

NRP® DÉCOR WALL PANELS

A QUICK UPGRADE FOR CORRIDORS, LOBBIES, AUDITORIUMS AND OFFICES.



Revolutionary panels featuring solid reclaimed polymer core with HPL or decorative laminate surface provide a logical alternative to traditional millwork and solid panels for commercial interiors where high performance, long service life and value are the key factors.

NRP DÉCOR panels can fulfill most design requirements and are unaffected by moisture. They are extremely durable and easy to clean. The 100% recycled plastic core provides exceptional product life and green building credits.

In high maintenance applications, such as corridors, schools, and healthcare facilities of all kinds, NRP DÉCOR panels are an outstanding choice.

Please call for samples and to discuss upcoming projects.



For more information contact us at 800-835-4110 or www.parklandplastics.com



Quality Consultants is a New York Special Inspection Agency

We provide inspection services for New York Architects since 1997.

We offer testing and inspection to retail, restaurant, residential, and commercial projects. Our inspectors are licensed and certified in multiple disciplines.

Our staff is well trained, friendly and professional. Quality Consultants uses reliable and consistent equipment for inspection and testing projects.







Services

- Steel (Stability, Bolting, Welding)
- Non-Destructive Testing
- Structural Masonry
- Soils

- Mechanical Systems
- Energy Code Compliance
- Sprayed Fire-Resistive Materials
- Firestop/Draftstop



(917) 567-4674

CONSULTING ENGINEERS

HVAC

Electrical Plumbing Fire Protection Building Control Systems Mission-Critical Systems Lighting Design

INFORMATION TECHNOLOGIES

Telecommunications Audiovisual Security Threat and Vulnerability Assessments Construction Administration Commissioning

CODE CONSULTING & FIRE ENGINEERING

ADVANCED TECHNOLOGIES

BIM (Building Information Modeling) CFD (Computational Fluid Dynamics) Building Energy Simulation

SUSTAINABLE CONSULTING

LEED Design/Consulting Energy Modeling Analysis Local, State & National Incentive Programs: Living Building Challenge Energy Star NYSERDA MPP Partner NJ Pay for Performance Partner

www.cosentini.com

NEW YORK, NY Two Pennsylvania Plaza t: 212.615.3600 info@cosentini.com



BOSTON, MA

 \triangleright

Ш

70

 \blacktriangleright

ЛД

CHICAGO, IL CALGARY, CANADA FREEHOLD, NJ HOUSTON, TX KANSAS CITY, MO LOS ANGELES, CA MEXICO CITY, MEXICO MIAMI, FLORIDA ORANGE COUNTY, CA PARIS, FRANCE SAN DIEGO, CA SHANGHAI, CHINA

OCULUS A Publication of the AIA New York Chapter

Spring 2017 Vol. 79, No. 1

OCULUS STAFF Editor-in-Chief Alan G. Brake Contributing Editors Lisa Delgado; John Morris Dixon, FAIA; Julia van den Hout; Jonathan Lerner; Bill Millard; Linda G. Miller; Stanley Stark, FAIA; Richard Staub; Janet Adams Strong, Ph.D.; Claire Wilson Copy Editor Elena Serocki Art Director Forrest Jessee Art Consultant Pentagram, New York Oculus Committee/Advisory Board Miguel Baltierra, Assoc. AIA; Christopher Barley; Julie Engh, Assoc. AIA; Iva Kravitz; Chris Leong, AIA; Suzanne Howell Mecs, Hon. AIA NYS; Chee Pearlman; James Petty, AIA; David Piscuskas, FAIA, LEED AP; Benjamin Prosky, Assoc. AIA; Barbara E Spandorf, AIA (chair), LEED AP; Jieun Yang, AIA

BOARD OF DIRECTORS 2017 President

David Piscuskas, FAIA, LEED AP First Vice President/President-Elect Gerard F. X. Geier, II, FAIA, FIIDA, LEED AP Vice President for Design Excellence Jennifer Sage, FAIA, LEED AF Vice President for Professional Development Jane Smith, FAIA, IIDA Vice President for Public Outreach Kim Yao, AIA Secretary Faith Rose, AIA Treasurer Kenneth A. Lewis, AIA Director for Development Affairs Paul A. Bello, PE Director for Educational Affairs Karen Fairbanks, AIA Director for Industry Affairs Marc Heiman Director for Legislative Affairs F. Eric Goshow, AIA, LEED AP Director for Programs and Strategic Planning Illya Azaroff, AIA Public Director for Professional Affairs Maxine Griffith, AICP Director for Publications Barbara E. Spandorf, AIA, LEED AP Directors for Sustainability Laurie D. Kerr, FAIA, LEED AP Associate Director Michael Szivos, Assoc. AIA Public Director Jeffrey C. Shumaker, Assoc. AIA Public Director of Educational Affairs Thomas Hanrahan Directors for Student Affairs Nick Tafel Alternate Director for Design Excellence Stephanie Gelb, FAIA Alternate Director for Professional Development Venesa Alicea, AIA, LEED AP BD+C Alternate Director for Public Outreach Dina Frank, AIA, IIDA Immediate Past President Carol Loewenson, FAIA, LEED AP Executive Director Benjamin Prosky, Assoc. AIA

AMERICAN INSTITUTE OF ARCHITECTS

New York Chapter Center for Architecture 536 LaGuardia Place New York, NY 10012 212.683.0023 | info@aiany.org www.aiany.org

AIANY/CENTER FOR ARCHITECTURE STAFF AND SERVICES

Executive Director Benjamin Prosky, Assoc. AIA (ext. 129) bprosky@aiany.org Managing Director Suzanne Howell Mecs, Hon. AIA NYS (ext. 115), smecs@aiany.org School Programs Coordinator Dustin Atlas (ext. 132) datlas@cfafoundation.org Accounting Manager Carol Bartold (ext. 128) cbartold@aiany.org Youth Programs Coordinator Hadley Beacham (ext. 133) info@cfafoundation.org Editor, Oculus Alan G. Brake (ext. 119) abrake@aiany.org Development Associate Annie Ciccarello (ext. 125) aciccarello@aiany.org Membership Coordinator Joseph Corbin (ext. 118) jcorbin@aiany.org Director of Program Committees Eve Dilworth Rosen (ext. 117) erosen@aiany.org Director of Digital Content and Strategy Meghan Edwards (ext. 136) medwards@aiany.org Director of Operations James Fallarino (ext. 112) jfallarino@aiany.org Program Committees Coordinator Kelly Felsberg (ext. 139) kfelsberg@aiany.org Office Manager Jacob Fredi (ext. 113) jfredi@aiany.org Lead Design Educator Tim Hayduk (ext. 137) thayduk@cfafoundation.org Director of Programs and Exhibitions Berit Hoff (ext. 138) bhoff@aiany.org Senior Director of External Affairs Jesse Lazar (ext. 108) ilazar@aianv.org Exhibitions/Archtober Manager Katie Mullen (ext. 120) kmullen@aianv.org Policy Coordinator Justin Pascone (ext. 116) ipascone@aianv.org Communications Director Camila Schaulsohn Frenz (ext. 114) cschaulsohn@aianv.org Development Manager Anne Shisler-Hughes (ext. 134) ashislerhughes@cfafoundation.org Technology Manager Philip Stevens (ext. 124) pstevens@aiany.org Director of Education Catherine Teegarden (ext. 135) cteegarden@cfafoundation.org Development Associate Morgan Watson (ext. 110) mwatson@aianv.org Finance Director Henry Zachary (ext. 131) hzachary@aiany.org

Oculus is a benefit of both AIA New York Chapter and Center for Architecture membership. For information on professional and public memberships, please call 212.358.6115.

One-year subscription (4 issues): \$40 (U.S.), \$60 (foreign). The AIA New York Chapter also publishes the twice-monthly online newsletter eOculus. To advertise in Oculus or eOculus, please contact David Freeman at dfreeman@naylor.com or 678.808.3193. For reprint or back issue information or to be placed on the e-mail list, contact info@aiany.org.

The opinions expressed herein or the representations made by advertisers, including copyrights and warranties, are not those of the Board of Directors, officers, or staff of the AIA New York Chapter or the Editor of Oculus, unless expressly stated otherwise.

©2017 The American Institute of Architects New York Chapter. All rights reserved. Reproduction in whole or in part without written permission is strictly prohibited.



The American Institute of Architects



⁶⁶ In architecture, you have the freedom to explore and influence society through the built environment. You're an idealist, but have the rare opportunity to create a reality that improves the lives of others. ⁹⁹

Danielle Mitchell, Assoc. AIA Member since 2015

Join me. aia.org/**join_grad**

Join when you graduate and receive free membership for up to 18 months, plus free registration to AIA Convention!*

REIMAGINING Exteriors.



WHY DRI-DESIGN?

Dri-Design's Tapered Series panels can add a unique and original element to any façade. This distinct system is truly striking when combined with Dri-Design's unlimited color palette in painted aluminum and many other material options, including stainless steel (pictured), VMZINC and many more. The tapered series, while attractive, still maintains Dri-Design's true dry joint rain-screen technology, sustainability and ease of installation.

- . No sealants, gaskets or butyl tape means no streaking and no maintenance for owners.
- Not laminated or a composite material, so panels will never delaminate.
- At Dri-Design, we have a strict policy of recycling and creating products that the world can live with.
- Fully tested to exceed ASTM standards and the latest AAMA 508-07.
- Available in a variety of materials and colors.



616.355.2970 | dri-design.com



Reliance Engineering, P.C.

CONSTRUCTION CODE INSPECTORS

98 Rose Avenue, Staten Island, New York 10306 (718) 351-4000 Fax: (718) 667-0123 info@reliance-engineering.com



SPECIAL INSPECTION AGENCY

Special Inspection Categories

Special Inspections	Code/Section
Structural Steel – Welding	BC 1704.3.1
Structural Steel – Details	BC 1704.3.2
Structural Steel – High Strength Bolting	BC 1704.3.3
Structural Cold-Formed Steel	BC 1704.3.4
Concrete – Cast-In-Place	BC 1704.4
Concrete – Precast	BC 1704.4
Concrete – Prestressed	BC 1704.4
Masonry	BC 1704.5
Wood – Installation of High-Load Diaphragm.	s BC 1704.6.1
Wood – Installation of Metal-Plate-	
Connected Trusses	BC 1704.6.2
G Wood – Installation of Prefabricated I-Joists	BC 1704.6.3
Subgrade Inspection	BC 1704.7.1
Subsurface Conditions – Fill Placement	BC 1704.7.2
and In-Place Density	BC 1704.7.3
Subsurface Investigations	
(Borings/Test Pits) 🛙 TR4	BC 1704.7.4
Deep Foundation Elements I TR5	BC 1704.8
□ Helical Piles (BB # 2014-020) ■ TR5H	BC 1704.8.5
Vertical Masonry Foundation Elements	BC 1704.9
Wall Panels, Curtain Walls, and Veneers	BC 1704.10
Sprayed fire-resistant materials	BC 1704.11
Mastic & Intumescent Fire-resistant Coating	
Exterior Insulation and Finish Systems (EIF	
□ Alternative Materials - OTCR Buildings	, 22.701.15
Bulletin #	BC 1704.14
	50 .704.14

Special Inspection Categories (Con't)

