculty and thinkers in other disciplines, students developed a body of knowledge about risk and how it relates to streams of intellectual energy around resilience. Emphasis was placed on two risk types – systems resilience and coastal adaptation – in greater depth and from many standpoints, mixing philosophy, policy, economics, science, regulation, engineering technique and design. Research in this course helped shape a larger effort at PennDesign to position architects, landscape architects and planners as crucial allies in risk management.

Topics in Theory and Design (spring) WORK: ASPECTS AND TOPICS IN LANDSCAPE ARCHITECTURE Instructor Laurie Olin

This course examined the nature of professional practice, its projects and typologies, in the past century and today. It examined issues regarding a number of project types, their genesis and production, from the instructor's perspective based on fifty years of practical experience: the clients, the politics, the design, production, and craft. The course also examined the nature of collaboration with clients and allied professionals, largely architects and engineers. Specific project typologies presented included: private gardens and estates; public parks - large and small, soft and hard; campus planning and design; community planning, development, and design; institutional grounds and settings; memorials and monuments; corporate and commercial facilities; infrastructure (highways, roads, streets, trails, harbors, water systems); regional and large district plans for resources, development, resilience; miscellaneous such as tourist, recreational and agricultural facilities.



Albert Chen, transformational leadership

INDEPENDENT THESIS STUDIO

RECONSTRUCTING SAN JOSE DE CHAMANGA Students Shuwen Ye and Aubrey Jahelka Faculty supervisor Maria Villalobos

This independent studio was a continuation of work conducted in the fall 2016 Pedernales, Ecuador studio led by Maria Villalobos and Oscar Grauer. This project focused on the reconstruction of the small town of San Jose de Chamanga in coastal Ecuador. While the earthquake that struck the area in April of 2016 caused much physical damage, the small fishing town had already suffered for several decades from severe environmental degradation linked to the shrimp farming industry. The proposed solution focused on sustainable and resilient reconstruction while also addressing pre-existing environmental damage by manipulating urban, productive and natural landscapes to work in hybridized tandem rather than at competing odds.



Aubrey Jahelka and Shuwen Ye, rendering

INDEPENDENT STUDY

UNDERSTANDING WETNESS (spring)

Student Jieru He

Faculty supervisor Anuradha Mathur

This independent research project aimed to study the presence of water in mining operations and the potential of design to provide a new ground for understanding wetness. At the beginning, the study compared and related two distinctive territories. One arid territory in China, and another humid territory along the Western Ghats in India. Then, by examining human mining processed and local traditional practice, questions were considered such as where landscapes of other wetness can intervene into, and how ground can be reimagined.

TRANSFORMATIONAL LEADERSHIP: CONTINUED RESEARCH (spring)

Students Ruyi Chen, Albert Chen and Yiling Li Faculty supervisor Lucinda Sanders Following initial research conducted during the fall Transformational Leadership course taught by Lucinda Sanders, three students elected to use independent study as a means to further develop their projects during the spring semester. The students met with Sanders individually and as a group over the course of the semester, which culminated in final presentations of their research to a panel of invited critics.

Albert Chen

Topic: Place Identity Issues and Practices in Contemporary Chinese Cities and Towns

Ruyi Chen

Topic: Across the Borderline: How might refugee settlements be integrated with the urban environment?

Yiling Li

Topic: Paradigm Shifts in Contemporary Landscape Architecture



Yiling Li, diagram

SUMMER INSTITUTE AUGUST 8 - 25, 2016

For Entering 3-Year MLA Students

Week 1 LANDSCAPE OPERATIONS

Instructors Rebecca Popowsky, Ari Miller, and Ed Confair

This one-week course, for entering three-year MLA students, introduced concepts and techniques for analyzing, representing, and operating on landform, the fundamental medium of landscape architecture. Students learned representational and model-making techniques for conveying topography, and described a series of landscape interventions on a topographic surface. Through models and drawings, students developed an appreciation for the spatial implications of landform, for landscape narrative, for the movement of water and people across the landscape, and for the operation of reshaping the ground. The week included an introduction to the Fine Arts Library.

