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The Definition of an Architect

He looked at the granite. To be cut, he thought, and made into walls. He looked at a tree. To be split and made into rafters. He looked at a streak of rust on the stone and thought of iron ore under the ground to be melted and to emerge as girders against the sky. These rocks, he thought, are here for me; waiting for the drill, the dynamite and my voice; waiting to be split, ripped, pounded, reborn, waiting for the shape my hands will give to them.

AYN RAND, *The Fountainhead*¹

AFTER READING THE PRECEDING TEXT from *The Fountainhead* by Ayn Rand, what are your thoughts and feelings? Can you relate to the main character, Howard Roark, in this passage? Are you overcome with the possibilities of creating with the materials around you?

Do you want to be an architect? Do you wish to study architecture? If your answer is “Yes” to any of these questions, this book is for you.

What is the definition of an architect? *The American Heritage Dictionary of the English Language*² defines *architect* as:

1. One who designs and supervises the construction of buildings or other structures. *är-ki-tek-t*, n. [MF *architecte*, fr. L *architectus*, fr. Gk *architekton* master builder, fr. *Archi-* + *tektion* builder]

Of course, this definition simply scratches the surface. Becoming and being an architect are much more.

What Do Architects Do?

People need places in which to live, work, play, learn, worship, meet, govern, shop, eat—private and public spaces, indoors and out; rooms, buildings, and complexes; neighborhoods and towns; suburbs and cities. Architects, professionals trained in the art and science of building design and licensed to protect public health, safety, and welfare, transform these needs into concepts and then develop the concepts into building images that can be constructed by others.

In designing buildings, architects communicate with and assist those who have needs—clients, users, and the public as a whole—and those who will make the spaces that satisfy those needs—builders and contractors, plumbers and painters, carpenters, and air conditioning mechanics.

Whether the project is a room or a city, a new building or the renovation of an old one, architects provide the professional services—ideas and insights, design and technical knowledge, drawings and specifications, administration, coordination, and informed decision making—whereby an extraordinary range of functional, aesthetic, technological, economic, human, environmental, and safety factors are melded into a coherent and appropriate solution to the problems at hand.

This is what architects are, conceivers of buildings. What they do is to design, that is, supply concrete images for a new structure so that it can be put up. The primary task of the architect, then as now, is to communicate what proposed buildings should be and look like.... The architect's role is that of mediator between the client or patron, that is, the person who decides to build, and the work force with its overseers, which we might collectively refer to as the builder.

SPIRO KOSTOF³





Parthenon, Athens, Greece. PHOTOGRAPHER: R. LINDLEY VANN.

Design Process

But how does an architect truly design? It begins with a client with the need for a building, a project. To design and build this project, an architect follows the architectural design process. This process begins with the schematic design phase, with the architect first gaining an understanding of the scope of the project to be built from the client. With the program determined, the architect develops preliminary concepts and ideas for the project and presents these to the client for approval or revision. In addition, the architect researches zoning or other restrictions. Next is the design development phase.

In design development, the initial concepts and ideas are further refined. The architect begins to determine the building materials of the project as well as detailing the mechanical, electrical, plumbing, and structural aspects of the project. The architect will formally present the project, at this stage of development, to the client for approval. Next is the construction document phase.

During the construction document phase, the architect produces detailed drawings and specifications of the project to be used for construction. These construction documents include all pertinent information necessary for construction. Once completed, the construction documents (CDs) are provided to potential contractors for bidding. Next is the bid or negotiation phase.

In preparation for actual construction, the architect prepares the bid documents. The bid documents include a number of documents for potential contractors to use in preparing a bid (cost estimate) to construct the project. Once bids are received from contractors, the architect will assist the client in evaluating and selecting the winning proposal. In the end, a contract is awarded to the selected bidder, which allows construction to begin. Next is the construction phase.

During construction, the architect's responsibilities will vary depending on the agreement with the client, but most commonly the architect will assist the contractor to construct the project as specified in the construction documents. As questions or issues arise on the construction site, the architect is there to address them. Depending on the issue, the architect may be required to issue additional drawings.

Thus, an architect must be equipped with a number of talents and skills to take a project from its initial idea to final construction. In the profession, architectural firms consisting of teams of architects, related professionals, and consultants undertake almost all projects, although there may be some smaller projects, usually residential, that a sole architect might lead.

Why Architecture?

Why do you desire to become an architect? Have you been building with Legos since you were a child? Did a counselor or teacher suggest architecture to you because of a strong interest and skills in mathematics and art? Or are there other reasons? Aspiring architects cite a love of drawing, creating, and designing; a desire to make a difference in the community; an aptitude for mathematics and science; or a connection to a family member in the profession. Whatever your reason, are you suited to become an architect?

Is Architecture for You?

How do you know if the pursuit of architecture is right for you? Those within the profession suggest that if you are creative or artistic and good in mathematics and science, you may have what it takes to be a successful architect. However, Dana Cuff, author of *Architecture: The Story of Practice*, suggests it takes more:

There are two qualities that neither employers nor educators can instill and without which, it is assumed, one cannot become a “good” architect: dedication and talent.

DANA CUFF⁴

Because of the breadth of skills and talents necessary to be an architect, you may be able to find your niche within the profession regardless. It takes three attributes to be a successful architecture student—intelligence, creativity, and dedication—and you need any two of the three. Also, your education will develop your knowledge base and design talents.

Unfortunately, there is no magic test to determine if becoming an architect is for you. Perhaps the most effective way to determine whether you should consider becoming an architect is to experience the profession firsthand. Ask lots of questions and recognize that many related career fields might also be appropriate for you.

For the architect must, on the one hand, be a person who is fascinated by how things work and how he can make them work, not in the sense of inventing or repairing machinery, but rather in the organization of time–space elements to produce the desired results; on the other hand, he must have an above average feeling for aesthetics and quite some ability at drawing, painting, and the visual arts in general.

EUGENE RASKIN⁵



What Is Architecture?

› The creation of space.

John W. Myefski, AIA, Principal, Myefski Architects, Inc.

› Architecture is the design and manipulation of the built environment to create a sense of place. It is a confluence of science and art that addresses programmatic and aesthetic requirements within the constraints of budget, schedule, life safety, and social responsibility.

Robert D. Roubik, AIA, LEED AP, Project Architect, Antunovich Associates Architects and Planners

› Architecture exists in the harmony between sophisticated form, fulfilling a purpose and the tactile nuances of joining materials together.

Rosannah B. Sandoval, AIA, Designer II, Perkins + Will

› Architects take big ideas and turn them into reality. Architects build cities, buildings, parks, communities—physical and virtual. They are visionary and incredibly practical at the same time.

Leigh Stringer, LEED AP, Senior Vice-President, HOK

What Is Architecture? (Continued)

› Architecture is the perfect combination of creativity and practicality. It is the opportunity to create an experience for the user through the design of spaces. It is the careful art of designing a space that is functional, enjoyable, and practical.

Elsa Reifsteck, BS Architectural Studies Graduate, University of Illinois at Urbana-Champaign

› Architecture is the art and science of planning and designing structures and environments to house the activities of humans.

H. Alan Brangman, AIA, Vice President of Facilities, Real Estate Auxiliary Services, University of Delaware

› Architecture is the art of designing buildings and spaces within a given set of parameters that include the programmatic needs of the project, the client's budget, building code regulations, and the inherent properties of the materials being used. Great architecture finds the best solution to a design problem by using both creativity and practicality. Part sculpture, part environmental psychology, part construction technology, architecture is the combination of many separate forces into a harmonic whole.

Carolyn G. Jones, AIA, LEED AP, Principal, Mulvanny G2

› The development of architecture is as much a design process as it is a simulation of inhabitable space(s) and building vocabularies. I will go as far to say that architecture is not architecture unless it was developed by means of an analytical process.

Thomas Fowler IV, AIA, NCARB, DPACSA Professor and Director, Community Interdisciplinary Design Studio (CIDS), California Polytechnic State University—San Luis Obispo

› Architecture is the built environments that shape the daily lives of people.

Grace H. Kim, AIA, Principal, Schemata Workshop, Inc.

› Practical and artistic development of our environment. Winston Churchill once said, to paraphrase, what we build in stone we remember, so

at some level architecture is about the creation of the making of memories and developing a sense of place.

Mary Katherine Lanzillotta, FAIA, Partner, Hartman-Cox Architects

› Architecture is the design of the built environment through the programming of needs, three-dimensional design, and the application of appropriate building technologies.

Eric Taylor, Associate, AIA, Photographer, Taylor Design & Photography, Inc.

› Architecture is the synthesis of art and science utilized to develop a solution to a challenge in the built environment.

Beth Kalin, Job Captain, Gensler

› Spaces that give shape to our lives.

Murrye Bernard, Associate AIA, LEED AP, Managing Editor, Contract Magazine

› Architecture is about light, shadow, texture, rhythm, form, and function. To me, architecture is the practice of creating and affecting the built environment. The practice of architecture is to understand the problem and finding a solution that is aligned with the vision for the project.

Sean M. Stadler, AIA, LEED AP, Design Principal, WDG Architecture, PLLC

› As the Greek origin of the word defines it, architecture is both art and science. It is the practice of bringing these two objectives together in a manner of achieving “form, function, and design.”

Kathy Denise Dixon, AIA, NOMA, Principal, K. Dixon Architecture, PLLC; Associate Professor, University of the District of Columbia.