Special Inspections	Code/Section
Smoke Control Systems	BC 1704.15
Mechanical Systems	BC 1704.16
Fuel-Oil Storage and Fuel-Oil Piping System	s BC 1704.17
High-Pressure Steam Piping (Welding)	BC 1704.18
High Temperature Hot Water Piping (Welding)) BC 1704.18
High-Pressure Fuel-Gas Piping (Welding)	BC 1704.19
Structural Stability – Existing Buildings	BC 1704.20.1
Excavations—Sheeting, Shoring, & Bracing	BC 1704.20.2
Underpinning	BC 1704.20.3
	BC 1814
Mechanical Demolition	BC 1704.20.4

Mechanical Demolition	BC 1704.20.4
Raising and Moving of a Building	BC 1704.20.5
Soil Percolation Test - Private On-Site	
Storm Water Drainage Disposal Systems,	
& Detention Facilities	BC 1704.21.1.2
Private On-Site Storm Water Drainage Disposal	
Systems, & Detention Facilities Installation	BC 1704.21.2
Individual On-Site Private Sewage Disposal	
Systems Installation	BC 1704.22
Soil Percolation Test - Individual On-Site	
Private Sewage Disposal Systems 🛙	BC 1704.22
Sprinkler Systems	BC 1704.23
Standpipe Systems	BC 1704.24
Heating Systems	BC 1704.25
Chimneys	BC 1704.26
Fire-resistant Penetrations and Joints	BC 1704.27
Aluminum Welding	BC 1704.28
Flood Zone Compliance (attach FEMA)	BC 1704.29
elevation/dry floodproofing certificate	BC G105
where applicable)	
Luminous Egress Path Markings TR7	BC 1704.30
	BC 1024.8
Emergency and Standby Power Systems	BC 1704.31
(Generators)	BC 1704.32
Seismic Isolation Systems	BC 1707.8
🖵 Concrete Design Mix 🛚 TR3	BC 1905.3
	BC 1913.5

□ Concrete Sampling and Testing ■ TR2

Progress Inspection Categories

Progress Inspections	Code/Section
Preliminary	28-116.2.1, BC 110.2
Footing and Foundation	BC 110.3.1
Lowest Floor Elevation	BC 110.3.2
Structural Wood Frame	BC 110.3.3
Energy Code Compliance Inspection	IS TR8 BC 110.3.5
Fire-Resistance Rated Construction	BC 110.3.4
Public Assembly Emergency Lighting	g 28-116.2.2
Final 2	8-116.2.4.2, BC 110.5,
Directive 14 of 1975	, and 1 RCNY §101-10

Energy Code Progress Inspection

50 1704.20.5	Progress Inspections	Table Referen	
		§5000-01(h) (1) and (2)
3C 1704.21.1.2	Protection of exposed for		
e no ne nne	Insulation placement and		(IA2), (IIA2)
3C 1704.21.2	Fenestration u-factor and	I product rating	(IA3), (IIA3)
	Fenestration air leakage		(IA4), (IIA4)
BC 1704.22	Fenestration areas		(IA5), (IIA5)
	Air sealing and insulation		(IA6), (IIA6)
BC 1704.22	Air sealing and insulation		(IA7), (IIA7)
BC 1704.23	Loading deck weather se	als	(IIA8)
BC 1704.24	Vestibules		(IIA9)
BC 1704.25	Fireplaces		(IB1), (IIB1)
BC 1704.26	Shutoff dampers		(IB2), (IIB2)
BC 1704.27	HVAC and service water he		(IB3), (IIB3)
BC 1704.28	HVAC and service water head HVAC insulation and each		(IB4), (IIB4)
BC 1704.29	HVAC insulation and seal	ing	(IB5), (IIB5)
BC G105	Duct leakage testing Electrical aparaty consum	ntion	(IB6), (IIB6)
	Electrical energy consum Lighting in dwalling units		(IC1), (IIC1)
BC 1704.30	Lighting in dwelling units		(IIC2)
BC 1024.8	Interior lighting power		(IC2), (IIC3)
BC 1704.31	Exterior lighting power Lighting controls		(IIC4)
BC 1704.32	Electrical motors		(IIC5) (IIC6)
BC 1707.8	Maintenance information		(ID1), (IID1)
BC 1905.3	Permanent certificate		(ID1), (ID1) (ID2)
BC 1913.5	Solar Ready Requirement	·c	(ID2) (ID3)
BC 1905.6 BC 1913.10	a solar neady nequirement	د.	(105)

www.reliance-engineering.com



Meetings / Conferences / Trainings / Retreats / Educational Seminars / Product Launches / Receptions / Breakthrough Space

ter Aaron



Floral Park, L.I. Manhattan 99 Tulip Ave., s.106 45 Rockefeller Plaza Ph. 516-327-0050 Ph. 212-956-9241



Senter for Architectu

212.358.6112

cfa.aiany.org

Code Resources for ICC **New York State**

ENERGY CODE

ESSENTIALS

NEW CODE REFERENCES AVAILABLE!

2015 **INTERNATIONAL CODES®**

2015

FIRE

Are You Ready to use the 2015 I-Codes®?

ICC publishes valuable resources to assist you in learning and interpreting the 2015 I-Codes:

• Each Code and Commentary contains the complete I-Code plus expert commentary following each code section.

• The Code Essentials Series focuses on the fundamentals of everyday code application.

• Inspector's Guides compile the most relevant information to increase accuracy and consistency of inspections.

• Study Companions provide helpful practice guizzes and learning assignments for self-study.

Code Resources for New York City

Get your updated building code, illustrated guide to the IBC, plus expert commentary

2014 NEW YORK CITY BUILDING CODE A fully integrated code based on the 2009 International Building Code®.

2009 IBC HANDBOOK: FIRE- AND LIFE-SAFETY PROVISIONS Details the nonstructural provisions of the 2009 IBC[®] with helpful figures to clarify application.

2009 IBC CODE AND COMMENTARY

2015

2015 Inte

Study Con

2015

Includes the full text of the IBC, including tables and figures. commentary at the end of each section.



Get Your New Codes and Resources Today! 1-800-786-4452 | www.iccsafe.org/ny2016



Severud Associates CONSULTING ENGINEERS P.C.

469 Seventh Avenue, Suite 900 New York, NY 10018 (212) 986-3700 info@severud.com

TABLE OF CONTENTS

OCULUS SPRING 2017 EDUCATING THE ARCHITECTS OF TOMORROW

- 13 Letter from the President Student Assembly: Engaging the Next Generation of Architects By David Piscuskus, FAIA
- **15 Letter from the Editor On Continuity and Change** By Alan G. Brake
- 16 At the Center Deans' Roundtable
- 19 One Block Over The Bronx is Rising By Claire Wilson
- 40 In Print

Never Built New York By Greg Golden and Sam Lubell Power at Ground Zero By Lynne B. Sagalyn Reviews by Stanley Stark, FAIA

- 43 54-Year Watch Paul Rudolph's Puzzling Masterpiece By John Morris Dixon, FAIA
- 45 Letter from the Executive Director The Center: Where the Academy and the Profession Meet By Benjamin Prosky, Assoc. AIA
- 46 Index to Advertisers Alphabetical & Categorical Index View the Oculus archive online: naylornetwork.com/arc-nxt

Cover: The studio at the Kent State College of Architecture and Environmental Design, Photo: Albert Vecerka/ESTO

Oculus is printed with low-VOC inks and alcohol substitutes. Our printer has eliminated film and film processing, and uses waste recovery programs and EPA-licensed handlers.

FEATURES

21 Opener

The Core Value of Critical Citizenship in Architectural Education By Craig Barton, AIA

22 Golden Flash Forward

The Kent State College of Environmental Design demolishes hierarchies and fosters community By Alan G. Brake

26 A Fast-Tracked Path to Practice

NCARB's new Integrated Path to Architectural Licensure telescopes the linear sequence of coursework, work experience, and examinations into a parallel process By Bill Millard

30 Prototyping the Future

The Making Center at Parsons The New School for Design encourages exploration and collaboration across disciplines By Julia van den Hout

34 Academic Expectations

Should architecture schools do more to prepare students with the business skills they need for practice? By Laura Raskin

Prairie Schooled

36

Kansas State University's College of Architecture, Planning, and Design unites disciplines and elevates design thinking By Alan G. Brake

38 Excerpt: When Ivory Towers Were Black By Dr. Sharon Egretta Sutton, FAIA





Coatings by AkzoNobel Trusted brands, proven performance, enduring appeal.

TRINAR[®] liquid and INTERPON[®] powder coatings easily pass the rigorous testing requirements of AAMA 2605 – for exterior metal finishes that stand the test of time.

AkzoNobel coatings appear on some of the world's most recognizable buildings, delivering remarkable resistance to weathering fading cracking and chalking

www.akzonobel.com/ccna www.interpon.us

NMN N

Custom Cast Vault Panels

о. к. FOUNDRY CO., INC. 1005 Commerce Rd. / Richmond, Va 23224 PHONE 1-888-592-2240 / 1-888-RIC-IRON FAX 1-804-233-6240 WEBSITE OKFoundry.com E-MAIL Architecture@OKFoundry.com

Industrial strength manufacturing, custom designs, historic details

- Ductile iron for NYC truck traffic loads
- Stock glass or custom glass options
- No paint finish options
- Refurbishment and repair of original cast iron

O. K. Foundry

Custom Architectural Castings since 1912

LETTER FROM THE PRESIDENT

STUDENT ASSEMBLY: ENGAGING THE NEXT GENERATION OF ARCHITECTS



DAVID PISCUSKUS, FAIA

For the licensed professions, advanced education tends be distilled into a tidy – and mostly accurate – single objective. Medicine: to provide a full and productive life of personal health and wellness. Law: the provision of justice in agreements and disputes. Education: to provide the learning essential to a functioning democracy.

As I was grinding through the final months of an M.Arch program in a sleep-shunned trance some 35 years ago, I could trust only the sense of purpose that impelled me to pursue architecture: namely, that I would be trained to realize a well-designed building that would last for generations. Then, the enduring constitution of a building seemed to be assured, but now, having had the opportunity to assess that generation of buildings, we are rightly compelled to revise our approach to architectural education.

Is my M.Arch degree from 1982 still relevant? Yes – and maybe. What about the density of technological progress combined with the empowerment and diversity of globalization: discernible at that time? Perhaps not – or maybe so. Aside from accredited licensure, where do we find our trust and confidence in the medical attention and legal advice we so regularly require?

In gathering ideas germane to our initiatives this year at AIA New York and the Center for Architecture, the thematic content of "Architects: Assembly Required" engages interrelated activities some of us believe essential to the vitality of our profession: personal and public interaction; advocacy and activism; diversity and inclusiveness; and design distinction thoughtfully conceived and constructed, as well as productively and enduringly utilized.

These ideas take on added salience as we consider the future of our profession, seen through the way we structure professional education. Are we and our successors as well assembled as we could be to engage the present-day and sure-to-come challenges? Even as our active membership prepares content for presentation and consumption at the Center intended to stimulate collaboration and support continuing education and professional growth, we should examine its relevance. Are we connecting with our youngest members? Do we understand the aspirations of our young people and what they seek in architecture and its allied disciplines?