Week 2 INTRODUCTION TO DIGITAL MEDIA

Instructors Abdallah Tabet, Agnes Ladjevardi, and Eduardo Santamaria

This week long introductory course was intended to enable students to orient themselves to digital media facilities, programs, and workflows. The course was focused around daily projects building up to a final pinup. Each daily project illustrated a different set of work paths between digital programs, as well as taught students how to use different software applications key to the practice of landscape architecture today. The focus of this course was to enable students to understand what each digital software application offers to the landscape process, and how to build change and iteration into digital workflows.

Week 3 NATURAL SYSTEMS

Instructors Sarah Willig and Marie Hart

Teaching assistants Prakul Pottapu and Ben Summay The purpose of this four-day session for the three-year MLA students was to develop an understanding of the plant communities typical of the Coastal Plain and Piedmont of southeastern Pennsylvania through exploration of natural areas and analysis of connections between climate, geology, topography, hydrology, soils, vegetation, wildlife, and disturbance. Students worked to develop a familiarity with the local flora (native and non-native) including plant identification and an understanding of preferred growing conditions and potential for use. Students continued this field investigation through the fall semester ultimately visiting natural areas from the Atlantic Ocean to the Appalachian Mountains.



Sally Willig, field trip photo

For Entering 2-Year MLA Students

Week 1 LANDFORM AND GRADING WORKSHOP

Instructors Cora Olgyay and Anneliza Kaufer

Teaching assistant Colin Curley

The reading and shaping of landform is an elemental tool in the practice of landscape architecture. The act of grading design – the manipulation and sculpting of the earth – is both art and science. This week-long course for two-year MLA students aimed to provide an appreciation of landform as both an evocative component in the design vocabulary and as a critical tool in resolving difficult design problems. Basic techniques and strategies of grading design were introduced and reinforced, so that grading design becomes an integral part of the students' design approach. This workshop was intended to provide a concise overview of the principles and process of landform and grading design, and was designed to prepare the entering two-year students for Workshop III. Students investigated the integral relationship between landscape components: geology, topography, soils, climate, hydrologic processes, vegetation, disturbance, and finally human inhabitation and intervention. This framework of natural systems provided the setting for the primary focus of the course: the intentional manipulation of topography through grading design.

Week 2 NATURAL SYSTEMS

Instructors Sarah Willig and Marie Hart

Teaching assistant Prakul Pottapu

The purpose of this five-day session for the two-year MLA students was to introduce the regional physiographic provinces (areas of similar geology and topography) and associated plant communities by moving roughly east to west over the course of the week. At each site, students characterized plant communities and considered the connections between climate, geology, topography, hydrology, soils, vegetation, wildlife, and disturbance. Students worked to develop a familiarity with the local flora (native and non-native) including plant species identification and an understanding of preferred growing conditions and potential for use.

Week 3 INTRODUCTION TO DIGITAL MEDIA AND ACADEMIC WRITING WORKSHOP

Instructors Keith VanDerSys (media) and Billy Fleming (writing)

Teaching assistant Le Xu

This four-day session included two concurrent courses. This Digital Media course introduced students to the facilities of digital media as the primary mode of design visual communication. The course provided a short, yet intensive, hands-on inquiry into the production and expression of digital media that is essential for all designers. Through a series of working labs, students learned various software applications and associated techniques to execute precise two-dimensional representations of three-dimensional concepts. The week culminated with an individual project. In the Writing Workshop, students received a basic introduction to research methods, research resources, academic writing, citation formats and standards expected by the School of Design. The workshop aimed to provide students with the tools necessary to engage with the vast intellectual resources available at Penn and to develop their own voice as scholars of landscape architecture. The workshop consisted of three tutorial-based lectures and three collaborative assignments.

LECTURES

Thomas Woltz

Principal, Nelson Byrd Woltz Landscape Architects, Charlottesville, Virginia "Cross Discipline / Common Purpose: Hybrid Collaborations at Nelson Byrd Woltz" September 15, 2016

Liat Margolis

John H. Daniels Faculty of Architecture, Landscape and Design; Director, GRIT Lab, University of Toronto "Bridging the Performance Gap" September 26, 2016

Erle Ellis

Professor, Geography and Environmental Systems, University of Maryland "Entangling Anthromes: Evolving Niche, Biosphere and Design" November 21, 2016

Frederick "Fritz" Steiner

Dean and Paley Professor, PennDesign "Design for a Vulnerable Planet" November 30, 2016

Nicola Irving / Tarna Klitzner

Charlotte Chamberlain & Nicola Irving Architects; Tarna Klitzner Landscape Architects Cape Town, South Africa "Safe Places - A Practitioner's Lens" February 16, 2017