› In its simplest terms, architecture is the design of the built environment—spaces where we live, work, worship, gather, vacation, or simply occupy.

Jessica L. Leonard, Associate AIA, LEED AP BD+C, Associate, Ayers Saint Gross Architects and Planners



Walt Disney Concert Hall, Los Angeles, California. Architect: Frank Gehry. PHOTOGRAPHER: TINA REAMES.

› To me, architecture is anything that can be designed—a chair, an app, a light fixture, a website, a logo, a film, a building, or a city.

William J. Carpenter, Ph.D., FAIA, Professor, Southern Polytechnic State University; President, Lightroom

› Architecture is the stage we live on. It enables activities to take place and shapes how those activities happen. It can link us to nature and reveal relationships we might not have noticed. Architecture is most unsuccessful when it is primarily designed to protect us from the elements and most successful when it improves our quality of life.

Allison Wilson, Intern Architect, Ayers, Saint Gross

› Architecture is not limited to buildings, interiors, or covered spaces; it is a designed response

to a programmatic necessity where one either does not exist, or where one exists yet lacks integrity.

Tanya Ally, Architectural Staff, Bonstra | Haresign Architects

› Architecture is the design of buildings and spaces. The experiences that are created by a design can have more of an impact than the program within the building or space.

Nicole Gangidino, B.Arch. Candidate, New York Institute of Technology

› Architecture is the physical and spiritual transformation of chaos into order, darkness into light, and space into place.

Nathan Kipnis, AIA, Principal, Nathan Kipnis Architects, Inc.



Interior, Johnson Wax Building, Racine, Wisconsin. Architect: Frank Lloyd Wright. PHOTOGRAPHER: R. LINDLEY VANN.

What Is Architecture? (Continued)

› The way the built environment is designed to interact with people in their daily lives.

Megan S. Chusid, AIA, Manager of Facilities and Office Services, Solomon R. Guggenheim Museum and Foundation

› Architecture is the creation of buildings using a synthesis of art and science to better human existence. Buildings are designed to support the activities within them while evoking a sense of beauty and belonging.

Jordan Buckner, M.Arch./MBA Graduate, University of Illinois at Urbana-Champaign

› Architecture is the collaboration of art, design, and technology in buildings and the urban land-

scape that is simultaneously enjoyed and criticized by the people it serves.

Kevin Sneed, AIA, IIDA, NOMA, LEED AP BD+C, Partner/Senior Director of Architecture, OTJ Architects, LLC

› Architecture is about shelter; crafting the places in which people live, work, and play—the art and science of designing and constructing buildings. All humans really need to survive is food and shelter. Architecture is a basic pillar of human existence.

Amanda Harrell-Seyburn, Associate AIA, Instructor, School of Planning, Design and Construction, Michigan State University

› Architecture is the creation and communication of ideas. It is the creative and technical process for

the design, management, and construction of the built environment. It represents a collaboration and coordination with a broad range of experts to get a building built.

Robert D. Fox, AIA, IIDA, Principal, FOX Architects

› Architecture is the study of inhabitable space, the relationships between human interaction and thoughtful design. Architecture can be created anywhere with anything, with any materials, on any terrain, in any climate as long as long the design is intentional and inhabitable.

Anna A. Kissell, M.Arch. Candidate, Boston Architectural College, Associate Manager Environmental Design, Reebok International Inc.

› Architecture is the creation of the environments in which we live, work, learn, and recreate. It is more than just constructing a building or designing a beautiful piece of sculpture—it is about understanding the wants and needs of the users, and creating an environment that exceeds their expectations. Architecture has the power to determine how we live and the responsibility to move our society forward.

Cody Bornsheuer, Associate AIA, LEED AP BD+C, Architectural Designer, Dewberry Architects, Inc.

› Architecture is the intersection of vision and creation in the built environment. However, I do not necessarily feel that architecture is limited to describing buildings alone, nor *architect* a term used to only describe one who designs “buildings.”

Ashley W. Clark, Associate AIA, LEED AP, SMPS, Marketing Manager, LandDesign

› In the late nineteenth century and early twentieth century, one might have heard architecture described as the “mother of the arts,” but today that sort of categorization sounds a bit limiting and perhaps somewhat elitist. Architecture is located at the intersection between the fine arts, applied sciences, technologies and engineering, and the social sciences.

Architecture involves the design of the physical environment at all scales from that of household objects and furnishings to entire portions of cities and landscapes, and everything in between! Consequently, it is both a discipline and a profession that actively works between bodies of knowledge to analyze problems and synthesize useful and meaningful solutions to the problems of the built environment.

Brian Kelly, AIA, Associate Professor and Director, Architecture Program, University of Maryland

› Architecture is everywhere and everything. Frank Lloyd Wright said it best, “I know that architecture is life; or at least it is life itself taking form and therefore it is the truest record of life as it was lived in the world yesterday, as it is lived today, or ever will be lived. Architecture is that great living creative spirit that, from generation to generation, from age to age, proceeds, persists, creates, according to the nature of man, and his circumstances as they change. That is really architecture.

Amanda Strawitch, Level 1 Architect, Design Collective

› Architecture is the process and products that we wrap our lives around.

Katherine Darnstadt, AIA LEED AP BD+C, Founder and Principal Architect, Latent Design

› Architecture is the art, science, business, and collaboration of people to make (great) buildings. Architecture is the thoughtful shaping of our environment for desirable inhabitation.

Joseph Mayo, Intern Architect, Mahlum

› Architecture is the physical manifestation of art, science, economy, craftsmanship, and sociology, masterfully blended to meet human needs for shelter and comfort.

Kimberly Dowdell, Project Manager/Director of Marketing, Levien & Company

What Is Architecture? (Continued)

› Architecture is the built environment that impacts the human experience. Architecture influences the way people interpret and use space, therefore shapes society and its efforts.

Danielle Mitchell, B.Arch. Candidate, Pennsylvania State University

› Architecture is the shaping of environments, real or imagined, that affect the way people think, feel, act, or respond to their surroundings. In this context, architecture can be both a noun and a verb; in other words, it can be the painting itself, or the act of painting.

Architecture appeals to the senses. It can comfort us or intimidate us. It can make us feel welcome and home, or alone and cold. Architecture can be as much about the intended desires of the designer's imagination or the unintended consequences delivered when architecture is not considered more fully in its proper context. Real or imagined, the environment we live, work, and play in is directly influenced by the architecture that surrounds us. In essence, architecture is humanity.

Shannon Kraus, FAIA, MBA, Principal and Senior Vice President, HKS Architects

› Architecture can be most broadly described as something that is consciously designed. Some interpret this to be a concern about aesthetics, but I would argue it has nothing to do with that. It is about engaging the world with insightful and reflective intention, ranging from the analytical and experiential to the political or social. While architecture is most often associated with the built environment, it may also be identified in anything that is thoughtfully organized, including institutions, education, and even writing.

Karen Cordes Spence, Ph.D., AIA, LEED AP, Associate Professor, Drury University

› Spaces where “dwelling” can occur; dwelling meaning *existing both physically and metaphysically in time and space*.

Sarah Stein, Architectural Designer, Lee Scolnick Architects & Design Partnership

› Architecture is a framework for civilization, a stage for life. It is the network of places and spaces we use to gather, celebrate, achieve, ponder, and reflect. Yet today, “architecture” is a field of increasingly blurred borders. As urbanized areas across the globe expand at unprecedented speed and scale, the discipline of architecture is continuously challenged to address the complexity and interconnection of the world's cities, including their impact on public health and the broader natural environment. Delivering a relevant twenty-first-century vision of the built environment requires an increasingly multidisciplinary and cross-cultural approach to design thinking.

Andrew Caruso, AIA, LEED AP BD+C, CDT, Head of Intern Development and Academic Outreach, Gensler

› To me, architecture is like a puzzle. It contains components that you, as the designer, are tasked with putting together into a cohesive form. But unlike the conventional puzzle, you not only have to put the pieces together, you also have to create them.

Makenzie Leukart, M.Arch. Candidate, Columbia University

› From my perspective, the process of creating architecture is puzzle solving on a majestic scale. This translates into the critical thinking and problem-solving aspects of the profession that architecture programs are so good at teaching and that our clients rely on us for as we help them accomplish their goals.

The architecture project/puzzle contains an infinite number of variables. Some are static; some are dynamic. The attributes of some are known and



Stonehenge, England. PHOTOGRAPHER: KARL DU PUY.

universally understood; for others, the attributes are unique to the person investigating them or experiencing them. The puzzle is constantly evolving, and no one has control over it! Most interesting of all, the result of the architecture project/puzzle is never complete, and no one ever sees it the same as someone else or even experiences it themselves in the same way.

Kathryn T. Prigmore, FAIA, Senior Project Manager, HDR Architecture, Inc.

› Architecture is a physical form of art that transforms our communities and has the ability to generate a sense of emotional pride. Architecture defines elements as small as neighborhoods to elements as large as cities, states, and regions. The recognition of specific countries and regions can

be acknowledged by the remarkable architecture it possesses.

Jennifer Taylor, Vice President, American Institute of Architecture Students

› Architecture is everything. It is where we all eat, sleep, and live. It is how we interact with our environment and how that environment interacts with the rest of the world. Architecture is not defined by buildings but by the space within them and the space that surrounds them. The art of architecture is about using physical materials to define the space that we cannot see. It is about taking everything in, analyzing relationships, not just in the physical context. Architecture is the world.