At AIANY we regularly recognize the immediacy of the academy in our annual Deans' Roundtable. Originated in 2006 by City College of New York professor and 2014 AIANY President Lance Brown, FAIA, this forum brings the leaders of local design and architecture schools to the Center to engage in a vigorous dialogue about the expectations of their students and their respective pedagogies and programs. The most recent such roundtable took place within a week of the presidential election. The concerns expressed, and the schisms and prospective dislocations projected that evening, portended a unique alignment between design students and their schools and many members of our profession. In particular, as many educators noted, the reciprocal respect – in word, deed, and action – that connects our education with our profession appeared threatened as both a core value of architecture and as a connective tissue of society.

For these reasons and others, this edition of *Oculus* offers a look at some of the programs and pedagogies influencing architectural education. We trust you'll agree that our inquiry is timely as we examine how we, as architects, are assembled not only in the service of our profession, but of our civil society. Enjoy.

DESIGNED & ENGINEERED CONCEALED LINTEL SYSTEMS

from Hohmann & Barnard

Flat Spine

- » Custom solutions for intricate and complex architectural requirements.
- » Can incorporate varied coursings, spans, offsets, and soffit widths.
- » Freedom to select various sizes and colors of brickwork.
- » Hohmann & Barnard provides all necessary drawings and calculations.
- » No further maintenance required All structural steel is unexposed.
- » Architectural creativity is virtually limitless.



www.h-b.com/lintelol or call: 800.645.0616



WE MEASURE BUILDINGS.

As-Built Drawings • 3D Modeling • BOMA Certifications



WWW.lt-fp.com Corporate/Cad Center: 1-888-393-6655 Business development: 1-888-825-2112

<u>laide (</u>



BOMA

Flame of Knowledge and all ornamentation reproduced by H&L

APPAS

HEATHER + LITTLE

Custom Architectural Sheet Metal Fabricatio

At H&L we fabricate and reproduce custom ornamental sheet metal, from complex ceiling panels to decorative details; custom finials to intricate cornices. Our master metal smiths are experts in historic reproduction and custom

call 1.800.450.0659 email info@heatherandlittle.com www.heatherandlittle.com

itt the

LETTER FROM THE EDITOR

ON CONTINUITY AND CHANGE

BY ALAN G. BRAKE



The Oculus Archive at the Center for Architecture.

What is the role of a quarterly magazine that serves a professional audience and reflects the activities and values of a membership organization? What should it look like? How should it reach and extend its audience? How should its content exist in print and online?

These are some of the questions we are exploring at Oculus, even as we continue to produce a magazine that has existed in various forms for more than 60 years. In this issue, you will notice a series of incremental changes as we refresh the magazine, reinforcing its value to our readers. A quarterly print publication doesn't, and shouldn't, compete with timely news, announcements, and event listings, which you can find on the AIA New York/Center for Architecture website. The magazine's content - primarily long form journalism and commentary can exist on a different, more considered timeline. The content should be able to reach audiences beyond our print readership, however, so we will be looking to improve the way Oculus stories exist online, in tandem with a redesign of the Center's website, which will occur later this year.

Other changes include a refinement of the print magazine's design, by graphic designer Forrest Jessee, which has made the magazine crisper, cleaner, and easier to read. Existing publication templates – ours was created by Pentagram – have a tendency to get cluttered and diluted over time, so we tasked Forrest with clarifying the design while keeping the DNA of *Oculus* intact. We are so pleased with the results and hope our readers appreciate the changes, which will continue to evolve throughout the year. Bravo, Forrest!

The event photography, formerly called "Center Highlights," now exists online and will be replaced with an excerpt of an event from the last quarter's programming. In this issue, we have included a condensed and edited transcript of November's Deans' Roundtable, because the event itself was stimulating, urgent, and memorable, and also because it was relevant to the theme of this issue: contemporary architectural education.

We have taken up the topic from a number of angles, from a perspective between the profession and the academy. We are not an academic journal, but we serve an audience that includes many members who are involved in architectural education, and schools feed our members' firms. The circles certainly overlap. The stories in this issue include the evolving path from the academy to practice, how architects and architecture schools are rethinking their physical teaching environments, and an excerpt from a scholarly book. We also initiated an online members' survey about the relationship between the academy and the profession, some quotes from which are included in this issue. The voices of dozens of architects, academics, and students animate *Oculus*.

Finally, I would like to end on a note of thanks to my predecessor, the one-ofa-kind Kristen Richards. Thank you for 13 years of thoughtful editing and stewardship of this magazine, and for being an enormous help to me in the process of putting this issue together. Look for Kristen's keen eye and insightful voice at her pioneering online publication, ArchNewsNow.com.

Bigger changes are in store for the magazine in the coming issues. I look forward to your thoughts, suggestions, and feedback. Contact me at abrake@ aiany.org.

Correction: In "Follow that Trail of Bread Crumbs," Oculus, Winter 2016, pg. 21, Paul Nakazawa, AIA, was incorrectly described as a consultant to WORKac.

AT THE CENTER

DEANS' ROUNDTABLE

The following is a condensed and edited transcript from the twelfth annual Deans' Roundtable, held on November 12, 2016, at the Center for Architecture.

Participants included Winka Dubbeldam, chair of architecture, PennDesign, University of Pennsylvania; Urs Gauchat, Hon. AIA, dean, School of Architecture, New Jersey Institute of Technology; Gordon Gebert, acting dean, Bernard and Anne Spitzer School of Architecture, The City College of New York; Toni Griffin, professor in practice of urban planning, Graduate School of Design, Harvard University; Robert Kirkbride, dean, School of Constructed Environments, Parsons the New School for Design;

Bimal Mendis, Assoc. AIA, assistant dean, Yale School of Architecture; Maria Perbellini, Assoc. AIA, dean, School of Architecture and Design, New York Institute of Technology; Robert Shibley, FAIA, dean, School of Architecture and Planning, SUNY University at Buffalo; Michael Speaks, dean, School of Architecture, Syracuse University; Nader Tehrani, dean, The Irwin S. Chanin School of Architecture of The Cooper Union. The Cooper Union for the Advancement of Science and Art; and J. Meejin Yoon, professor and head, department of architecture, MIT. Craig Barton, Assoc. AIA, provost, School of the Art Institute of Chicago, served as the moderator.

Craig Barton: What do we think of the academy's role in educating students about citizenship and urbanism? And what's the environment in your individual institutions?

Toni Griffin: I teach the core urban planning studio, and students were literally huddled around their desks asking themselves what their role would be. We educational experiences - not just for found we had to spend the rest of the week making space in our classrooms for ing technology to crucial and significant open dialogue and conversation, reconciliation, and motivation - turning that sense of sorrow into a form of activism, talking about architecture, planning, and design as being political and not forgetting that it always has been.

Urs Gauchet: We have for many, many years had a tradition of focusing on local issues, helping local communities plan and make decisions. This kind of involvement at the local level is very attractive for students. Meeting the local players is a good experience for them. They see how the game is played. They meet with the mayor. They meet with the people who live there. They really understand the mediating role we can play in our profession.

Maria Perbellini: I'm interested in technology advances combined with environmental, social, and cultural issues, and how the relationship can create opportunities for our learning experiences. I believe in being able to create something from a multicultural perspective, an internationalization of our economy or efficiency, but actually linkissues related to sustainability, poverty or resilience in our cities, and going into territories that they're actually uncomfortable.

Robert Kirkbride: What brought us together was just getting to work, because we realized there are several fronts that are threatened immediately: community engagement, climate, views on social infrastructures, and the constructed environment in general. What is very important, as we think about fears of walls being built and those coming to our door to study, is recognizing that students may not want to come to the United States to study anything, let alone architecture. It compels us not to withdraw as we often do in architecture, to keep the boundaries open.

Gordon Gebert: Two things seem to be emerging in our school. One is a real concern for the climate - principles that are very much under attack and are likely to be in a very bad way over the next four to eight years - and the thought that unraveling the work we've done is probably going to kill a lot of people, just to be very blunt. A thrust we're pursuing is to revisit this yet again in the deepest possible way. We believe it will not only be a real fight to get anything done in that arena, but we will probably come under attack as environmentalists, and we need to be strong and ready to deal with that.

Nader Tehrani: I would simply remind us, if we believe the statistics and look around us, that a great part of the divide is not only that people have not listened, but there is an educational divide between the urban realm and the rural realm. Effectively, the discussion with the students was about the uniqueness of the architectural discipline in its incertitude, in the comfort that the critiques should give you because it's not a one-way discussion; debate that ensues produces the possibility of a creative confrontation with the conditions we



Participants in the Deans' Roundtable included Urs Gauchat, Nader Tehrani, and Maria Perbellini.

find today. Lastly, I would say something about the silver lining of this moment: I've never felt so rejuvenated in my life because of this renewed sense of purpose.

Bimal Mendis: Like for all of you, there was this kind of stunned reaction to the events. As you can imagine, the students in their fearlessness are trying to mobilize, trying to have a logical conversation about how they act as architects. But I think there's also a sense of disappointment perhaps not just nationally, but also disappointment in the profession.

Robert Shibley: If I've learned anything from my students, it is that they are really terrible victims. They just don't do that; they go right back into the teeth of it. The invitation for us is to recognize that the job just got harder but no less compelling or, frankly, exciting. My tendency is to hang on to what I'm grateful for, and work with what is already a really positive and proactive energy in our student bodies to not be victims.

Meejin Yoon: If we have power in the academy, through the platform of education, one of the things that is absolutely critical is advancement. We can't look back. We have to look forward in terms of advancement of knowledge but, more importantly now, advancement of conversation. One of the powerful platforms of academia is that we have actually no borders, no boundaries. We have incredibly international faculty and students, and we can have a global conversation in a way I think will be very hard for the nation to have in the next four years.

Michael Speaks: I often find it puzzling that architects and urbanists are so naïve to believe we can live in a world unless it changes absolutely dramatically without capital. How in the world would you practice or be engaged in a university or city or national government without capital? We live in a capitalist mode of production. If you know the work of Karl Marx, you will know that very well. I find a lot of our worries naïve. Politically, they're naïve. They're economically naïve. What our students are interested in more than anything else is not some sense of authentic local practice or engagement; they really want to do things in the world.

Winka Dubbeldam: I don't think students are worried about what the architect is. The students definitely are not, but they're personally attacked. They're personally attacked as a gay person, as a woman, as a gay woman, as a gay, black woman – all of the above, right? I don't think any student wonders what the architect is, and they're not even worried to operate. They're worried about their personal values and how, after all these battles through the centuries, we're back at zero.

Toni Griffin: I think it is our responsibility to continue to expose them, to encourage them to believe they can have that agency – not necessarily sitting at a traditional architect's desk, but at the things they are learning. The skills, the critical thinking they are learning have great agency and so many spaces of leadership. Ultimately, what we're creating are leaders we want to shape the urban environment, and we want to encourage them to find ways to use that agency.

RSA SPECS

THE GLOBAL RESOURCE FOR ARCHITECTURAL SPECIFICATIONS

SERVICES

Technical Building Specifications = Sustainable Project Specifications Quality Control & Construction Document Review = Master Specification Developmen Building Materials & Systems Advisory & Research = Bid Form Development AIA Documentation Assistance

ROBERT SCHWARTZ & ASSOCIATES

For More Information: hbrusilow@rsaspecs.com 212.691.3248

RSASPECS.COM

333 West 39th St. Suite #1501 New York, NY 10018





Meetings / Conferences / Trainings / Retreats / Educational Seminars / Product Launches / Receptions / Breakthrough Space

Peter Aaror

Center for Architecture cfa.aiany.org 212.358.6112

ONE BLOCK OVER

THE BRONX IS RISING

Major developments could transform the South Bronx neighborhood

BY CLAIRE WILSON



25 Bruckner Boulevard, a new development designed by Karl Fischer Architect.

The South Bronx is having a moment. One of the last remaining areas of 21stcentury New York with large swaths of underdeveloped land, the borough is now the focus of major public and private initiatives that may eventually give it the cachet of other revitalized former industrial neighborhoods like Long Island City, Greenpoint, and Dumbo.