Steward Pickett

Distinguished Senior Scientist, Cary Institute of Ecosystem Studies, Millbrook, New York "Urban Crisis and Urban Opportunity: A Role for Ecological Knowledge" March 23, 2017

Catherine Mosbach

Principal, Mosbach Paysagistes, Paris "Soil, Air, Water under Photons" April 10, 2017

BOOK LAUNCH

"Foreign Trends in American Gardens"

By Ra^Ffaella Fabiani Giannetto Speakers and panelists: Laurie Olin, Rebecca Bushnell, David Brownlee, Emily Cooperman, John Dixon Hunt, and Elizabeth Hyde April 24, 2017

SYMPOSIUM

Inaugural Penn Landscape Dialogues Organized by Richard Weller, Christopher Marcinkoski, and Keith VanDerSys Participants included: Diego Bermudez, Nikole Bouchard, Fionn Byrne, Dane Carlson, Danika Cooper, Michael Ezban, Alison Hirsch, Jason Ho, Erin Kelly, Annalisa Metta, Lukas Pauer, Robert Pietrusko, Nadine Schütz, Gideon Shapiro, and Amelia Thorpe Penn faculty speakers/moderators included: Frederick Steiner, Richard Weller, Nick Pevzner, Raffaella Fabiani Giannetto, Karen M'Closkey, and Anuradha Mathur March 30-31, 2017

FORUM

Earth Day 1970/2017 What's Left: A Forum on Global Urbanization, Biodiversity and Policy "Atlas for the End of the World" website launch Speakers: Richard Weller, Frederick Steiner, and Eugenie Birch Researchers: Claire Hoch and Chieh Huang Website designer: Darcy Van Buskirk Co-sponsored by PennDesign and Penn IUR

EVENTS

LAAB Re-Accreditation Exhibition and Team Visit October 16-19, 2016

PennDesign ASLA Alumni and Friends Reception New Orleans, October 21, 2016

PennDesign Thanksgiving Dinner November 17, 2016

PennDesign Lunar New Year Celebration February 2, 2017

PennDesign Awards Ceremony, May 14, 2017

Commencement, May 15, 2017

PennDesign 2017 Year-End Show May 12 - June 12, 2017 Opening Reception: May 12, 2017

Penn Career Services Events

Fall 2016 Pizza with Career Services, August 30 Walk-in Advising/Resume Interviews, October 19 and December 7 PennDesign Internship Panel, November 2 Portfolio Preparation Panel, co-sponsored by the PennDesign Alumni Association, November 16

Spring 2017

Resume Review Walk-ins, January 25 Resume Book, submission deadline, February 8 Career Connection Day, Career Fair, February 17 Careers in Architecture and Landscape Architecture Alumni Panel, March 29

PennDesign Alumni Association Student Events

Firm Crawl: Philadelphia City Panning Commission, OLIN, and KieranTimberlake November 4, 2016 Portfolio and Resume Review January 27, 2017

STUDENT ORGANIZED EVENTS

PD ASLA Student Chapter MLA Student Reps Ava Zhong - 500s Rep Cody Erhart - New 600s Rep Hallie Morrison - Continuing 600s Rep Sean McKay - 700s Rep Xiao Wu - International Rep

ASLA Emerging Professionals Committee Visit and Leadership Talk Richard Zweifel, Past President, ASLA Daniel Martin September 22, 2016

The Balancing Act Real Students / Real Stories / Real Talk Organized by Arianna Armelli and Ishaan Kumar January 20, 2017

Brown Bag Sessions

Organized by Krista Reimer and Prakul Pottapu Fall 2016 Richard Weller, August 31 Jillian Wallis, Visiting Scholar, September 7 Karen M'Closkey, September 28 Raffaella Fabiani Giannetto, November 9 Chris Marcinkoski, December 7

Spring 2017

Student summer intership/travel experience, January 18 Student social impact work, January 25 Aaron Wunsch, February 1 Dilip da Cunha, February 22 Anuradha Mathur, March 15 Chris Marcinkoski, April 12 Matthijs Bouw, Rockefeller Risk Fellow, April 19

ANNOUNCEMENTS

The Master of Landscape Architecture Program at the University of Pennsylvania was ranked second again in **America's Best Architecture & Design Schools 2017**, a national survey of professionals with direct experience hiring and supervising recent architecture and design graduates. **Richard Weller** was honored as one of the top 25 Most Admmired Educators for 2017-2018. The research is conducted annually by **DesignIntelligence** on behalf of the Design Futures Council.