Elizabeth Weintraub, B.Arch. Candidate, New York Institute of Technology

Past Is Prologue

MARY KATHERINE LANZILLOTTA, FAIA

Partner, Hartman-Cox Architects

Washington, DC

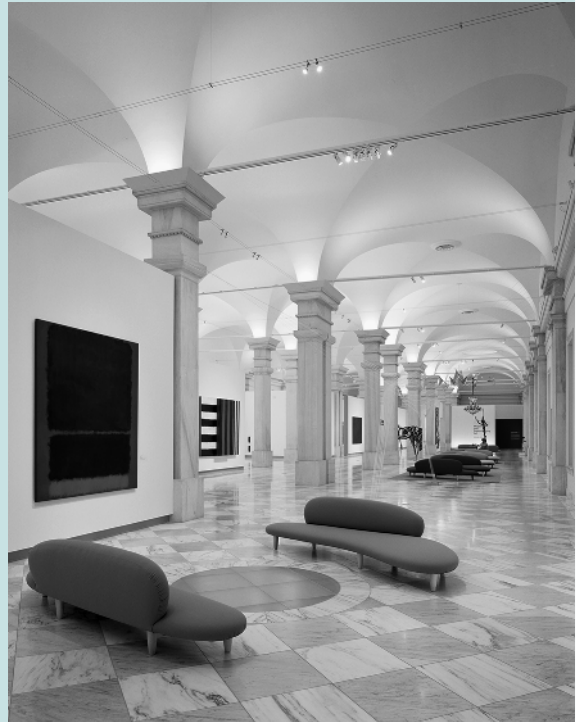
Why and how did you become an architect?

› Having an idea develop into drawings and then a building where one lives or works is thrilling. My parents added onto our home and then built a new home when I was a child. The reality of this experience and living through the construction was very exciting. I knew by the time I was a teenager I wanted to find some way to be involved in the building process.

Why and how did you decide on which school to attend for your architecture degree? What degree(s) do you possess?

› As I was trying to decide whether to pursue engineering or architecture, the University of Virginia (UVA) offered a summer program for high school students on the “grounds” in Charlottesville. My parents agreed to let me attend the program to determine if architecture was a good fit for me. As part of the program, I attended morning lectures on history, visited job sites, and then had a “studio” program in the afternoon. The experience was very positive, and I knew I wanted to pursue the bachelor of science in architecture at UVA.

After four years and a dozen or so architectural history courses at UVA, I knew I wanted to be more involved with the preserving the built environment. For graduate school, I applied only to programs that offered a combination of architecture and preservation; I completed a master of



Lincoln Gallery, Smithsonian Donald W. Reynolds Center for American Art and Portraiture. Smithsonian Institution, Washington, DC. Architect: Hartman-Cox Architects. PHOTOGRAPHER: BRYAN BECKER.

architecture at the University of Pennsylvania and a Certificate in Historic Preservation.

What has been your greatest challenge as an architect?

› Reminding myself to stay focused on the big picture and not to get bogged down in the details. To do this often requires me to step back and think creatively about how to solve the challenge in a different way.

As a partner at Hartman-Cox Architects, what are your primary responsibilities and duties?

› One primary responsibility is to pursue, secure, and execute good work. As one who is interested in preservation, I tend to look for more work in this same area but am also open to exploring new opportunities. My other duties are “as assigned,” as we do not have rigidly set roles but look to see what is needed and where.

A handful of Hartman-Cox Architects projects relate to historic preservation, adaptive reuse, and rehabilitation. How and why are these issues important to architecture?

› Most of the Hartman-Cox projects relate to providing a continuity of the sense of place. This

can be achieved by preserving existing buildings, adding onto existing buildings in a sensitive and appropriate manner, or by building a new building that respects its neighbors and reinterprets the sense of place. Our firm believes in building timeless buildings of their place. The continuity of history is important culturally as there are specific reasons why particular materials are used in some locations and not in others and, in the process, they leave us with a lesson about the use of local materials and technology.

Smithsonian Donald W. Reynolds Center for American Art and Portraiture. Smithsonian Institution, Washington, DC. Architect: Hartman-Cox Architects. PHOTOGRAPHER: BRYAN BECKER.





Luce Foundation Center for American Art. Smithsonian Donald W. Reynolds Center for American Art and Portraiture. Smithsonian Institution, Washington, DC. Architect: Hartman-Cox Architects. PHOTOGRAPHER: BRYAN BECKER.

In the case of the Old Patent Office building, now the Smithsonian Donald W. Reynolds Center for American Art and Portraiture, we can see the evolution of much of the nineteenth-century technology and architectural history from the restraint and classicism of Robert Mills with the solid masonry vaults to the exuberance and mannerism of Adolph Cluss as seen in the Luce Foundation Center. Buildings also share the cultural memories of place from the soldier's carving his initials in the shutter of a window to the inaugural ball of President Lincoln.

Buildings also embody an enormous amount of energy, and to reuse or renovate buildings appropriately to keep them in use is a responsible approach.

In 1958, the General Services Administration considered tearing down the Old Patent Office Building that occupies two city blocks and turning the site into a parking lot. The amount of wasted materials would have been vast, and the history would have been lost.

What is the most/least satisfying part of your career as an architect?

➤ The most satisfying experiences are watching people in the buildings and seeing how they are enjoying the building and seeing if they are experiencing it in the manner we expected. Of course, when you find the public is not as pleased with some aspect, these are the most instructive moments. All architects should visit their own buildings to see what works and what does not so they can improve upon their experience.

Can you provide details on Architecture in the Schools and why it is important for you to serve the profession in this way?

➤ A program of the Washington Architectural Foundation, Architecture in the Schools (AIS) teams volunteer architects with pre-K to 12th-grade classroom teachers to use architecture and design concepts to reinforce learning standards across the curriculum. Established in 1992, the Architecture in the Schools program originated in the District of Columbia and expanded to the greater Washington metropolitan area in 2002.

Students in the program (1) learn problem-solving techniques, (2) explore different ways to express their ideas, (3) examine their environment through the classroom projects they design, (4) apply abstract concepts to real-life scenarios, (5) develop a cross-curricular understanding of subject matter, and (6) cultivate civic awareness of how the children can influence their environment.

Since its inception over 400 schools and over 10,000 students have participated in the program. The Architecture in the Schools program has expanded to include professional development programs for teachers to learn more about how to integrate design and architecture into their curriculums and a series of architectural walking tours for children in Washington, DC, neighborhoods. With the opening of the District Architecture Center in 2011, we began to offer monthly Saturday programs for K–12 students who are interested in architecture. The programs have ranged from the basics of site design, drawing, and model building to set design and green roof tours. All of these programs allow students to explore the architecture and the built environment.

The experience of opening the eyes of children to the world around them and having them think critically about choices in their neighborhoods has had a profound impact on me. The opportunity to

share my understanding of design and architecture with these students has forced me to learn to speak about architecture in a readily understandable way. The students' questions helped me to think critically about how to present ideas in a new approachable manner. Further, these students will grow up and become homeowners or members of a citizen's advisory committee. When this next generation has to think critically about a design issue that may impact or influence their communities, I hope they will have some frame of reference on which to base their decisions.

Who or what experience(s) has been a major influence on your career?

▶ Without setting out to do so, I have found myself gravitating toward projects that have an educational theme. The preservation projects are educational in what and how the buildings are preserved and the missions of the organizations themselves, whether it is preserving the Lincoln or Jefferson Memorials or ren-

Load Testing Columns,
Oyster Elementary
School Third Grade,
Washington, DC.
Washington Architectural
Foundation, Architecture
in the Schools. COURTESY
OF THE WASHINGTON
ARCHITECTURAL
FOUNDATION.



ovating the UNC Morehead Planetarium Building. The Architecture in the Schools program is more directly educational, but the program attempts to encourage children to look at their world and think critically about it while they are still open-minded.

A major influence on my career has been my current partners, Lee Becker and Graham Davidson, and emeritus partners, George Hartman and Warren J. Cox, and all of the members of the Hartman-Cox team over the years.

My parents encouraged me to explore architecture both as a young child by building and, then, as a student when I wanted to pursue architecture as a

career. My parents also were role models for getting involved in and giving back to the community through their own service.

In addition, another influence is the hundreds of Architecture in the Schools volunteers who have given so freely of their time to share their knowledge of architecture and the built environment with the schoolchildren in DC and the metropolitan area to bring AIS program to life in the schools.

Rolaine Copeland, Hon. AIA, was the Architecture in Education program director at the Foundation for Architecture in Philadelphia who encouraged me to start the Architecture in the Schools program in DC.

Daring to Lead

SHANNON KRAUS, FAIA, ACHA, MBA

Principal and Senior Vice-President

HKS Architects

Washington, DC

Why and how did you become an architect?

› I became an architect simply because it was a lifelong goal. A life's goal achieved. A passion delivered. It was something I set my mind on from the time I was in fourth grade when the only class I had true interest in was art; my mother had the vision to open my mind to architecture as an occupation that would fit my interests.

It was through art and imagination that I could express myself. I did this through the pictures I would draw, the models I would build, and the

forts I would enlist the neighborhood kids to help construct. From there, becoming an architect simply felt right.

However, in the end I did become an architect to make a difference. While I pursued architecture because that is where I could express myself, I have found that what I enjoy most about this amazing profession is having the ability to work with diverse groups of people to solve complex problems so that others can fulfill their dreams—thus really making a difference by turning vision to reality.