Individual projects dot the landscape, such as the repurposed Bronx General Post Office on the Grand Concourse; the Bank Note Building in Hunt's Point; the mixed-income, mixed-use green Via Verde in Melrose; and the new Fresh Direct headquarters currently under construction in Port Morris.

Mott Haven, the southernmost swath of the South Bronx, is seeing the greatest change. A trend that started with the Clock Tower lofts conversion in 2002 has been followed by the conversion of the Bruckner Building (now minus its iconic neon History Channel sign), a new hotel, new apartments like 25 Bruckner, and several bars, restaurants, and retail shops. An upscale coffee shop, Filtered, opened last spring. According to the owner, Aaron Baird, it got off to a slow start but is steadily gaining clientele.

"The reward will come later on," said Baird, who has other outposts in Manhattan. "There is a lot of development going on, especially near the waterfront."

That development includes a seventower, mixed-use, mixed-income 2,000unit apartment complex on both sides of the Third Avenue Bridge. Developed by Somerset Partners and the Chetrit Group, it was designed by the former Goldstein Hill + West Architects to fit in with the existing landscape of bustling circulation routes, bridges, and both older and modern industrial buildings against a backdrop of a vibrant, stable historic neighborhood. In a nod to the surroundings, the buildings will be constructed in three different colors of brick and linked by a series of tunnels and courtyards. Multiple roof areas will take advantage of the views across the Harlem River, and ground-floor retail and a large public space will wrap around the whole, according to David West, AIA, founding principal, whose firm was renamed Hill West Architects as of January 1, 2017.

In a community where some locals harbor something of an anti-gentrification bent, the architect's intent was something "gentle, friendly to the community," said West, "not designed to be seen from the waterfront, but to be seen and welcoming from all sides."

Somerset Partners also plans a condo complex with a hotel component in the area, as well as a food hall and brewery, according to Keith Rubenstein, founder.

What might prove to be a gamechanger in the neighborhood, which is well-served by public transportation, is the city's plan to deck over a 13-acre portion of the Harlem River Yards north of the Willis Avenue Bridge and make way for a mixed-use residential complex. That could bring thousands more residents to an area already slated to grow exponentially over the next two years. It will be a boon for small businesses like the La Grata Italian restaurant, opened last year, and Charlies Bar & Kitchen, opened in 2012, which filled a void in a bustling area whose acknowledged lack of amenities is quickly becoming a thing of the past.

Majora Carter, a Hunt's Point-based urban revitalization strategist and real estate developer, hopes the change will be advantageous to the indigenous population, not force them out.

"I'd like there to be economic development that includes wealth creation for the people already in the community," she said.

Right now, she added, "the second they can afford to leave, they do, because there's not much there that is going to keep them."

Claire Wilson is a longtime contributor to Oculus *and the* New York Times.



8th Floor | New 212.643.2277 | w

STRUCTURAL DESIGN | SUPPORT OF EXCAVATION | NYCT APPROVALS | VALUE ENGINEERING | FORENSIC ENGINEERING

Meetings / Conferences / Trainings / Retreats / Educational Seminars / Product Launches / Receptions / Breakthrough Space

eter Aaron

Center for Architecture

Law Offices C. JAYE BERGER

Building Construction Law • Contract Drafting and Review Mechanic's Liens • Real Estate Transactions and Leases Litigation in State and Federal Courts

> 110 East 59th Street, 22nd Floor New York, New York 10022 Tel: (212) 753-2080



OPENER

THE CORE VALUE OF CRITICAL CITIZENSHIP IN ARCHITECTURAL EDUCATION

BY CRAIG BARTON, AIA



Students at Columbia, Barnard, Rice, Yale, and other schools protested the proposed U.S./Mexico border wall.

The twelfth convening of the annual Deans' Roundtable at the Center for Architecture was held on November 12, 2016. The palpable shock of the recent U.S. presidential election weighed heavily on our conversation, as did the anxious, agitated, and vulnerable conversations the roundtable participants had had at their home campuses with their students and faculty. Our dialogue was concerned with how to cogently respond, as educators and designers, to this time of uncertainty. How do we give our students tools and techniques, as well as reservoirs of agency, for their emerging practices? Where should the locus of our engagement be within and for our communities? How can the designers of the built environment provide intellectual and political leadership?

As I write this introductory reflection now – after an inauguration of dubious attendance, a flurry of irregular executive actions, and an outpouring of worldwide, peaceable protest - it seems naïve to conduct business as usual. The questions we had in the days just after the election take on an even greater urgency. Simultaneously, the paramount characteristic of our response is made manifest: our citizenship is key. As we witness the transfer of power in a democratic society, it is important to remember the powerful role art and design play in shaping that society. Our citizenship - no matter if the status of that citizenship is contested or diminished by the state – can be measured by how effectively we marshal our craft and intellect toward the project of keeping art, design, architecture, and education open, diverse, discursive, and responsive to the world in which we live.

As we react to an administration that seeks to limit public discourse, defund federal arts organizations, and discredit artistic expression, we must resist the burgeoning sentiment of antiintellectualism and disregard for the power of art and culture. We can and should construct, and teach our students to construct, a built environment that supports robust, productive, critical exchange within our communities, both on and beyond the campus. This does not require us to rethink what we do so much as how we do it now in meeting the current political challenges that diminish the value of cultural exchange, thereby affecting our work and its manifestations in the built environment. We need to focus on the core value of critical citizenship, an implicit demand when designing the spaces we share. As we teach the next generation of architects, we are not only providing the métier of our profession and a critical set of skills that allow them to practice, we are supplying them with a set of values that enable citizenship. Helping architects be productive and responsible individuals within a society is a fundamental

act of resistance opposed to fearful and isolationist rule.

Resiliency is the cornerstone of our resistance. Architecture, the most public of the arts, knows that public space thrives upon communities that are broadly and powerfully diverse. These are the spaces in which we enact citizenship, not just on Election Day, but day after day. These shared spaces – our classrooms, our city halls, our public squares - are where we as educators and architects can daily help encourage diversity and citizenship, building a resilient culture. Our guilds and professional organizations, such as the American Institute of Architects, can be key bases of safety, comfort, collegial debate, and collective resilience. The conversation I moderated in November provided insight into some concerns that academic leaders for design thinking saw at the outset of a new political landscape. Revisiting this transcript now, I am heartened at the intellectual rigor of my colleagues, emboldened by the citizen-like disposition of our field, and hopeful for the generation of architects and designers being educated today.

Craig Barton, AIA, is provost and senior vice president of academic affairs at the School of the Art Institute of Chicago. FEATURE

GOLDEN FLASH FORWARD

The Kent State College of Environmental Design demolishes hierarchies and fosters community

BY ALAN G. BRAKE





LEFT The building has a bold, contemporary presence on campus. How do you design an architecture school that enhances education both today and in the future? That was a question Marion Weiss, FAIA, and Michael Manfredi, FAIA, grappled with when they were designing the new College of Architecture and Environmental Design (CAED) at Kent State University in Kent, Ohio. They also considered how the building could be a teaching tool and act as a bridge between the university and the city of Kent.

The most important aspect of the project was simple: unifying a college with programs located in multiple buildings on campus. "College officials flew us out for the competition and we learned about the school. It was scattered over three buildings, and they really needed to be together," said Marion Weiss, partner at Weiss/Manfredi. "The previous dean, Doug Steidl, made sure everyone was at the table. There was a recognition that this was something new. He really led that."

The fragmentation of the school had diminished the educational potential. "Physical separation of departments had allowed shared agendas to drift apart," Weiss added, "and faculty felt it was crucial to be within eyesight of the students and each other to renew common ground." LEFT The color of the custom Beldon Bricks relates to the masonry structures in Kent. The ridged profiles are unique to the building.

BELOW Large expanses of glass make the activities in the building legible on the exterior.



Working closely with Steidl, faculty, and students, Weiss/Manfredi designed a building that confidently answers those needs. Clad in golden-hued, locally made Belden Brick with custom-shaped ridges, the building relates to the architecture of the campus as well as to the city of Kent, where similarly colored masonry is common. The façades are punctuated with angled glass bump-outs, which reveal the circulation inside the building on the exterior, and open up expansive views on the interior. This bold composition signals that the building is clearly of this time.

Inside, Weiss/Manfredi placed public and semipublic program areas on the ground floor, including a large lecture hall, library, café, small gallery, and three classrooms. This plan helps give the school a public face and increases its visibility and accessibility to the campus community. The school's studios and additional classrooms were placed on the upper floors, but in a way that deliberately encourages mixing between years and disciplines, and interaction between faculty and students. Even with changing technologies, the architects believe that open, loft-like studios are still the most conducive to design education, so they created three large stu-





ABOVE Natural light pours into the open studio.

LEFT Curved glass walls enclose the lecture hall on the ground level.

dio spaces, which they call "trays," that are staggered across the second, third, and fourth floors of the four-story building.

"We did not apportion the building based on years. No one can anticipate where pedagogy is going to go, so it made sense to make the spaces be utterly flexible," said Michael Manfredi, partner of Weiss/Manfredi. "The building conscientiously doesn't stratify people or programs."

The structure and systems of the building were made legible to students and visitors. "The building is also a pedagogical tool; it's an intelligent building. You can see how the geothermal system works, the green roof," Manfredi said. "But the work inside the building is also on display to the larger world, so the students feel like they are on show. They're thinking of new ways to have an impact."

"We appreciated the diversity of the learning community and the range of disciplinary interests," Manfredi added. "We were pleasantly surprised to learn how much consensus there was around the importance of design. Architecture, planning, landscape, interiors, and construction all coalesced around the urgency of design in shaping our environment." The students agree. A recent headline in the student newspaper *The Kent Stater* declared, "CAED students praise new home after first semester." The space does foster interaction among students from different disciplines and different years. "In the past, all the majors were split up. But it's not like that in the new building," Ashlee Wampler, a freshman interior design major, told *The Kent Stater*. "We can all collaborate in the new building, and it's nice being able to ask an architecture major for advice."

Not only has the building provided vastly improved facilities for students and faculty, and improved working conditions, collegiality, and intellectual community, it has also helped open a new chapter for the college. "The building shows the students, the city, and the world that we are committed to design at the highest level," said Mark Mistur, AIA, the new dean of the CAED. "Just being bathed in natural light, working together, and seeing each other's work has created a sense of joy."

Alan G. Brake is the editor of Oculus and an opinion columnist for Dezeen.





ABOVE Circulation spaces also include informal work and gathering areas.

BELOW The three levels of studios are marked by angled sawtooth bays.



FEATURE

A FAST-TRACKED PATH TO PRACTICE

NCARB's new Integrated Path to Architectural Licensure telescopes the linear sequence of coursework, work experience, and examinations into a parallel process

BY BILL MILLARD



A student at work at the NewSchool of Architecture + Design in San Diego, California.