The MLA program underwent a very successful re-accreditation review by the Landscape Architecture Accreditation Board (LAAB) on October 16-19, 2016. The visiting team members were Chip Winslow, from Kansas State University; Mary Anne Alabanza Akers, from Morgan State University; and Robby Layton, with Design Concepts in Colorado. The team reported that all standards were met and there were no recommendations for improvement that would affect our accreditation. the next re-accreditation review will be held in the fall of 2022.

Departmental publications

LA+ Interdisciplinary Journal of Landscape Architecture continues to be published twice a year by ORO Editions. The fourth issue *LA+ Simulation* came out in the fall of 2016, the fifth issue *LA+ Identity* was published in the spring of 2017, and the sixth issue *LA+ Risk* is due out in the fall of 2017. Editor-in-chief Tatum Hands and faculty advisor Richard Weller are working with the student sub-editors on *LA+ Imagination* and *LA+ Time*. Students Joyce Liao and Prakul Pottapu are working on the Imagination issue and Arianna Armelli, Sofia Nikolaidou and Naeem Shahrestani are working on the Time issue.

LA+ is generously supported by the following donors – Gold Patrons: Andropogon, James Corner Field Operations, Hollander Design, Mathews Nielsen, Marilyn Jordan Taylor, OLIN, Starr Whitehouse, W Architecture and Landscape Architecture; Silver Patrons: bionic, McGregor Coxall, Stoss, Terrain; Bronze Patrons: AHBE, Imelk, PEG+ola, Snøhetta, T.C.L. Landscape Architecture, Reed Hilderbrand, TOPOTEK 1, WRT, and Workshop: Ken Smith.

PennDesign and the digital publication *Scenario Journal* continue their affiliation. Lecturers **Stephanie Carlisle** and **Nicholas Pevzner** are the editors-in-chief. The journal investigates complex urban landscape and infrastructural issues.

Students

Colin Curley, December 2016 MLA graduate, was PennDesign's nominee to the Landscape Architecture Foundation's Olmsted Scholars Program in 2017.

Two May graduates won ASLA Student Awards in the General Design category. Zhengneng "Albert" Chen received an Honor Award for his project "Create a Walkable History: Editing the Historical Percorsi of Pienza." Faculty advisors were Randy Mason, Laurie Olin, Rebecca Popowsky and Fritz Steiner. Zhiqiang Zeng received an Honor Award for his project "Milan Traversing;" his faculty advisor was Valerio Morabito. The awards were presented at the ASLA annual meeting in Los Angeles in October 2017.

Faculty

Richard Weller was reappointed as chair of the department for another term, beginning January 1, 2018 and concluding June 30, 2023. Richard Weller with alumni co-authors Claire Hoch and Chieh Huang launched the website "Atlas for the End of the World" on April 22, 2017. The site was designed and built by Darcy van Buskirk.

Professor Anuradha Mathur and Adjunct Professor Dilip da Cunha were the recipients of a 2017 Pew Fellowship Grant from The Pew Center for Arts & Heritage for their work on the lines separating land and water, in the built environment.

Associate Professor Karen M'Closkey and Senior Lecturer Keith VanDerSys' new book "Dynamic Patterns: Visualizing Landscapes in a Digital Age" was published in April 2017 by Routledge.

announcements

Karen M'Closkey and Keith VanDerSys, in conjunction with PennPraxis are part of the BionicTeam, which was chosen as one of ten design teams in the Resilient by Design / Bay Area Challenge competition to create community-based solutions to climate change in the San Francisco Bay Area. The Field Operations Team, led by Emeritus Professor James Corner was also selected as one of the teams to join local community members in the year-long research and design challenge. The winning teams were announced in September 2017.

Associate Professor Christopher Marcinkoski, with Lecturer Javier Arpa, was invited to exhibit and give the keynote lecture on his *"Atlas of African Speculation"* research at the 2017 Kuala Lampur Architecture Festival in July. He also received an Alumni Achievement Award from Penn State University's College of Arts and Architecture.