From my first day on campus at Southern Illinois University (SIU) to gaining registration as an architect in the state of Texas, my journey took approximately 12 years—four years of undergraduate work, one year as American Institute of Architecture Students (AIAS) vice president, three



Ahuja Medical Center, Beachwood, Ohio. Architects: HKS Architects. PHOTOGRAPHER: HKS.

years in graduate school for the master of business administration (MBA) and master of architecture, and four years of internship at RTKL finished concurrently with the ARE spread over 18 months.

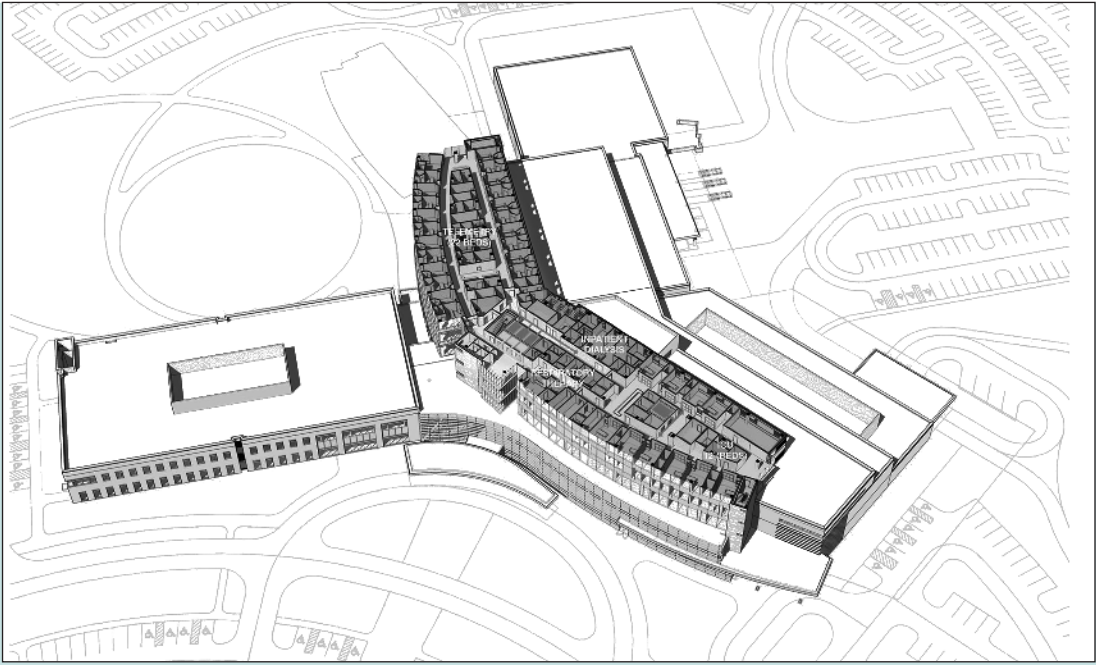
Why and how did you decide on which school to attend for your architecture degree? What degree(s) do you possess?

› Coming out of McArthur High School in the central Illinois town of Decatur, with the ambition to pursue architecture, I found myself at a small but terrific undergraduate program at Southern Illinois University at Carbondale. How I ended up there was primarily the result of not enough information and economics. They had a four-year architecture program, and it was less expensive than most any other school in the area. What I did not know was that the reason it was less expensive was that their

architecture program was not accredited. In the end, this turned to be a blessing—SIU was one of the best, if not luckiest, decisions I made.

Through SIU I learned the art of architecture. I learned to think, draw, paint, sketch, and resolve complex variables into rational solutions. While not known for design, the school was heavily based in the fundamentals, including learning how buildings go together—more so than most schools cover. My education at SIU provided me with the best foundation for becoming an architect I could have asked for.

For graduate school I ultimately chose the University of Illinois at Urbana-Champaign. Having just completed my term as national vice president of the American Institute of Architecture Students, a full-time job in DC following my



Ahuja Medical Center, Beachwood, Ohio. Architects: HKS Architects. PHOTOGRAPHER: SHANNON KRAUS, FAIA, MBA.

undergraduate studies, I came to realize that the single biggest gap in the amazingly rich and diverse education that architecture provides was business. As such, I chose to apply to universities where I could also attend business school—a decision that ultimately led to my acceptance into the school of architecture and the school of business at the University of Illinois, where I graduated summa cum laude with a master in business administration, and a master in architecture. Where the MBA equipped me to think more holistically about business and refined my communications skills, the M.Arch. filled in the remaining gaps with a curriculum more focused on design and design theory.

Reflecting back on how I chose the schools I did, I do believe that the profession does not have an adequate guidance system for assisting students interested in architecture. I say this because in

many ways the school you choose will ultimately go a long way toward determining the type of professional you become.

What has been your greatest challenge as an architect?

► My view on this has evolved. Early in my career it was definitely Hadassah Medical Center in Jerusalem, Israel, due to the inherent social, political, and physical challenges of the location. However, now it would have to be managing an office and region of our global practice. Architecture school doesn't quite prepare you for office management and all that goes with it: mentoring, performance reviews, project staffing, recruiting, strategic marketing, and business planning. In many ways it is like being the general manager of a professional sports team where you look for new talent, look to mentor and coach

your existing talent in order to position them to succeed and outperform your competitors. The biggest challenge, what keeps me awake at night, is making sure I am doing all I can not only to provide great project opportunities for my staff, but to bring enough project opportunities to keep everyone productive and employed—while doing so by shaping a studio culture within which any individual can thrive and is inspired to be entrepreneurial and innovative. Before my concerns centered around what I could do to improve a project, now my responsibility is to approximately 75 direct reports and their families.

Why did you pursue two graduate degrees—master of architecture and master of business administration—during your graduate studies?

› I believe in the notion that an architect is a generalist. The architectural education is extremely com-

prehensive and provides the foundation suitable for many careers; however, business seemed to be the one missing ingredient.

After serving as AIAS national vice president, I quickly came to realize that architecture is a business and that there was much more to learn—so I decided to go back to school and round out my education by earning an MBA in addition to the master of architecture. After speaking with others, I also knew that if I were to ever pursue the MBA, the time to do it was then—as there were no guarantees that such an opportunity would be available later in life.

Ultimately, I felt the MBA would help me simply by providing additional tools for me to draw upon. However, in addition to the business skills, the MBA had many other benefits that I did not anticipate. The program I went through proved valuable

John Dempsey Hospital Addition, Hartford, Connecticut. Architect: HKS Architects.



in helping me to hone my communication skills, problem-solving ability, and leadership skills. In many ways, the business degree was not as much about accounting or finance as it was about maximizing resources and leadership.

As one of the youngest vice presidents in the history of the AIA, what would you say was your most significant achievement?

› During my tenure as AIA vice president, I had the fortune of being involved in several meaningful things that I feel truly help the profession. One of the most significant was working with my fellow executive committee members to help the AIA craft and adopt a policy supporting the 2030 Challenge. Other milestones include the development of a national ARE scholarship, as well as the creation of a National Research fund for evidence-based design. My goal as vice president was simply to have made a difference—to have a positive impact on the

evolution of the institute, no matter how small. In doing this, it is now my hope that others who are as passionate about the profession as I am will be similarly encouraged to get engaged and get involved.

As a relatively young architect in a large firm, what are your primary responsibilities and duties?

› Currently I am the managing director of a 35-person office and am the regional director for our mid-Atlantic and East Coast region that encompasses around 75 staff. My responsibilities include not only developing our healthcare practice by bringing in new work and working with clients to deliver those projects, but it also now includes managing the office culture, empowering young staff to take on leadership roles, hiring and performance reviews, and mentoring. I took on this role after serving as director of design for about five years in two different offices. That role would include serving as the senior design lead on multiple projects, cultivating new work,

Shore Health Medical Center, Easton, Maryland. Architect: HKS, Inc. PHOTOGRAPHER: HKS.



working with clients to deliver on their expectations, and working with the team to adequately staff projects, develop talent, and nurture new leaders.

Some of my recent projects include Shore Health Medical Center, University of Connecticut John Dempsey Tower, Ahuja Medical Center in Cleveland, Ohio, and Flower Mound Hospital in Flower Mound, Texas. In all of these projects, regardless of my role, my goal is to understand the clients' needs, listen to their dreams, and work with them to identify innovative design solutions that they can implement on time and on budget.

What is the most satisfying part of your career as an architect?

› Without a doubt the most satisfying part of my career has been helping others succeed. Knowing you helped recruit someone into the practice, helped influence their career, empowered them, and then witness them begin to take off on their own successful career is quite invigorating. This really is more than mentoring; it is for me the essence of leadership. Mentoring programs come and go, but empowering others to succeed and investing in their development is to me the responsibility of every firm and should happen regardless of any formal mentoring. Second to this is seeing projects you pour your heart and soul into get built. When you are pursuing something you love and look forward to, there is not a greater feeling in the world than to see not only your vision realized but that of your team and client.

What is the most important quality or skill of a healthcare designer?

› Patience, communication, and knowledge are the most important skill sets of a designer in healthcare, or any area for that matter. As a programmer and designer in healthcare, we work directly with

clients, physicians, nurses, equipment specialists, contractors, builders, project managers, and business leaders. In each case, the architect must be knowledgeable enough of the subject matter being programmed to effectively communicate in the language of the particular user being met with. Most issues and challenges are the result of poor communication, so having the patience to work through misconceptions and differences of opinions is key to resolving issues as you develop a program or a project design solution. The knowledge of health-care facilities comes through trial and error and is learned more on the job than in school. You have to be “heads-up” in the office, seek out every opportunity to participate in a meeting or go on a tour.