Thirteen years, no matter how well spent, is a long chunk of a life. From the first undergraduate year through work experience and examinations – the so-called "three pillars of licensure" – it takes longer to produce an architect than a physician, an attorney, or any other professional in the U.S. In 2015 the National Council of Architectural Registration Boards (NCARB) reported the time to licensure averaged 13.3 years: a drop from the 2008 peak of 15.5 years, the seventh reduction in a row, but still longer than three U.S. presidential terms.

The road may be long because built environments are complex systems to master; it may also be a procedural artifact, not carved in granite. After years of consideration, formation of a multidisciplinary task force in 2013, and a 2014 request to all accredited programs, NCARB and the National Architectural Accreditation Board (NAAB) launched the Integrated Path to Architectural Licensure (IPAL) in 2015, letting students at 17 schools (large and small, public and private, totaling 21 programs, six B.Arch. and 15 M.Arch.) complete the Architectural Experience Program (AXP) and Architect Registration Examination (ARE) while earning degrees. "It's a concentrated approach," affirms NCARB CEO Mike Armstrong, JD, "not a shortcut."

Architectural education "was essentially sequential in concept," says Charles Lagreco, AIA, professor of community design and IPAL coordinator at the University of Southern California, "because it was very difficult or impossible for most people enrolled in an accredited program to actually accumulate the required experience as part of their process during school." Yet some institutions, like the Boston Architectural College, the University of Cincinnati, and San Diego's NewSchool (all of which offer IPAL) and Rice University (which is considering it), already emphasize work-study; others have created new programs. USC students also benefit from an Architectural Guild offering mentorship and networking, plus an ARE-support program, Not Licensed Yet. For USC, making the sequential process parallel is logical. "Our basic position," Lagreco says, is that IPAL "should be available to all accredited schools and is an advantage to the profession and the academic programs."

Effects beyond the personal level

Alongside other changes - revising the Intern Development Program, renaming the AXP and requiring 3,740 hours across six experience areas, and structuring ARE 5.0 into six practice-based segments rather than siloed topics - IPAL addresses several professional problems. The long pre-ARE period, participants suggest, hampers the field's economic and demographic diversity; conduces to career stasis, burnout, dropouts, exploitation, and vulnerability to economic boom/bust cycles; raises the risk of an impending architect shortage; and worsens architecture's ratio of effort to measurable rewards. "If we find that students are accelerating and going from 13 years to seven, we're going to see a lot more licensed professionals available for the profession quicker," says NCARB President Kristine Harding, AIA.

NCARB's career-trajectory studies find that "the longer you're out and not taking the exam, the less likely you are to actually take it, because you've figured a way to either have a job without being licensed or move into another profession," says Rachel Schade, AIA, program director at Drexel University's Westphal College of Media Arts and Design. For many would-be architects, especially those with family obligations and/or shallow pockets, "life gets in the way." Drexel is one of the IPAL programs that already had strong experiential components, in part through a six- or seven-year baccalaureate schedule, job-friendly evening coursework,



The NewSchool of Architecture + Design is one of the pilot schools in the IPAL program.

and strong support from Philadelphia-area firms. Schade reports that in an exploratory meeting with officials from NCARB, Rice, and the University of Cincinnati, the Drexel team could show that "our students are already graduating having had enough time to complete their AXP hours. So it was kind of a no-brainer for us, because we didn't have to change the curriculum at all." Granted permission to implement IPAL in September 2015, Drexel now has a cohort of eligible second-year students; Schade expects some to begin AREs in the summer of 2018.



NCARB developed the program to streamline the process of licensure and expand internship possibilities.

IPAL is too new for patterns of enrollment or progress to appear, but participants believe its population will skew toward diverse, committed, and well-organized students. "It really isn't for everybody, and I don't think it necessarily needs to be," says Schade. "The heaviest critiques of the program itself come from schools that just aren't interested in it," she adds, "because they can't do it. It just doesn't fit their model." IPAL's work component may pose problems for international students on one-year visas. This factor may be one reason Ivy League and New York-area institutions are absent from the initial 17 IPAL schools.

Harding, however, believes that IPAL may appeal to international students (if revised immigration laws can resolve visa problems, an area NCARB is exploring) as well as older students, those who might join the military, and those with economic hardships, since AXP requires paid internships. "We're finding that many of these programs are creating collaborations with firms in their area, which is really beneficial to the firms themselves," she says. By investing in a student with "the ultimate result of a licensed professional coming to them after graduation," Harding explains, firms strengthen relationships with their workers as well as with clients, who expect project managers to hold licenses.

IPAL is not "licensure graduation," Armstrong specifies. Licensure remains a state or territorial board responsibility. "Many jurisdictions that have an IPAL program in their state," Harding says, "are working towards changing their laws to provide early access to the ARE for anybody enrolled in an IPAL program. But that doesn't mean that if somebody is in an IPAL program and their jurisdiction



A student project at the NewSchool of Architecture + Design.

has not been able to change the law, that's going to limit them from initial licensure. You can sit for the ARE and do experience from anywhere."

Another chief misconception, Armstrong notes, is that "this program will force people to teach to the test." The ARE has changed to emphasize real-world practicality, he says, and "it's going to become clearer in the marketplace that you better have a lot of experience or you're not gonna pass the exam." Ray Huff, director of the Clemson Architecture Center in Charleston, North Carolina, reports faculty concern directly addressing this risk: "We didn't want to become exam preparers for the students." NAAB requirements continue to ensure accredited programs' curricular integrity.

Healthy subversion

"I see IPAL as one of the best subversive moves in higher education in architecture that I've seen in a generation," says Marvin J. Malecha, FAIA, president of San Diego's NewSchool of Architecture and Design (NSAD). Managed internships and credentialing have long been priorities of his, reflected in his 2005 monograph *The Learning Organization and the Evolution of Practice Academy Concepts*. When he joined NSAD in December 2015, colleagues Mitra Kanaani, D.Arch, AIA, and Kurt Hunker, FAIA, were already working to integrate academics and practice. NSAD now has one of the nation's largest IPAL programs.

"Because of economic necessity, I had to work my way through school," Malecha says, "and I was fortunate enough to work part-time in architectural offices from the time I was a first-year student all the way through graduate school. That combination for me as a student helped me a great deal." The subversion he favors refers to the artificial theory/ practice barrier; he prefers replacing it with a bridge. He paraphrases AIA Gold Medalist Joseph Esherick, FAIA, who "once said that the best offices have significant aspects about them that are like school, and the best schools have significant aspects about them that are like the office."

Aaron Betsky, writing in *Architect*, has raised concerns that it would fast-track students efficiently and shallowly, even steering them toward becoming "Rhino monkeys," at the expense of conceptual breadth and creativity. "Not everybody learns the same way, and in fact for some people that longer gestation period is necessary," Malecha comments.



A studio at the NewSchool of Architecture + Design.



The IPAL program will supplement, not replace, traditional architecture programs.

"Now, the counterpoint to Betsky is, if you're truly in a gestation period, then you should be exposed to all parts of that gestation period," including a familiarity with office realities – current technologies, the deadline-driven "charrette mentality," latestage revisions when a client vetoes a design – that he finds inseparable from credible teaching. There should be room, Malecha believes, for both "students that come to study architecture almost more as a liberal art" and those so focused on becoming architects that they resemble a colleague who once told him, "I just can't wait to put on my pants in the morning so I can get to work in my office."

IPAL will serve the latter. Huff views it as "something that won't necessarily have a broad appeal; I think it would appeal to the highly motivated student who understands the long vision for what is entailed to become licensed." Many such students will be minorities, and diversifying the profession, he reports, is a high priority for faculty at Clemson's community-service-oriented program. In preparing students for licensure, "we're not meeting the needs of the profession," he summarizes. "We're deterring really creative young people because of the length of time and financial investment to become an architect. So the case can be made for a pathway that says, 'Look, we can move you through this process fairly quickly, and it doesn't mean you're going to be less of an architect. But you may not be the theoretician, necessarily."The challenge for educators, as they observe IPAL's evolution and make ongoing adjustments, is to ensure that both ends of Malecha's pedagogic/ practical bridge remain structurally sound.

Bill Millard is a freelance writer and editor whose work as appeared in Architect, Icon, LEAF Review, Architectural Record, and other publications.



FEATURE

PROTOTYPING THE FUTURE

The Making Center at Parsons The New School for Design encourages exploration and collaboration across disciplines

BY JULIA VAN DEN HOUT

Many of us are averse to having too many things. We live in small apartments where we seek out strategies to empty our closets, and make resolutions to waste less. But when it comes to our work, a hands-on approach often still wins. We create prototypes, study space and light in physical models, and mark up printed drawings. The commitment to making and collaborating has been at the center of the revised programs of art and design at The New School's Parsons School of Design, and the school has now shifted focus to creating workspaces that support this mission. "We were very aware that talking about how you work can sound very ephemeral and abstract," explains Joel Towers, executive dean. "It was very important that the first thing we did after redesigning the curriculum was to reassert our commitment to the physical world."

The new Making Center, led by director Will McHale, is a hub of eager productivity at the heart of Parsons' collection of buildings on Fifth Avenue. Even on a quiet Tuesday morning before the start of a new semester, the open workspaces buzz with creative opportunity and a sense that at any moment, a horde of eager students will burst through the door to produce, experiment, collaborate, and innovate. The establishment of the Making Center and a series of other renovation projects in the building has been an exercise in careful strategic planning, or as McHale calls it, "a game of Tetris." It was a multiyear process made possible in large part through the construction of SOM's new University Center, which opened in 2014. The new building allowed for the consolidation of the New School's campus, bringing the Schools of Fashion and Music downtown while also housing a new library, and therefore opening up space in the Sheila C. Johnson Design Center at 66 Fifth Avenue and 2 West 13th Street.

The 26,000-square-foot Making Center spans the basement, second, and third levels of the Johnson Design Center, bringing the facilities of a diverse range of programs under one roof for the first time. Available to students from all departments, the wellequipped shops and open workspaces encourage students to explore different technologies and collaborate across disciplines. As Towers describes it, in offering a range of tools and machines, the Making Center aims to "hybridize all the various practices of making, from traditional to new technologies."



LEFT The Making Center offers New School students a wide variety of workshops and tools.

RIGHT The spaces are intentionally rugged to encourage heavy use.



LEFT Spaces flow from one to the other, a necessity as the Center is located in adjoining buildings.

In the print-making area, an old Vandercook press stands next to brand-new light tables, while upstairs, Shima Seiki 3D knitting machines and digital Jacquard looms are offered alongside traditional sewing machines. "A student in textile or fashion can be exposed to someone doing 3D printing," says Towers. "You can go from ancient technology, to new technology, to new materials, to traditional materials, all within one space."

The design of the Making Center emphasizes a graphic simplicity and accessible usability that softens any sense of intimidation students might feel around such expensive equipment. They are encouraged to learn how to use the machines rather than to fear them. Robert Kirkbride, dean and associate professor of architecture and product design, explains, "It's not about the architecture speaking loudly, but about creating spaces that are welcoming to different people to come through and use."

Rice+Lipka Architects, which has worked with Parsons on a number of academic and social spaces, has created workspaces that beg to be used. The firm's intervention, led by partner Lyn Rice, AIA, with Taylor McNally-Anderson, is not driven by design, but by an understanding that production – sometimes messy, sometimes loud – should be at the forefront. "A key factor was not to make it too precious," says Rice. "We didn't want to care whether someone wrote something on the wall or nailed something to it."