Assistant Professor Raffaella Fabiani Giannetto's latest book *"Foreign Trends in American Gardens: A History of Exchange, Adaption, and Reception"* was published in February 2017 by the University of Virginia Press. Fabiani Giannetto was invited to present the volume at the Polytechnic of Turin, Castello del Valentino, Italy in October 2017.

Professor of Practice Laurie Olin, Adjunct Professor Dilip da Cunha and Adjunct Associate Professor Cora Olgyay's terms ended on June 30, 2017. The Department is grateful for their commitment to the MLA program for so many years. Olin and Olgyay will continue teaching on a part-time basis. Olin was also honored as the 17th laureate of the Vincent Scully Prize by the National Building Museum in October 2017.

In March Senior Lecturer **Nicholas Pevzner** was named the 2017 Maeder-York Family Fellowship in Landscape Studies by the Isabella Stewart Gardner Museum in Boston. He was in residence at the museum in June and July.

Adjunct Associate professor **Ellen Neises** has been named executive director of PennPraxis beginning August 14, 2017. PennPraxis is the center for applied research, outreach, and practice at the School of Design.

In 2017 Adjunct Professor Valerio Morabito's firm APS won competitions for a new waterfront in the City of Torre del Greco, for new landscape strategies for two industrial site projects – Occhiobello and Colli Euganei – all in Italy. Morabito, Chris Marcinkoski and Randy Mason have worked through PennPraxis on an urban development project with the City of Sesto San Giovanni.

Emeritus Professor John Dixon Hunt will be the first landscape architectural historian to receive the Friedrich-Ludwig-von-Sckell Ring in October 2017, from the Bayerische Akademie der Schönen Künste. This award was established in honor of the designer of the Englische Garten in Munich.

Lecturer Megan Born joined PORT Urbanism as a full partner in October 2016. She joins Associate Professor Christopher Marcinkoski and Andrew Moddrell in leading PORT. The Regional Plan Association of New York selected PORT to prepare policy and landscape infrastructure strategies for the Highlands, a 200-mile rural belt that surrounds New York City. PORT designed and installed OVAL+ for the Fairmount Park Conservancy and Philadelphia Parks and Recreation, a 5-week temporary park in Eakins Oval at the terminus of the Benjamin Franklin Parkway. Because of the success of this project, PORT is beginning concept design studies for the permanent reconfiguration of the Oval.

Lecturer Michael Luegering received the G. Holmes Perkins Award for Distinguished Teaching by a Member of the Non-Standing Faculty from the School of Design in May 2017.

Lecturers Mark Thomann, Kira Appelhans and MLA student Prakul Pottapu were part of the wHY team which won The Ross Pavilion's 2017 International Design Competition to revitalize a nationally important site in Edinburgh.

Lecturer Maria Villalobos, and her partner Carla Urbina, were awarded the National Prize of Architecture of the XII National Biennale, in February 2017, by the Library of the Universidad Simon Bolivar, for "Botanical Urban Landscapes of Maracaibo as Living Schools: Lessons from the Botanical Garden of Roberto Burle Marx." Associate Professor of Practice David Gouverneur was a key advisor.

STUDENT AWARDS

Ian L. McHarg Prize

Established in 2001. Awarded to a graduating student who has demonstrated excellence in design and best exemplifies ecological ideals in contemporary and culturally pertinent ways. This prize is awarded in memory of lan L. McHarg, 1920-2001, distinguished professor of landscape architecture, pioneer of ecological design and planning, and one of the most influential landscape architects of the twentieth century. Awarded to Colin Curley

Laurie D. Olin Prize in Landscape Architecture

Awarded to a graduating student who has achieved a high academic record and demonstrated design excellence in the making of urban places. Laurie D. Olin is one of the world's foremost leaders in contemporary landscape architecture and founder of the internationally acclaimed OLIN studio in Philadelphia, designing some of the world's most significant urban public spaces. Established in 2010 by the OLIN studio in honor of Professor of Practice Olin who has served on Penn's faculty of landscape architecture since 1974. Awarded to Sean McKay

Faculty Medal in Landscape Architecture

Awarded to a graduating student with an excellent academic record and outstanding contribution to the school in leadership. Awarded to Jieping Wang