Who has been a major influence on your career?

› There have been many great influences on my career, but none greater than my parents and my wife. While I have benefited from many great mentors, and try to learn from all of those around me, it is my parents who helped shape me into the man I am today, teaching me to believe that I could do anything I put my mind to. And it is my wife who helps keep me focused, motivated, and on track with an even-keeled perspective that brings with it humility and grace. Without a doubt I am blessed to have them as positive influences in my life and I know that I would not be where I am today if not for them.

What has been your most rewarding endeavor as a professional?

› Having a hand in the creation of the HKS Design Fellowship is so far my most rewarding endeavor as a professional. In 2006, motivated by a desire to empower architects in the community while also linking young architects with political leaders to solve community challenges all at the same time, I initiated the first HKS design fellowship. The pro-

gram, run and led by emerging architects, features a social or community problem that would benefit from a three-day design charrette intervention. The results then are offered to local leaders and related community organizations at no cost to them.

The program has expanded opportunities for the firm's young professionals by giving them direct client experience and speaking opportunities. It also

works well with civic leaders to show how good design can be used to solve challenges and shape communities. For the first two years, HKS focused on projects in Dallas. Since then, the program has expanded to be offered each year in DC, Detroit, Dallas, and Atlanta, and now includes students partnering with interns in charrette teams from over 20 architecture schools.

Second Modernism

WILLIAM J. CARPENTER, Ph.D., FAIA, LEED AP

Professor

School of Architecture and Construction Management

Southern Polytechnic State University

Marietta, Georgia

President, Lightroom (www.lightroom.tv)

Decatur, Georgia

Why and how did you become an architect?

► I grew up in Mattituck, New York. I became an architect because of my sixth-grade teacher, Robert Fisher. I was his first student to go to architecture school, and I could not have done it without him. He invented classes for me, such as eco-itecture, that emphasized sustainable design before it was in vogue. He collected donations from many of the businesses in our town to create a scholarship for me that he gave me at high school graduation. This summer I went to visit him and he had all of the drawings and books I had sent him displayed in his library. I would not have known what architecture was without him.

I was able then to apprentice for two great architects: first, Norman Jaffe, FAIA, in New York, and then Samuel Mockbee, FAIA, in Mississippi. Mockbee later received the America Institute of Architects (AIA) Gold Medal.

Why and how did you decide on which schools to attend for your architecture degree? What degree(s) do you possess?

► Bachelor of architecture, master of architecture, and Ph.D. in architecture. I went to Mississippi State for my undergraduate studies because I asked Richard Meier at a career day what school he would attend and he said he had just returned from there and something interesting was happening there. At 17, I packed my bags and arrived from New York. He was so right—I was able to study with Robert Ford, Christopher Risher, and Merrill Elam.

I chose Virginia Tech for graduate studies because of its emphasis on urbanism and tectonics. No school in the world offers a better balance of these pedagogical intents—of course, I am an alumnus. Jaan Holt and Gregory Hunt were amazing professors and left an indelible imprint on me.

The Breen Residence,
Atlanta, Georgia. Architect:
William J. Carpenter, FAIA,
Ph.D. PHOTOGRAPHER:
KEVIN BYRD.



For my doctorate I wanted to go to England. I was able to study with Professor Thomas Muir before he retired. I studied at the University of Central England at Birmingham Polytechnic, which is one of the oldest programs in the United Kingdom. Muir, Alan Green, and Denys Hinton gave me an appreciation for Europe, how to live and where to find the best pubs. I have never met anyone with a deeper commitment to architectural education and learning.

What has been your greatest challenge as an architect?

› The greatest challenge I have is balancing my time. I have two wonderful daughters and desire to be an integral part of their lives. I have amazing students to teach, and I work for great clients on architectural commissions. The biggest challenge is getting it all done well. One of the ways I keep it all together is to keep a journal/sketchbook, in which I try to keep new ideas or work on existing ideas at many different scales.

How does your work as a faculty member inform your architectural practice and vice versa?

› My students constantly inspire me and help me see things in new ways. I invite them to my studio to see new projects. I try to be involved in their lives during and after school. They are why I teach; I also try to involve students in actual projects such as our community outreach in Reynoldstown (in downtown Atlanta).

What are your primary responsibilities and duties as an architect and a faculty member?

› I am president of Lightroom, an architecture and new media firm in Decatur, Georgia. In the past few years we have won awards in a number of different disciplines, including being on the team who won the international 48-hour film festival, being on the team that had a short film accepted to Cannes, and two major awards of excellence from the AIA and from *Print* magazine. I do not think awards define you, but I appreciate that they are from very diverse organizations, all for excellent design.

► Lightroom Studios, Decatur, Georgia. Architect: William J. Carpenter, FAIA, Ph.D. PHOTOGRAPHER: LIGHTROOM.



▼ Lightcatcher, Decatur, Georgia. Architect: William J. Carpenter, FAIA, Ph.D. PHOTOGRAPHER: LIGHTROOM.



I teach in the thesis studio, which is very enjoyable. I like teaching at the fifth-year level. I also teach a theory class on modern architecture and design. My duties as a professor are also centered on connecting academic with the profession. To accomplish this, I serve on the National AIA board of directors as a regional director.

You authored the book *Modern Sustainable Residential Design: A Guide for Design Professionals* (Wiley, 2009). What is sustainable design and why is it important for design professionals?

► Sustainable architecture is designing efficient buildings that can produce their own energy and allow for the least damage to the earth possible—such as using recycled buildings or materials. It is important for design

professionals because economy (part of the Vitruvian triad) is an essential element of great design.

About two years ago the editor of *Dwell* magazine contacted me to write their first book. I have always been impressed with how they humanized modernism with pictures of people and looking comfortable in their homes. Sustainability is often seen as a fad amongst architects and the public. I believe it is an integral part of architecture and the best modern buildings I know—such as the Second Jacobs house by Frank Lloyd Wright and

his Rosenbaum House—are great examples of sustainable modern buildings. I am concerned today about sustainable buildings that look modern-“ish” and not “modernist.” This is the difference between style and commitment and authenticity. In the future I believe that sustainable architecture will produce power for us—whether it is a house or an entire city. An important sustainable principle that students need to remember is that the adaptive reuse of buildings can be one of the most sensitive moves an architect can make.

Enhancing Your Business through Design

ROBERT D. FOX, AIA, IIDA, LEED AP

Principal, FOX Architects

McLean, Virginia/Washington, DC

Why and how did you become an architect?

› My father was an architect, and I grew up in the offices of Louis Kahn and Romaldo Giurgola when I was a kid. It was during this time that I fell in love with architecture because I could appreciate the tangible nature of design.

Why and how did you decide on attending Temple University for your architecture degree? What degree(s) do you possess?

› I have a bachelor of architecture from Temple University. My father taught there so it made the decision easier.

What has been your greatest challenge as an architect?

› Design is an incredibly impactful profession. We are all able to create buildings and spaces that are beautiful and functional, but it's our clients that challenge us to go beyond that. Our clients want their offices to be performance tools. It is our job as commercial design specialists to look beyond the pragmatic to create places that enhance the daily lives of our clients.

Earlier in your career, you specialized in corporate interiors. How does interior architecture differ from architecture?

› Interior architecture is more intimate than architecture. People spend a majority of their day in the office so it needs to be comfortable and functional. In designing an interior, I work closely with our clients so I get to learn more about them and under-



440 First St., N.W.
Washington, DC.
Architect: FOX Architects.

stand their specific needs, and I get to see the impact of our design on their employee morale and productivity. Today, my firm specializes in both architecture and interiors. This integrated approach allows us to take an “inside-out, outside-in” approach to design.

As a principal of a firm, what are your primary responsibilities and duties?

› My duties as a principal include all the aspects of business management: financials, marketing, human resources, legal, insurance, real estate, information technology (IT), software, and contracts, and so on.

More important, I enable design. My primary responsibility is to create a highly specialized team of experts. Starting with our leadership, our firm is composed of subject matter experts who make us an asset on any project.

Beyond that, I am responsible for listening first to our design team and my partners and then developing and communicating the direction of the firm in a clear and concise manner. I strive to find the strengths in others and enable them to perform at very high levels and to continually offer my experience and expertise.

FOX Architects specializes in architecture, interior design, graphic design, multimedia design, and signage. How do these different design disciplines interact within your work?

› The reason that FOX has a multidisciplinary design practice is to expand and engage the dialogue of our work. We cannot achieve breakthrough ideas if we do not have a holistic approach to all aspects of design. Different perspectives enable us to stay fresh and develop innovative ideas in an industry that is constantly evolving.



▲ American Society for Microbiology, Washington, DC. Architect: FOX Architects. PHOTOGRAPHER: JOHN COLE, JOHN COLE PHOTOGRAPHY.

► FOX Offices—Virginia Office, McLean, Virginia. Architect: FOX Architects. PHOTOGRAPHER: RON BLUNT, RON BLUNT PHOTOGRAPHY.

What is the most/least satisfying part of your career as an architect?

› The most satisfying part is seeing our clients “get it.” The moment they realize their business potential—that is really exciting. I also enjoy learning about other businesses and seeing different business models.