Out of previously small and dark subdivided rooms on the second floor, Rice+Lipka created a sequence of flowing lofty spaces. Towers jokes that the architects "had to undo the architectural malpractice of the previous use of these buildings." In the process, they uncovered several original features, including the masonry arch structure of the building at 66 Fifth Avenue and 12 windows that were boarded up in what was previously the school's design library. Natural light now streams into the nearly 15,000 square feet of space, which has been largely left unprogrammed and easily flows from end to end, despite shifting floorplates.

Rice+Lipka designed low storage partitions around moveable worktables, and used stained plywood panels to demarcate a few closed-off spaces, such as the tool library and 3D printing lab. All panels were hung on Z-clips to ensure they can be easily replaced if damaged. Staining portions of the panels black, the architects created a strong graphic language that extends throughout all three floors. Painted stripes on the concrete and wooden floors mark an egress path along the elevator core and stairwells, like a supergraphic of caution tape.

Unfolding the U-shaped floor plan into a linear sequence of space, the Making Center roughly transitions as a gradient from what Rice calls "dirty making" on one end – the wood shop, which has needs for special ventilation and acoustics – to the cleanest and quietest work areas on the other end.

A visit to the Making Center will encourage anyone to want to go back to school. For students, of course, the pressure is now on – the new state-ofthe-art facility comes with raised expectations for the quality of experimentation and creativity in their work. This is a school where students have all the tools needed to explore a multitude of design techniques themselves. "Any one student can push his or her regular ways of working and learn new techniques," says McHale. Dean Towers agrees: "It has animated the curriculum that just study and learning didn't previously. We now have our first graduating class, and you can already see a huge difference."

Julia van den Hout is founder of the editorial and curatorial office, Original Copy, and editor of CLOG, a quarterly publication that provides a platform for discussion of one topic at a time.





ABOVE Students can experiment with hand tools and new technology.

LEFT Art, design, and architecture students can all work together in the space.

FEATURE

ACADEMIC EXPECTATIONS

Should architecture schools do more to prepare students with the business skills they need for practice?

BY LAURA RASKIN

A couple of years ago, Andrea Rutledge, her staff, and volunteers culled the archives of the National Architectural Accrediting Board (NAAB), where Rutledge is the executive director. She came across notes from a practice analysis session from 1999, in which one of the debates concerned how much architecture students should learn about actually practicing architecture – along with business and management skills – while still in school.

Nearly two decades later, this is still a topic of debate among schools, firms, students, and architects. "I've been watching this ping-pong match going on for a long while," says Rutledge. "This topic seems to come around every five or six years."

This longstanding question of when students of architecture should acquire the skills to practice may be having another moment in the spotlight. Rutledge posits that one reason it is the rebounding of the economy – and increase in architecture, engineering, and construction jobs - in the years following the 2008 recession. When this is combined with advances in design software and building technology, firms may now have greater expectations for new hires, assuming they can "spring fully formed from graduate school and be able to design hospitals" - or, at least be indispensable, flexible, and have more skills. Rutledge also wonders if these firms want to devote less time to teaching and "just need someone right this minute who can do these set number of things, three of which are related to materials delivery and payables."

If you ask James P. Cramer, chairman of DesignIntelligence, a consulting firm for the design profession, every architecture school should have a champion for the business of architecture. He believes that business schools have "run away with" design thinking as a discipline, creating "the big missed opportunity of our time." He laments that it's possible to graduate from architecture school and not know how to set a fee for a project. "We know project delivery is best when it is well managed," says Cramer, who is conducting a study on practices with fewer than 10 people, and how and why project fees vary so widely. "Management is a key to success," he says

Architect Marc Kushner, AIA, agrees with the idea of a curriculum that isn't so insular and prepares students to sell their work. "The seemingly never-ending crises in architecture - Are we relevant? How do we make money? How do we influence decision-makers? - are directly attributable to the disconnect between our training and the realities of practice," says Kushner, co-founder of the website Architizer and a partner at architecture firm Hollwich Kushner. He relates an anecdote about his third-year design studio at Harvard's Graduate School of Design. He invited his parents to the final review, but even though he'd received a glowing assessment by a jury of professors and principals from Boston and New York firms, his parents had no idea whether he'd done well because listening to the jury was like "watching a foreign movie without subtitles." Why aren't architecture students taught to convey their love of architecture in language everyone can understand? "A perverse dream I have is to swap out the jury of an academic review with people off the street - or, even scarier, business students. These are, after all, our future clients," says Kushner.

In an essay in *Architecture School* (2012, The MIT Press), architect and historian George Barnett Johnston traces the history of the debate about what is taught in architecture school over a century



Reyner Banham with students at the University at Buffalo.

"There is a lot of griping about architecture schools, and the widespread feeling is that they are too focused on abstract issues of design with too little business or technical education. I agree with this to a limited extent – although I feel the greater problem with design education is not that there is too much of it, but rather that it is naive, jejune, jargon-burdened, and doesn't lead toward artistic insight." – Robert B Dean, AIA, Robert Dean Architects

"It's the age-old problem, no usable skills upon graduation! We need to go back and focus on design and construction – presentation, though critical, should not be the main focus, and unfortunately we are seeing that more and more." – Sandra Rodriguez, AIA, Busch Associates

"Architectural education needs to balance reality with design. Most emphasis is put on learning scripting and producing wild design. While that is important in developing creativity and striving for innovation, an understanding of reality is missing. Why not challenge students to produce a mock set of construction documents and mock 'file' them as you would for a project?" – Catherine Wilk, Assoc. AIA, PBDW Architects

*These quotes were taken from an online Oculus readers' survey.

and half, beginning with the Beaux-Arts model, which placed design on a higher pedestal than engineering and construction. When universities began recruiting future architects, the split continued "between the intellectual and cultural values of the university and the instrumental ones of the state," writes Johnston. It wasn't until the mid-20th century that the curriculum around the practice of architecture was incorporated into schools.

The NAAB, established in 1940, develops standards and procedures that accredited programs in the U.S. must follow. While Rutledge stresses that the NAAB doesn't want to create conditions that lead to standardization in education, students in accredited programs are expected to understand business principles for the practice of architecture, including project management and legal responsibilities. It is up to schools to determine how to deliver that information.

Rutledge's position is that it is the responsibility of schools to introduce these topics, but more learning must be done in internships, on the job, and through continuing education. "The profession has the responsibility," she says. "I get concerned when people want to shove it all back into school."

Robert Shibley, FAIA, dean of the University of the School of Architecture and Planning at the University at Buffalo, says the lack of agreement on this topic is healthy: firms and the built environment benefit from people with a range of passions. Yet Buffalo has also understood, for a long time, that architecture benefits from business skills; it has offered a dual-degree program for the last 30 years that allows students to earn an MBA and an M.Arch. (A number of other schools offer this as well.) It's a rigorous path, admits Shibley, with a commitment of at least two years for the MBA and two-and-ahalf to six years for the M.Arch. About 100 students have taken advantage of the program since its inception.

But Shibley notes there are multiple other ways for students to become proficient in areas of practice outside of design at Buffalo, such as dual-degree programs in real estate development, management, sustainability, architecture, and planning. Buffalo is also developing a dualdegree program in management finance and real estate development. The school's forward-thinking approach stretches back to its founding dean, John Eberhard, who in 1968 planned a research- and systems-based curriculum for the school. "Even today," says Shibley, "we are trying to build these programs to prepare all our students to anticipate an unpredictable future and be resilient."

Laura Raskin writes for Architectural Record, The Architectural Review, *and other publications*.



FEATURE

PRAIRIE SCHOOLED

Kansas State University's College of Architecture, Planning, and Design unites disciplines and elevates design thinking

BY ALAN G. BRAKE

The design of the new home of the Kansas State University College of Architecture, Planning, and Design sprang from a process of learning from and listening to the education community there. "When I get an RFP that I'm really interested in, I go into research mode," said Tomas Rossant, AIA, a design partner at Ennead Architects. "I was blown away by what I saw at Kansas State. It's a design school where all the disciplines stand shoulder to shoulder." He added: "Cutting-edge design education is happening in the heartland." This cross-disciplinary approach – which many schools claim but often have trouble implementing in practice – stems from the curricular structure of the school. Here, all students spend their first year as design students and are exposed to all the school's disciplines: architecture, landscape, planning, and interior and product design. Then, following a rigorous counseling process, they choose a discipline. The result, according to Rossant, is that departments are less segregated from one another, and students have a more expansive view of design. LEFT: A new bridge building will connect two historic masonry buildings.

ABOVE RIGHT: The bridge will also act as a gateway, welcoming students from across the university.

BELOW RIGHT: Sun shades will mitigate heat gain and glare.





In their renovation and addition for the college, Rossant and his team at Ennead, working with BNIM as architects of record, sought to reinforce this cross-disciplinary approach in built form. The project unites Seaton Hall, originally home to the engineering school, with Mechanics Hall, the original home of the architecture school, via a new extension of Seaton and a glazed bridge building that connects to Mechanics Hall. The addition contains a "collaboration" corridor, which serves as a pin-up space and holds the faculty offices. Faculty from different departments are deliberately mixed together to encourage cross-disciplinary interactions. A series of "pods," or flexible gatherings spaces, can be used for group work or informal faculty/student meetings.

The language of the buildings is contemporary but draws on the surrounding buildings. The extension of Seaton has a honed stone "wrapper" that connects it to and differentiates it from its neighbor, which is clad in rusticated stone. Vertical perforated steel panels provide sun shading while allowing the activities within the building to be legible to the campus. "The building is bold but it doesn't scream," said Rossant. "It's rigorous, contextual, and progressive."

It also acts as a gateway, so students and faculty from the university can easily pass through the building on their way across campus, exposing the various disciplines within to the entire university. Rossant believes this exposure will strengthen design thinking on the campus as a whole: "When a student from the business school later becomes a CEO, we want him or her to value and understand the power of design."

The project will be complete in the fall of 2017.

FEATURE

WHEN IVORY TOWERS WERE BLACK

The following is an excerpt from the new book by Dr. Sharon Egretta Sutton, FAIA, When Ivory Towers Were Black (Fordham University Press, 2017). The book chronicles a brief period of activism, community engagement, and expansion of the presence of African-American and Latino students at the Columbia University Graduate School of Architecture, Planning, and Preservation. She is a professor of architecture at the University of Washington. She will receive the Medal of Honor at the AIA New York Honors and Awards Luncheon on April 21, 2017.

Columbia's arc of insurgency began in 1965, as civil rights and black power activism turned violent during the Watts race rebellion, and gained steam during the long hot summer of 1967, when a racial Armageddon seemed certain. In response to the surging urban tensions, the Ford Foundation provided the university with a \$10 million line of credit to address problems in Harlem, and the School of Architecture's Division of Planning mobilized to take action. A critical milestone along this evolutionary arc was a university-wide student rebellion in April 1968 that included Avery Hall, where the School of Architecture was housed. The rebellion ended in a violent bust by the police, igniting among the insurgents in Avery a fierce commitment to social justice; the raw display of power fueled their determination to make a wholesale change in the school's approach to education and to the surrounding ghetto community. The group undertook a three-year,

ever-changing experiment in democratic governance and education that about half the faculty fervently supported, and the other half overtly or covertly sought to upend. Overseeing the resultant experimental operation was the enigmatic Dean Kenneth A. Smith; loved by some, despised by others, he was the school's only official administrator despite the faculty's adoption of interim rules, which – in total violation of university statutes – gave students and faculty roles in school governance.