John Dixon Hunt Prize in Theory and Criticism

Awarded to a graduating student who has shown particular distinction in the theoretical and critical understanding of landscape architecture. The prize was established in 2004 and renamed in 2010 to honor the distinguished career of Professor Emeritus John Dixon Hunt. Awarded to Zhengneng "Albert" Chen

Eleanore T. Widenmeyer Prize in Landscape and Urbanism

Established in 2004 through a bequest by Eleanore T. Widenmeyer in memory of her parents, Arthur E. Widenmeyer, Sr. and Lena R. Widenmeyer, is awarded to a graduating student who has achieved a high level of design synthesis between landscape and urbanism. Awarded to Zhiqiang Zeng

Narendra Juneja Medal

Awarded in memory of Associate Professor Narendra Juneja, who served the department with distinction from 1965-1981, to a graduating student who has demonstrated deep exceptional commitment to ecological and social ideals in landscape architecture. Awarded to Yiqing "Ethan" Wu

Narendra Juneja Scholarship

Awarded in memory of Associate Professor Narendra Juneja, who served the department with distinction from 1965-1981, to a continuing student in landscape architecture for academic excellence and demonstrated need. Awarded to Nicholas Jabs

George Madden Boughton Prize

Established in 1986 by Jestena C. Boughton in memory of her father, George Madden Boughton. Awarded to a graduating student in landscape architecture for design excellence with environmental and social consciousness and evidence of potential for future effective action in the field of landscape architecture. Awarded to Boyang Li

Robert M. Hanna Prize in Design

Awarded to a graduating student who has demonstrated great care for the craft, making and construction of landscape architecture. Established in 2010 by the OLIN studio in memory of Robert M. Hanna (1935-2003), who served on Penn's faculty of landscape architecture from 1969 to 1998. Awarded to Le Xu

Mr. and Mrs. William L. Van Alen Traveling Fellowship

Awarded to one landscape architecture student and one architecture student, in the second year of their programs, for summer travel to Europe. Awarded to Rivka Weinstock and Sarah Yassine

ASLA Awards

Certificates of Honor and Merit awarded to graduating landscape architecture students who have demonstrated outstanding potential for contributions to the profession.

Certificates of Honor awarded to Zhengneng Chen, Sean McKay, and Le Xu

Certificates of Merit awarded to Colin Curley, François Poupeau, and Shilei Lu

Wallace Roberts and Todd Fellowship

Established in 1991. Awarded to an outstanding landscape architecture student who has finished the second year of the three-year program. Awarded to Anni Lei

OLIN Partnership Work Fellowship

Established in 1999. A prize and a twelve-week internship awarded to an outstanding Master of Landscape Architecture student entering the final year of his or her study. Awarded to Sofia Nikolaidou

Chair's Acknowledgement Award for Service

Inaugurated in 2013. Awarded to a single student or small group of students who have made an exceptional extracurricular contribution to the program. Awarded to Jieping Wang and Yiqing Wu

Chair's Acknowledgement Award for Design Progress

Inaugurated in 2013. Awarded to a first year student in the three-year Master of Landscape Architecture program who has demonstrably advanced the furthest in their design capability across the course of their first year of study. Awarded to James Billingsley

Susan Cromwell Coslett Traveling Fellowship

Established in memory of former Assistant Dean, Susan Coslett. It is awarded to a School of Design student for summer travel to visit gardens and landscapes. Awarded to James Billingsley

GRADUATES

Master of Landscape Architecture

December 2016 Colin Curley Emily Tyrer Jieping Wang Jingya Yuan Zhiqiang "John" Zeng

May 2017 Michael Biros Ruyi Chen Zhengneng "Albert" Chen Rong Cong Baihe Cui Jingshi Diao Nanxi Dong Sneha Easwaran Nyasha Felder Zitong Feng Margaret Gerhart Chen Hu Scott Jackson Wenqian Jiang Jinah Kim Boyang Li Yiling Li Anhua Liang Boya Lu Shilei Lu Sean McKay Nicholas Parisi

François Poupeau Karli Scott Yuzhou Shao Muyang "Moya" Sun Michael Shafir Xiaoyang Wang Sarai Williams Hang Yung Elvis Wong Yiqing "Ethan" Wu Le Xu Liqiu Xu Xinyi Ye Shuwen Ye Tianjiao Zhang Yuxia Zhou



MLA Class of 2017; photo Darcy Van Buskirk

Department of Landscape Architecture University of Pennsylvania School of Design