We carry quite a bit of financial liability in what we do; few design professionals really understand the risks that they take on—they just want to design. While design is fun, you cannot grow or evolve unless you are making a decent profit.

Who or what experience has been a major influence on your career?

› First, my father was a big influence. Second, I am constantly influenced by a number of the developers with whom we work and seeing how they conceive, construct, and operate a building, from debt and financing, to management, maintenance, sales, and leasing.



A Gentle Woman's Profession

KATHY DENISE DIXON, AIA, NOMA

Principal

K. Dixon Architecture, PLLC

Upper Marlboro, Maryland

Associate Professor

University of the District of Columbia

Washington, DC

Why and how did you become an architect?

› My becoming an architect is the result of several influences during my childhood, not the least of which is the fact that my father was an architect for the Army Corps of Engineers. In a sense, I think I inherited the desire to be an architect. But, moreover, the fact that I had a creative nature, drawing ability, and good math skills also led me to pursue architecture.



▲ Potomac Consolidated TRACON, Federal Aviation Administration, Warrenton, Virginia. Architect: Jacobs Engineering. PHOTOGRAPHERS: KATHY DENISE DIXON/YUYAN ZHOU.

◀ Assembly for Worship Church, Brandywine, Maryland. Architect: K. Dixon Architecture, PLLC / Millennium Design Architects.

Why and how did you decide on which school to attend for your architecture degree? What degree(s) do you possess?

› It was a fairly easy choice to decide to pursue architecture at Howard University due to the fact that they were the only institution that offered me a five-year scholarship. After my bachelor of architecture, I also pursued a master of arts in urban planning at the University of California at Los Angeles (UCLA) with a focus was housing and community development.

Why did you pursue the additional degree—master of arts in urban planning—from UCLA?

› I felt that pursuing a degree in planning would enhance my perspective as an architect. Even the best architecture has to respond to context. On a broader scale, understanding context, community, environment, and our society is essential for a well-rounded architect. I believe all architects should learn more about urban planning, planning policy, and urban design so we are not designing in a vacuum.

How and why did you decide to start your own firm, K. Dixon Architecture, PLLC in 2010?

› I decided to start working for myself in 2010 to fulfill a lifelong desire to have my own architecture firm and steer my own destiny. I had actually created the business entity, K. Dixon Architecture, PLLC, in 2003, knowing that one day I would be ready to work for myself, but I had no timeline for when that might occur. In 2010 several factors came together that allowed me to make the transition. One of those factors was the opportunity to teach at the university level in the Department of Urban Architecture and Community Planning at University of the District of Columbia. Teaching evenings at UDC enabled me to work for myself during the day.

How does teaching differ from practicing architecture?

› Teaching differs from practicing architecture in that there are no client deadlines. However, I believe it is very similar to practice due to the need to always be prepared for presentation (lecturing), always keeping up to date on current events and trends (continuing education), and always synthesizing large amounts of information (design process) into a format that can be easily understood by others.

What has been your greatest challenge as an architect?

› Personally, my greatest challenge has been gathering up the personal confidence to do well in the profession. I was licensed at 29 years of age and had two professional degrees, plus I had obtained additional certifications. However, with all the education and achievements, I was not confident that I could make the decisions and lead the design process and team on my own. I remember having a talk about the lack of confidence with a colleague who had recently started his own consulting business. He told me that I just had to believe in myself and be confident that I can make the decisions and do what is required. He suggested that everyone has this challenge and he had to deal with the same issues in starting his business. It still took more years of experience before I felt I could lead a design team, but I have overcome that personal and internal self-challenge.

What is the most/least satisfying part of your career as an architect?

› Seeing the finished product of your labor is probably the most satisfying of any career one can choose. To visit, experience, and reflect over the completed structure and the decisions that went into its creation is a satisfaction that few others will experience.

Probably one of the least satisfying aspects of being an architect is the length of time it takes to see your work come to fruition. Other careers generally have immediate results. However, the length of time to design and construct a building can be 18 months or longer. It is challenging, especially as a young architect, to have to wait so long to see the realization of what you have been working on.

In 2013–2014, you served as the president of the National Organization of Minority Architects (NOMA). What is NOMA, and how has serving in leadership positions within NOMA benefited your professional career?

› Founded in 1971, NOMA is a professional networking organization founded to assist minority architects in their career development. Although the number of minority architects is increasing, there are currently only approximately 300 licensed African American women architects in the country. This presents challenges for individuals pursuing

the field of architecture and requires a great deal of mentoring. Prior to deciding to pursue a career in architecture, I did not know a single African American woman architect. I only met a couple during my college studies. Although I became licensed on my own, it would have been very beneficial for me to have known and potentially been mentored by a woman architect. As a result, I am involved with the NOMA and have a particular interest in mentoring young African American women in the field of architecture.

Serving in NOMA has been beneficial for my professional development due to the wonderful network of individuals in the organization that I can turn to if I need assistance making decisions about my own career or my practice. It is great to have the NOMA Network as a resource as my firm grows. I also benefit from being the leader of the organization as a result of increased visibility and networking. Given my leadership role, I recently



Galina Perova Fine Art Gallery, National Harbor, Maryland. Architect: K. Dixon Architecture, PLLC.

participated in a White House workshop on STEM (science, technology, engineering, and mathematics) minority inclusion—an opportunity I may not have otherwise ever experienced.

Who or what experience has been a major influence on your career?

› Of course, my father was a major influence in my decision to become an architect. I am very much like my father in character and interests.

I was also fortunate to have Barry Washington, an interior designer, serve as a role model early on in my career. On my first job working as a computer-aided design and drafting (CADD) operator for the U.S. Department of Justice, I worked with Mr. Washington on various facility management projects. Barry required a high level of professionalism and quality of work during my three-year internship. His expectation for design excellence has remained with me throughout my career.

The Architecture of Leadership

CAROLYN G. JONES, AIA, LEED AP

Principal

MulvannyG2

Bellevue, Washington

Why and how did you become an architect?

› After taking an Introduction to Architecture class at a summer camp program in junior high, architectural design became one of my favorite hobbies. I would spend summers at my drafting table designing floor plans and building foam core models of houses. Despite my interest in architecture, I never thought of it as my career; I started college as an international studies major. During the second semester of my freshman year, I decided to try Introduction to Architecture. Three weeks later, I switched majors. I was instantly captivated by the buildings we were studying and could not imagine anything more rewarding than creating the built environment for a living.

Why and how did you decide on which school to attend for your architecture degree? What degree(s) do you possess?

› I received a five-year bachelor of architecture from the University of Notre Dame. Since I did not go to college planning to study architecture, it was pure luck that I even ended up at a school with an architecture program. I chose Notre Dame for its well-rounded liberal arts undergraduate program, its size, the campus atmosphere, and the student life it provided. It was more important to me to be at a school that felt like a great fit for me overall, with the strength of the specific program I was interested in being a secondary consideration.

As it turned out, the program there did provide a very strong background and foundation for the study and practice of architecture. However, I believe that the most important part of my education, which has helped make me the architect and person that I am today, was based more my *entire* Notre Dame experience and not the specifics of the architecture program.



Anthropologie—Urban Outfitters, Vancouver, British Columbia. Architect: MulvannyG2 Architecture.
PHOTOGRAPHER: RAEF GROHNE.

What is retail design, and how might it be different from architecture design?

› What makes retail design unique is the focus beyond just the traditional shell building to the interior architectural design as well as the visual merchandising. The design of the entire environment, from the building itself to the smallest detail of a merchandise fixture, is part of what creates retail architecture.

I have never felt that interiors and architecture are two separate, distinct fields, and in retail design, the two are inseparable. From the architectural standpoint, retail design needs to be a seamless connection between interior and exterior spaces, forms and functions.

The key is that in retail, the architecture serves as a backdrop for the merchandise. You have to understand how product is displayed, how it best sells, how the customer interacts with or “shops” the space, the impact of lighting, and the importance of setting a certain atmosphere through a combination of built environment, furniture, fixtures, and finishes.

As a principal, what are your primary responsibilities and duties?

› As a principal of a very large firm, my responsibilities are much broader than working on individual projects. At one point I managed a large client account and team of over 50 people, which was similar to running a small office. My duties included being the primary contact for the client to coordinate and manage workflow, project quality, schedules, and budgets. Internally, I worked with staffing to keep the project teams balanced with the right individuals, and also monitored the execution of the projects as well as being responsible for the financial performance of the team.

Now, working in a broader capacity, I work with leadership throughout the firm on setting strategy around our retail practice, developing business plans, developing business with new clients, and participating in and leading initiatives, task forces, and other broader business and operations functions of how the office runs. I also have a number of client accounts that I personally manage as principal in charge. Additionally, a key responsibility as a principal is spending an extensive amount of time on personnel issues, helping others set and work toward their goals, dealing with problem situations, helping to maintain morale of the staff, and so on. As principal overseeing projects across the country,

I am also responsible for signing drawings and thus maintaining licenses in most states.

What has been your greatest challenge as an architect?

› My greatest challenge as an architect has been learning the necessary skills for my position that were not taught in school, mainly teamwork, management, financial, and leadership. School focused heavily on the achievement of the individual, but in the working world, success relies on working with others. It took me quite a few years to realize that my hard work or talent meant very little, and I would not be successful, if I did not cooperate with and respect the input and contributions of others.