Insurgents in the Division of Planning, who assumed leadership of the transformation, decisively situated learning in the surrounding community. In particular, their curriculum engaged students in offering technical assistance in the Puerto Rican communities of East Harlem and Manhattan Valley through the East Harlem Planning Studio and later the Community Development and Planning Studio. As a complement to these community-based studios, the division's Urban Action and Experimentation Program (UAEP) undertook community-focused, brick-and-mortar projects, which created an ideal client base for students. In a win-win, the Urban Center, a university-wide initiative dedicated to urban and minority affairs, used its Ford Foundation monies to support the supervision of students' service work, thus keeping down the cost of UAEP projects, while providing a superior learning experience.

Insurgents also co-designed and implemented new approaches to student-centered learning, called the "platform system," in which self-selected groups organized to study particular

problems. Occurring primarily in the Division of Architecture, some platform system problems were communitybased, but many related to problems typically studied in architecture school, like adaptive reuse. Alongside for-credit, community-based studios were paid internships, many provided by the Architects Renewal Committee in Harlem or the Real Great Society in East Harlem. Architecture and planning students offered technical assistance through these internships, blurring the line between education, service, and employment -aline further blurred because community organization staff sometimes had teaching assignments in the school.

Believing that the urban crisis could best be solved by indigenous citymaking professionals who would have the cultural competence to facilitate the redevelopment of ethnic minority communities, the School of Architecture, especially the Division of Planning, set out upon an audacious effort, financed through the Ford-funded Urban Center, to enroll black and Puerto Rican students. The recruitment effort was one of the most successful university-wide and arguably the boldest among the country's architecture and planning schools. It reflected national efforts among citymaking professionals to tackle both the urban crisis and the lack of indigenous professionals who could address the crisis. The effort was initiated right after the rebellion through the cleverness of the school's few existing ethnic minority faculty and students and their revolutionary white peers. It gathered speed when the Urban Center funded an assistant to the dean for minority affairs, who tenaciously pursued his charge to catalyze an ethnic minority presence in the school. As the recruitment progressed, the membership of the Black and Puerto Rican Student-Faculty-Administrators Organization (BPRSFAO) grew, and so did its influence; BPRFSAO members became widely respected for their academic performance as well as for their devotion to student recruitment and mentoring, faculty and staff hires, and curricular reform.

The arc of insurgency at the School of Architecture began to peter out when a sequence of bad things happened in the Division of Planning. First was the weakening of an already too-small teaching staff that occurred when the charismatic Charles Abrams took a leave of absence and then died, his replacement was denied tenure, and a third chairman was promoted without strong university support. Second was the university's torpedoing of the Urban Center, its linking of the center to the division's "potentially explosive" social justice mission, and its capturing of center funds for a new, sanitized urban studies agenda, which effectively de-funded the ethnic minority recruitment and outreach programs. Third was central administration's anointing of a division chairman from the Law School, rumored to have had a run-in with a black community, who was to help the division articulate its role within the university's new urban studies agenda.

Then the School of Architecture was dealt a crushing blow when its centerpiece, the professional program in architecture, received only conditional accreditation, primarily due to the university's longtime disinvestment in the school and a byzantine administrative structure that co-mingled the university's top-down statutes with the school's democratic interim rules. Intensifying its assaults upon the Division of Planning, the university assigned an external administrator, who had been key in developing the Urban Center torpedo strategy, to oversee all the school's daily operations (which he referred to as the "agonies in Avery"). With the Division of Planning weakened by internal interference, the Division of Architecture facing external censure, and the entire school under surveillance, the arc of insurgency was on a sure course toward extinction, especially since student interest in participatory democracy was fading, as were the ethnic minority recruits. In the wake of the accreditation report, Smith resigned and university administrators put plans for improving the school's physical plant on hold.

Jolted into action, the faculty conceded their contested interim rules, replacing them with ones that maintained the spirit of democratic participation but within the constraints of the university hierarchy. The faculty's adoption of these new rules officially terminated the school's experimental operation almost exactly three years after it formed. Within two years, a democratic search process - the first in the school's history - yielded a new dean, James Stewart Polshek, who took the helm with strong university support for fixing the school's serious malfunctions. After achieving full accreditation for the architecture program, he hastily implemented sweeping changes, converting architecture's undergraduate program into a graduate

program, firing and hiring faculty, eliminating the Division of Planning's two applied research centers, and improving the physical plant. The rapidity of these changes – captured in the school's new name, Graduate School of Architecture and Planning – naturally caused some consternation on the part of students, faculty, and even central administration. Overall, however, positives outweighed negatives as the school returned to normalized operations.

Still, two residual and interconnected problems remained that would drag on for several years, one related to the school's rapidly vanishing cohort of ethnic minority recruits, the other related to the Division of Planning's ever more unpopular social justice mission. As recruitment efforts lagged, the BPRSFAO and assistant to the dean for minority affairs went on the offensive, registering complaints with school and university administrators, and once even engaging the services of a politically-connected Harlem attorney. Even though some of the complaints proved baseless, Polshek (with the guidance of an assistant dean who was trained as a social worker) proved particularly adept at negotiating BPRSFAO's demands to the satisfaction of all involved, their vanishing numbers bringing finality to the conflict.



A scene from the 1968 student uprising at Columbia University.

IN PRINT

REVIEWS

Never Built New York, by Greg Goldin and Sam Lubell, Metropolis Books, NY, 2016. 488 pgs. \$55

In this sumptuously illustrated book, Greg Goldin and Sam Lubell present the fits and starts of more than 200 years of New York architectural projects, depicted in 220-plus designs that landed on the cutting-room floor. Unrealized due to a variety of circumstances – money, politics, bad timing, conflicts, and a jittery market – these designs were often first drafts of better versions that came later.

If the stars had aligned, some of these projects might have been positive additions to the city, such as Frank Lloyd Wright's St. Mark's Towers or Venturi Scott Brown's Whitehall Ferry Terminal. Many were mistakes the city avoided, including Wright's proposal for Ellis Island (his late-career alien-spaceship style) and Pei Freed Cobb's megalithlike dorms for Columbia University.

The book is organized into chapters by geography. One of the most fascinating and richest chapters concentrates on infrastructure projects, such as mass transit, tinkering with the street grid, adding land, layering systems and streets, parks, the harbor, and bridges and tunnels. A number of these proposals were early versions of major urban systems that were realized later, like the Interborough Rapid Transit.

Certain preoccupations continually resurface. Raymond Hood's Skyscraper Bridges begat Steven Holl's Bridge of Houses, which influenced the High Line with its arbor of condominiums. Large developments such as Grand Central, the UN, the World Trade Center, and Battery Park City spawned many versions of themselves until a final scheme was selected. The text is not always reliable and would have benefited from closer editing. In their provocative introduction, for example, Goldin and Lubell contend that the conservative forms and practices of the city either bend the assertive and innovative proposals back to comfortable norms, or they are discarded. This gravitational pull is probably more often true than not, but the authors' assertion that the best ideas and most innovative designs are never realized is hyperbolic.

In many ways this is a terrific book. Just read it with care.

Power at Ground Zero: Politics, Money, and the Remaking of Lower Manhattan, by Lynne B. Sagalyn. Oxford University Press, 2016. 899 pgs. \$39.95

This compelling saga of how the redevelopment of Ground Zero happened is not just a story of power, money, and ambition; it is a modern-day version of *War and Peace*. Between 2001 and 2016, many but not all of the components of the World Trade Center site were completed, 15 years after the tragedy and outrage of the 9/11 attacks.

Starring roles were held by Governor George Pataki; the leadership of the Port Authority; Larry Silverstein, the developer who had signed a lease for the buildings six weeks before the attack; the victims' families; Lower Manhattan Development Corporation; Mayor Michael Bloomberg; the eminences of the global architectural community; and an alliance of Lower Manhattan community groups, among others. From the beginning there was conflict among the stakeholders as the project lurched from crisis to crisis. After an expenditure of \$25 billion, they muddled through to completion.

Sagalyn is critical of how this project – existentially important to NYC and globally important to the U.S. – was led, planned, managed, and delivered. Indeed, Ground Zero may be a model for how *not* to conduct a major, multidimensional public project. The list of



Chelsea Walk, 1967, by Philip Johnson.

missteps is long: Leadership was lacking. Ground Zero needed a consensus builder. Pataki behaved indecisively and then impulsively, often with a time lag that diluted his effectiveness. Also missing was alignment among the stakeholders, who pushed their own agendas, with an angry press taking sides and egging on the parties. It was a fight, all the time. Consensus was continually undermined, with one exception: the reintegration of the site back into the city. The rush to rebuild created unrealistic expectations, which were used to flog the project and its leaders until the end, and generated a perpetual atmosphere of disappointment. The rush also prevented the market from catching up with the plans for the site.

Sagalyn believes there is reason to applaud what was achieved at Ground Zero. Unfortunately, the coherence many had hoped for has been lost to a group of competing buildings, each vying for attention. But the saga also conveys a subversive lesson: No matter how smart, ordered, and driven the leaders are, and how controlled the process is, contingency rules.

Stanley Stark, FAIA, is the book critic for Oculus.

Zetlin & De Chiara llp

For The Visionaries Who Shape Our Skyline

Zetlin & De Chiara provides architects with the sophisticated counsel and legal representation required to build complex projects. We anticipate issues before they become problems, incorporating our knowledge and expertise into the contracts between design professionals and property owners. When problems become disputes, Zetlin & De Chiara serves as a powerful advocate in and out of court, seeking pragmatic solutions that result in commercial success and not victory at any cost.

Zetlin & De Chiara. Construction is our business.

Proudly Serving as General Counsel to AIA New York Chapter

212.682.6800 | ZDLAW.COM

ATTORNEY ADVERTISING



Center for Architecture AIA New York Chapter 536 LaGuardia Place, New York, NY 10012 212.683.0023 | info@aiany.org | www.aiany.org



PROSURANCE REDEKER TD

Prosurance Redeker Group

Creating Insurance Solutions for Architects, Engineers & Land Surveyors

Contact us for innovative, low cost solutions to the challenge of securing and maintaining coverage. We have the experience, relationships and commitment to help!

Call 212.693.1550 today! Ask to speak to one of our specialists:

Greg Kumm akumm@proredinsure.com Warren Redeker wredeker@proredinsure.com

David Kumm dkumm@proredinsure.com Greg Kumm, Jr. greg@proredinsure.com

he look and feel of

natural wood grain

in a composite panel.



New York, NY 10006 (212) 693-1550

An Allied Member of AIA New York State

www.ae-insurance.com

AMCORK AMERICAN CORK PRODUCTS COMPANY



importers of fine cork flooring & wall coverings www.amcork.com 1-888-955-CORK (2675)





42

54-YEAR WATCH

PAUL RUDOLPH'S PUZZLING MASTERPIECE

The iconic Art and Architecture building at Yale has inspired admiration and controversy ever since its 1963 completion

BY JOHN MORRIS DIXON, FAIA

Rarely has any building been so widely praised and so frequently condemned as the Yale Art and Architecture building, designed by Paul Rudolph. At its very opening in 1963, the "A&A" was criticized – in a speech by British architectural historian Nikolaus Pevsner – as a kind of aesthetic indulgence made possible by Rudolph's double role as the building's designer and chairman of Yale's architecture department.



The Brutalist interior of the Yale Art & Architecture Building included plaster casts of antiquities.

The building – since renamed Rudolph Hall – was a prominent example of the 1960s reconsideration of Modernist design principles. The spare orderliness of earlier Modernism was giving way increasingly to sculptural, massive Brutalist configurations. Also evident here was a renewed interest in the relationship of new construction to its context. Located at a key intersection of the university with workaday New Haven, Rudolph's building established a highly visible bastion of Yale, alluding to the university's prevailing Gothic Revival mode in the verticality of its massing and its ribbed, gray concrete walls.

The spaces devoted to architectural drawing were clearly the object of Rudolph's attentions. Arrayed on 36 levels around multistory atria, these spaces generated an atmosphere of mystifying complexity. "Nowhere in Rudolph's design," wrote critic Sibyl Moholy-Nagy in *Architectural Forum*, "is space defined by solid walls."

Early complaints about the building's design came from the artist half of the building's occupants. It made functional sense to put their painting studios on the top floor, for ample daylight, and to locate the heavy materials and equipment for sculpture and printing in the basement. But the art department saw itself as relegated to the attic and the cellar. Art students threatened to picket the opening ceremonies.

As the '60s took on their historic anti-establishment cast, disaffection for the building increased among all its occupants. After Rudolph departed as department chairman in 1965, his spatial virtuosity was obscured by colonies of student-built cubicles. An article in a 1967 issue of *Forum* documented the



The building's interlocking volumes appear fortress-like to some. For others, the forms relate to the Collegiate Gothic structures on campus.

building's functional deficiencies, its maintenance challenges, and the graffiti then defacing its concrete walls.

In 1969, a fire of unknown origin, fueled by those student structures, gutted the building's interiors. And later that year, Yale announced a division of the school into separate schools of art and architecture, each with its own dean, freeing the artists for their subsequent relocation. The building was cleaned up, with some unsympathetic alterations, and had to wait till 2008 for a respectful restoration.

Deborah Berke, FAIA, Yale's newly appointed dean of architecture, says of Rudolph Hall, "Its spatial, material, and experiential complexity make it a great place to study architecture." It has been "the site of many reformations and counterreformations." Of its present and future, she says, "Today our students embrace diversity in all forms, and after the election they hung a banner from the top of the building that read 'United Against Hate.' It was in the same place where students decades ago hung a banner that read 'Free the Panthers.' Rudolph Hall is not a blank canvas, but invites arguments, ideas, and action, decade after decade."

John Morris Dixon, FAIA, was the editor of Progressive Architecture from 1972 to 1996.





WWW.SAIL-NYC.COM CHELSEA PIERS DAY & EVENING SAILS ARCHITECTURE TOURS



DESIGNING CITY SKYLINES

Headquartered in New York City, WSP | Parsons Brinckerhoff's preeminent high-rise building engineering group has produced the most iconic buildings in New York City and around the globe

With over 500 staff in New York City and 1,100 across the United States, our Buildings Team shares a long history of close collaboration with our clients and a reputation for delivering innovative, integrated engineering solutions to complex problems. While part of a global company, we are deeply rooted in and have a biotory of chapting the compunyities we serve





WE HAVE MOVED... One Penn Plaza, 250 West 34th Street, New York, NY 10119 212.465.5000 | usbuildings.wsp-pb.com



PARSONS BRINCKERHOFF

LETTER FROM THE EXECUTIVE DIRECTOR

THE CENTER: WHERE THE ACADEMY AND THE PROFESSION MEET

BY BENJAMIN PROSKY, ASSOC. AIA

The AIA New York Chapter has an ongoing commitment to engage with the academic communities in our region. The November 2016 Deans' Roundtable, held at the Center for Architecture, provided an opportunity for AIANY members to check in with leaders from architecture schools. In his introductory piece in this issue, Craig Barton, AIA, who moderated the roundtable, asks some important questions that schools, professionals, firms, and AIA chapters must address:

How do we give our students tools and techniques, as well as reservoirs of agency, for their emerging practices?

Where should the locus of our engagement be within and for our communities?

How can the designers of the built environment provide intellectual and political leadership?

For professionals, the broad range of interests covered by the more than two dozen AIANY committees can be the locus of engagement for our extended design communities. The programs and exhibits at the Center represent opportunities to respond to and reflect on critical political, social, technological, and historical issues. Active Chapter members must bring the questions and knowledge gleaned from these discussions back to their firms.

Visit Schools, Attend Lectures, Ask Questions

Interest in design research is becoming more pronounced in architecture schools. Many schools have active research labs that explore how technology, science, data, and software can, should, and will inform architecture. Simultaneously, firms seek to respond to their clients' demands for more complicated programming and more sustainable systems and construction methods, as well as more efficiency. I encourage AIANY members to attend lectures and conferences organized at local design schools to learn about the topics they are exploring. Share these topics with your firms and at discussions held by AIANY committees.

Confront Our Lack of Diversity

Recent programming at the Center has offered valuable insight about the architecture profession's successes and failures in engaging and serving diverse communities. The February 1 panel, Revisiting Whitney Young, examined the state of diversity in the profession since the 1960s. Professor Mindy Fullilove, who moderated the panel, gave the profession a D to C report card. She and the panelists revealed that since 1968, when civil rights leader Young challenged the AIA to take measures to diversify the profession, only 2% of architects were African-American. Today, almost 50 years later, the percentage remains the same! And, as student protests start to reignite at universities across the nation, the Chapter invited professor Sharon Sutton to discuss her recent book When Ivory Towers Were Black, which examines diversity and community engagement initiatives at Columbia University following the 1968 student uprisings.



Make the Profession Affordable for All

While other accredited professions such as law and medicine offer their emerging professionals opportunities for student loan forgiveness through community service, those who graduate with architecture degrees do not have this option. Join the Chapter's Emerging New York Architects committee's efforts to support the National Design Services Act, legislation that would allow young architects to offset their loans through approved community service programs. Active efforts like these, along with the Center's recent fundraising for the Walter A. Hunt Jr. Scholarships offered to local design students, seek to attract more diverse talent to the profession.

Reach Out to the Architects of Tomorrow

One of the most powerful ways to shape the profession in the future is by exposing young people to architecture and architectural thinking. Many of our members are already involved in local schools and mentorship programs, and I commend them for their commitment. But we can do more. Why not host a school group at your firm? Here at the Center, our own K–12 education programs are currently looking for teachers. We would love for you to join us.

And, as always, write us at membervoices@aiany.org with ideas and input.

INDEX TO ADVERTISERS

CATEGORICAL INDEX

ACCOUNTING
Grassi & Co
AIR & VAPOR BARRIERS/MOISTURE
MANAGEMENT
Hohmann & Barnard, Inc
APPLIANCES
Fisher & Paykel Appliances, Inc
ARCHITECTS
The Falcon Group
ARCHITECTURAL BAR GRILLES
ARCHITECTURAL GRILLE
Artistry in Architectural Grilles
COCO Architectural Grills & Metalcraft18
ARCHITECTURAL CASTINGS
OK Foundry Co. Inc
AS-BUILT LASER CAD/LASER SCANNING/
REVIT MODELING
Lasertech Floorplans
ATTORNEYS
Law Offices of C. Jaye Berger
Zetlin & De Chiara, LLP41
AUDIO VISUAL/ACOUSTICAL CONSULTING
Audio Command Systems
BICYCLE STORAGE
Cycle Storage Solutions 8
CEILINGS
Parkland Plastics, IncInside Front Cover
CLAIMS DISPUTE RESOLUTION
Zetlin & De Chiara, LLP
CODE/EXPEDITOR
International Code Council
CONSTRUCTION SPECIFICATIONS
Construction Specifications, Inc20
Robert Schwartz Associates
CORK FLOORING
American Cork Products Co
CURTAIN WALL/BUILDING ENCLOSURE
SYSTEMS
The Falcon Group
DRAWINGS/RENDERINGS/MODELS
Lasertech Floorplans14
ENGINEERS
Cosentini Associates
The Falcon Group
Reliance Engineering, PC7
Severud Associates
Consulting Engineers P.C
Walter T. Gorman, PE, PC
Wexler and Associates
Structural Engineers
5

WSP 44
FAILURES/STRUCTURAL INSPECTION
Municipal Testing Laboratory, Inc
Outside Back Cover
INSURANCE
Prosurance Redeker Group, Ltd 42
LAW FIRMS
Law Offices of C. Jaye Berger20
Zetlin & De Chiara, LLP41
MANUFACTURERS
KML Corporation
METAL WALL PANELS
Dri-Design
ORNAMENTAL SHEET METAL FABRICATION
Heather & Little, Ltd14
PAINT & COATINGS
AKZO NOBEL COATINGS, INC12
SPECIAL INSPECTIONS
Quality Consultants 3
TESTING & INSPECTION SERVICES
Municipal Testing Laboratory, Inc
Outside Back Cover
TESTING LABORATORIES
Municipal Testing Laboratory, Inc
Outside Back Cover
WALL COVERINGS—ACOUSTICAL CORK
American Cork Products Co 42
WINDOWS
AirFlo Windows 8

ALPHABETICAL INDEX

AirFlo Windows 8
www.airflowindows.com
AKZO NOBEL COATINGS, INC
www.akzonobel.com
American Cork Products Co
www.amcork.com
ARCHITECTURAL GRILLE 20
www.archgrille.com
Artistry in Architectural Grilles 8
www.aagrilles.com
Audio Command Systems
www.audiocommand.com
Classic Harbor Line 44
www.sail-nyc.com
COCO Architectural Grills & Metalcraft18
www.cocometalcraft.com
Construction Specifications, Inc 20
www.constructionspex.com
Cosentini Associates
www.cosentini.com

Cycle Storage Solutions 8
www.cyclestorage.net Dri-Design6
www.dri-design.com
The Falcon Group 42
www.thefalcongroup.us
Fisher & Paykel Appliances, Inc
Inside Back Cover
www.fisherpaykel.com
Grassi & Co18 www.grassicpas.com
Heather & Little, Ltd
www.heatherandlittle.com
Hohmann & Barnard, Inc14
www.h-b.com
International Code Council
www.iccsafe.org
KML Corporation 42
www.kmlcorp.com
Lasertech Floorplans
www.lt-fp.com
Law Offices of C. Jaye Berger
Municipal Testing Laboratory, Inc
www.mtllab.net
www.mtllab.net OK Foundry Co. Inc
www.mtllab.net OK Foundry Co. Inc
OK Foundry Co. Inc
OK Foundry Co. Inc
OK Foundry Co. Inc
OK Foundry Co. Inc
OK Foundry Co. Inc
OK Foundry Co. Inc
OK Foundry Co. Inc
OK Foundry Co. Inc
OK Foundry Co. Inc
OK Foundry Co. Inc
OK Foundry Co. Inc
OK Foundry Co. Inc
OK Foundry Co. Inc
OK Foundry Co. Inc
OK Foundry Co. Inc
OK Foundry Co. Inc
OK Foundry Co. Inc
OK Foundry Co. Inc
OK Foundry Co. Inc