I am probably less confident now than I was when I was first starting out in architecture. The longer you practice, the more you know, but you also become increasingly more aware of what you do not know. Sometimes that can be very overwhelming, but in the end you have to remember that you have an amazing support system in the resources and colleagues around you. Those people become part of your personal and professional “team” who can help you achieve more than you ever could on your own.

What is leadership in the context of architecture? Why is it important, and how does one develop it?

› Leadership in the context of architecture can mean many things, especially within the setting of various types of firms where different leaders may be in charge of account leadership, practice or operations leadership, and design leadership. In a broader sense, I think leadership involves having a passion for the craft of architecture, both the design and the construction. It means being a champion for good design and having respect for the other consultants and disciplines that contribute to successful projects, as well as for those in the construc-

tion trades that know their craft and execute the buildings. Leadership is being involved with your community, not just with industry-related groups, but other causes you care about, including supporting sustainability. It includes supporting the profession as a whole, but also being involved with your client’s industry or business as well.

Globally, leadership is important to make our communities and world a better place through the built environment. It supports the profession of architecture in the eyes of the public and our clients. Within firms, leadership is important to ensure success of the business, especially during challenging economic times, and it is vital to support, mentor, and grow the next generation of architects.

Honestly, not everyone is cut out for or interested in leadership at a certain level—especially because taking on more leadership in a business often means doing less of the actual “architecture” that we love. But even those who are not interested in a future role as a CEO have other ways to be leaders. Within a firm you can get involved with certain initiatives or activities from coordinating an office volunteer effort to supporting a quality assurance task force. Outside of work, volunteering with other groups you are interested in provides many leadership opportunities. For those who do want higher leadership positions in the firm, be proactive in asking for challenging assignments and projects. Volunteer, as mentioned earlier, for a range of activities inside and outside the office. Find opportunities to learn more about the business and operations of a firm—even if you are in a design role. Support and mentor others, remember that the success of those around you is the only way a leader can be successful. And get licensed; doing so shows that you respect your profession enough to make the effort.

What challenges do you find in being both an architect and a mother?

› I am sure that I face the same challenges as a working parent in almost any profession. Balancing work and family is never easy, and with architecture there is, of course, the occasional added pressure to work extra hours or late nights on project deadlines. Learning to work more efficiently in the time you have is critical and often feels counterintuitive to what we have learned since the studio model in school. I think most working parents would agree that it is frustrating to feel like you are never really able to give 100 percent either at work or at home. After becoming a parent, it can be difficult to realign expectations of yourself and your career.

What I do find very challenging in architecture is the lack of role models of other working moms at

the leadership level. Perhaps this is not unique to our profession, but it has been difficult to find many women in more advanced roles that also face the challenges of parenting young children and I have found myself to be an exception in this regard. What I have come to realize is that I need to embrace the fact that I actually *am* that role model. It is an honor to be an example for others as a firm leader and mom, learning the ropes of balancing a career and a family every day. I hope, by being a role model in this regard, I can help encourage the next generation of young architects, men and women, to find their own work/life/family balance. As a bigger vision, I also hope to help find a way to keep more talented women architects in the profession in the long run by encouraging them to find creative solutions to integrating their own families and careers.

H&M, Auburn, Washington. Architect: MulvannyG2 Architecture. PHOTOGRAPHER: JUAN HERNANDEZ.



Nordstrom—City Creek,
Salt Lake City, Utah.
Architect: Callison.
PHOTOGRAPHER: CHRIS
EDEN.



What is the most/least satisfying part of your job?

› What we often refer to as “people issues” are both the most and least satisfying parts of my job. On the least satisfying side is dealing with office politics, staffing problems, or personnel issues. This might include how I get along with and fit in with other leaders in the company whom I do not always agree with or who have different agendas, as well as helping staff who do not get along with each other learn to cooperate and communicate. More challenges include delivering tough messages to staff that are having serious performance issues and, in the worst case, having to lay off or even fire coworkers. Many days, the architecture challenges we face on projects seem quite manageable compared to keeping so many talented and unique individuals working together in a positive, constructive way.

On the flip side, people issues are also the most rewarding part of my job. I truly enjoy working with staff to help them create and work toward their professional goals. Whether through our performance review process or more informal day-to-day coaching and mentoring, it is very rewarding to help facilitate the growth and learning of those around me. Although seeing a building you worked on get completed is a peak experience as an architect, it is just as satisfying to see people around me grow and succeed

in their careers. It can often be challenging to find the time to spend with others in this development capacity, especially when you have so many pressing needs on your own projects, but the time spent connecting one-on-one with those you work with has intangible rewards. It is an honor to be in a leadership position where I can work with young architects in this capacity.

Who or what experience has been a major influence on your career?

› By far the greatest influences on my career have been the mentors I have had. Three individuals in particular, two managers and one client, were extremely supportive of my career growth and were champions for me at a young age. As a result, I have enjoyed rapid growth in my career and a chance to expand my skill set and knowledge base very quickly. These opportunities have helped fuel my success within my firm as well opened up opportunities for me to learn new skills on various project types.

Although finding a mentor is not always easy, there are things a young architect can do to help facilitate finding one. The more interest, initiative, drive, and enthusiasm you show in your career, the more likely you are to attract the attention of a mentor who can support you along the way. Look for others that you respect or have an interest in, and do not be afraid to reach out to them to input and advice.

Profile of the Profession

According to the Bureau of Labor Statistics, U.S. Department of Labor,⁶ 113,700 architects were practicing in the United States in 2010, the last year for which statistics are available. Employment projections for architect are expected to grow by 27,900 (24 percent) between 2010–2020, faster than average for all occupations.

Much of this growth is dictated by current demographic trends. As the population continues to live longer and Baby Boomers retire, there will be a need for more healthcare facilities, nursing homes, and retirement communities.

There will be a demand for architects with knowledge of green design; rising energy costs and increased concern about the environment have led to many new buildings being built green.⁶

With this projected growth of the profession, should you consider architecture? Before you answer, consider the following. According to the National Architectural Accrediting Board (NAAB), 25,958 students were studying architecture in professional degree programs in the United States during the 2012–2013 academic year, a slight decrease from the previous year. Newly matriculated students enrolled in NAAB-accredited degree programs equaled 7,169.⁷

Further, 6,347 students graduated with the NAAB-accredited degree. If you assume that the number of graduates with the accredited degree remains the same for 2010–2020, the projected time frame, 63,400 graduates with a NAAB-accredited degree may be competing for the projected 27,900 openings. Clearly, based on employment projections, the competition for architectural positions will be keen over the next decade. Take solace, though, because graduates with an architectural education may enter many career fields; see Chapter 4, “The Careers of an Architect.”

In its 2013 survey of registered architects, the National Council of Architectural Registration Boards⁸ (NCARB) reports 105,847 registered architects living in the 55 reporting jurisdictions, including all 50 states, the District of Columbia, Guam, the Northern Mariana Islands, Puerto Rico, and the Virgin Islands. This total represents a negligible increase from the previous year’s survey.

While the AIA⁹ does not represent the entire profession, its membership does constitute a majority. Therefore, it is worth reporting its facts and figures. The AIA reports a membership of 81,000 members of the AIA. Of the full AIA architect members, 74 percent practice in architecture firms, 2 percent practice in the corporate sector, and 2 percent practice in government and 1 percent in construction, while the remaining practice at design firms, universities/colleges/associations, contractors’ or builder firms, and engineering firms.

SALARY

According to the Bureau of Labor Statistics, U.S. Department of Labor,¹⁰ the 2012 median annual earnings of wage and salary architects were \$73,090. The lowest 10 percent earned less than \$44,600, and the highest 10 percent earned more than \$118,230. Salaries fluctuate, depend-

ing on the region of the country, the amount of experience an individual has, and even the type of employer.

Finally, data from the 2013 AIA Compensation Survey¹¹ report the average compensation for an architect is \$76,700, a slight increase from the 2011 survey. The following salaries are almost identical to the previous survey in 2011: managing principal, \$133,000; senior project designer, \$91,100; architect, \$72,500; and interns, \$45,400. Of course, these salaries were also collected during the latter part of the economic downturn in the latter part of 2012 and early 2013.

At all experience levels, large architecture firms offer higher compensation than smaller firms. In addition, most firms offer a salary premium to staff with a master of architecture and those that have completed the Architect Registration Exam (ARE) and become licensed, and a full third of firms offer higher salaries for staff that have sufficient experience in building information modeling (BIM).

DIVERSITY

What is diversity, and why is it important? The following answer is from *Designing for Diversity*, by Kathryn H. Anthony, Ph.D:

Diversity is a set of human traits that have an impact on individuals' values, opportunities, and perceptions of self and others at work. At minimum, it includes six core dimensions: age, ethnicity, gender, mental or physical abilities, race, and sexual orientation.¹²

In the context of the architectural profession, diversity is extremely important because, for many years, the profession has been known as a white man's profession. This label may no longer be quite appropriate, as the profession is beginning to make strides, but consider the representation of women and individuals of color. Again, the AIA is the most reliable source for estimates.

According to the AIA, about 13,500 (16 percent) are women, and 8,000 (10 percent) are ethnic minorities.¹³ The National Organization of Minority Architects states that fewer than 2 percent (~2,100) of the 105,000 architects are African American. Within the schools, the numbers are dramatically better. According to the NAAB, the number of female students pursuing architecture in accredited professional degree programs is 11,456 (42.6 percent). The number of students of color is 8,765 (32.6 percent).

As of September 2013, the Directory of African American Architects lists currently 1,896 licensed African American architects (301 female and 1,595 male).¹⁴ Sponsored by the Center for the Study of Practice at the University of Cincinnati, the directory is maintained as a public service to promote an awareness of African American architects and where they are located.

What Are the Most Important Skills an Architect Needs to Be Successful?

› The most important skill is listening. I find that too many architects do not listen well; it takes practice.

William J. Carpenter, Ph.D., FAIA, Associate Professor, Southern Polytechnic State University; President, Lightroom

› Leadership is the most important skill an architect can possess. As the client's advocate and the head of the consultant team, the architect must maintain an overview of the project and provide consistent guidance to ensure its success as well as the long-lasting relationships developed during its course. A great leader is skilled at listening empathetically, creating a vision, and enabling others to act.

Grace H. Kim, AIA, Principal, Schemata Workshop, Inc.

› Creativity, design, technical skills, management, communication, and excellent leadership skills are required. It requires a very high level of maturity.

Robert D. Fox, AIA, IIDA, Principal, FOX Architects

› Communication skills. Though architects are often regarded as lone wolves, the reality is that completing a project takes teamwork. You must practice clearly articulating yourself through email, over the phone, and in person.

Murrye Bernard, Associate AIA, LEED AP, Managing Editor, Contract Magazine

› The most important skills are *communication*, imagination, *communication*, problem solving, and *communication*. Architects must have the imagination to dream up the vision of clients, the communication skills to articulate that vision so the client can understand it, and the ability to resolve complex variables in order to make that vision a reality. The fundamentals of math, science, and art are rel-

evant, but they are tools that support imagination, communication, and problem solving.

Shannon Kraus, FAIA, MBA, Principal and Senior Vice President, HKS

› An architect is the person that dwells at the confluence of the left and right brain. They are able to translate the creative impulse and technical realities into the physical world. A successful architect is able to balance those abilities with the needs of the individual and society.

Amanda Harrell-Seyburn, Associate AIA, Instructor, School of Planning, Design and Construction, Michigan State University

› To be successful, you must be able to adapt to your surroundings. You must be a good communicator and, more important, a good listener. You must be open to taking risks and looking at things in a different way.

H. Alan Brangman, AIA, Vice President of Facilities, Real Estate Auxiliary Services, University of Delaware

› Creative, analytic, and communication skills. An architect needs to be able to conceive, draw, build, and effectively communicate their ideas as well as find solutions to design obstacles or limitations.

Anna A. Kissell, M.Arch. Candidate, Boston Architectural College, Associate Manager Environmental Design, Reebok International Inc.

› Patience for process and appreciation for design is a telescopic continuum in which you cannot skillfully address any point of the scale without being mindful of the others.

Rosannah B. Sandoval, AIA, Designer II, Perkins + Will

› Patience, willingness to listen, good personal skills in dealing with clients, and last but not least, ability to design.

John W. Myefski, AIA, Principal, Myefski Architects, Inc.



Cosmonaut Museum, Moscow, Russia. PHOTOGRAPHER: TED SHELTON, AIA.

► To achieve *good* design, an architect needs to be sensitive to many things; observing, listening, reacting, inventing, creating, activating. For an architect to design a solution, he/she must first understand and analyze the problem. Without this, architecture lacks an overarching concept—a critical part of a functional, iconic, successful design.

Tanya Ally, Architectural Staff, Bonstra | Haresign Architects

► Architects must have the following skills (the order depends on the individual): (a) excellent com-

munication skills (e.g., writing, speaking, and traditional and digital drawing ability); (b) tolerance for ambiguity; (c) agility; (d) an analytical mind; (e) attention to both the macro and the micro; (f) humility; and (g) graphical diagramming.

Thomas Fowler IV, AIA, NCARB, DPACSA Professor and Director, Community Interdisciplinary Design Studio (CIDS), California Polytechnic State University—San Luis Obispo

► Observation; graphic and verbal communication skills; tenacity, perseverance, and fortitude.

Mary Kay Lanzillotta, FAIA, Partner, Hartman-Cox Architects

► Verbal, written, and graphic communication skills are the most important needed to be a successful architect. Since there are many players involved in a building being designed and built, clear communication is imperative to convey your ideas to others.

Robert D. Roubik, AIA, LEED AP, Project Architect, Antunovich Associates Architects and Planners

► Drive to get through the rigorous education and training is paramount. After the initial education of an architect, the development of strategic thinking, strategic planning, and efficient thinking continually need to be fine-tuned.

Megan S. Chusid, AIA, Manager of Facilities and Office Services, Solomon R. Guggenheim Museum and Foundation

► All architects must be able to communicate well in a variety of media. Other important skills include speaking, writing, critical thinking, and problem solving. Also, an understanding of business finance is important, as the measure of a successful project is more than aesthetics and function. My personal goal on every project is to learn such that it will enable me to increase my creativity or productivity.

Kathryn T. Prigmore, FAIA, Project Manager, HDR Architecture

What Are the Most Important Skills an Architect Needs to Be Successful? (Continued)

› An architect is an artist, who needs to be a master of input and output. An architect needs to be a leader and know how to manage time effectively. Most important, an architect needs to be able to understand and analyze information, as well as be able to interpret it and communicate information effectively. An architect needs to be able to work with different media to create the desired outcome.

Elizabeth Weintraub, B.Arch. Candidate, New York Institute of Technology

› Architects also need to be good communicators, and in this case that means they need to be able to skillfully craft the written word, they need to be able to speak in public clearly and persuasively, and they need to be able to effectively utilize visual media to communicate their intentions. Architects need to understand the wide range of technical, social, formal, and ethical dimensions in which they design.

Architects are like orchestra conductors in that they don't need to be able to play every instrument; rather, they need to know what every instrument can do and be able to successfully coordinate their activities.

Architects need to be good collaborators. The age of the sole genius architect is over, that is if indeed the myth was ever a reality. Architecture is the product of collaboration within design teams, with consultants, clients, regulatory bodies, and more. The architect who is unable to collaborate is likely to be an unemployed architect.

Brian Kelly, AIA, Associate Professor and Director, Architecture Program, University of Maryland

› Collaboration, teamwork, and people skills are probably the most important and most undervalued skills an architect needs in today's professional practice. But perhaps most important,



McCormick Tribune Campus Center, Chicago, Illinois. Architect: Rem Koolhaas. PHOTOGRAPHER: LEE W. WALDREP, Ph.D.

the ability to work collaboratively with clients, to lead them through the project process, can make the difference between a good project and a great one.

Carolyn G. Jones, AIA, Principal, Mulvanny G2

› Being an architect involves solving problems, overcoming challenges, and making all the parts and people involved work in just the right way. It is not human nature for this to be an easy task, and it takes much patience in order to do so.

Ashley W. Clark, Associate AIA, LEED AP, SMPS, Marketing Manager, LandDesign

› Passion, patience, and communication skills. Our work is most fun when we are fully committed to it and when we are excited about it. As design and construction are not straightforward processes, it helps to be patient with the team of professionals involved in a project, as many issues will be revisited repeatedly. Great ideas never become reality if no one else can understand and build them, so verbal, graphic, and oral communication skills are a must.

Allison Wilson, Intern Architect, Ayers, Saint Gross

› An architect must combine creativity and ingenuity. One must have a passion for understanding people and designing environments for them.

Jordan Buckner, M.Arch./MBA Graduate, University of Illinois at Urbana-Champaign

› Architects have to be able to see the larger issues at hand in any situation—they need to understand possibilities beyond the basic requirements, addressing everything from community, education, health, and social conditions to sustainability and technology. They also need the ability to see a way to address these challenges and take on this work. This is why architects have always been associated with critical changes throughout history—their abilities to both identify the difficult topics and envision potential ways to attend to them directly

engages world problems and begins to develop solutions.

Karen Cordes Spence, Ph.D., AIA, LEED AP, Associate Professor, Drury University

Vision. Creativity. Passion. Persistence. Resilience. Listening. Communication.

Kimberly Dowdell, Project Manager/Director of Marketing, Levien & Company

› The most important skill is communication. You can be a fantastic designer and have a great project, but that is useless if you cannot communicate your ideas to the client. That being said, the ability to draw is also extremely important. Communication, especially in architecture, does not have to be entirely through words. It is helpful to be able to quickly sketch your ideas on the spot for a client or professor.

Elsa Reifsteck, BS Architectural Studies Graduate, University of Illinois at Urbana-Champaign

› Architects must exhibit social and cultural awareness as it relates to specific projects at hand. This may include being aware of the project's history and the people it will serve and effect. Not only must architects design and relate to the building, they must also have a sense of business and the legal responsibilities that come with the profession.

Jennifer Taylor, Vice President, American Institute of Architecture Students

› An architect must be resourceful. The myriad of regulations, building codes, materials, products, and rules of thumb are impossible to commit to memory. An architect must know where to go to find answers to best solve the design problem. Moreover, because the architect is responsible for coordinating an entire team of professionals, he/she must have very good organization skills and people skills. Finally, the ability to imagine objects in three dimensions is paramount.

Kathy Denise Dixon, AIA, NOMA, Principal, K. Dixon Architecture, PLLC; Associate Professor, University of the District of Columbia

What Are the Most Important Skills an Architect Needs to Be Successful? (Continued)

› Because architecture exists at the intersection of numerous disciplines, those who practice it require a wide range of knowledge and skills. Consequently, the best architects today are the products of sound liberal education, not simply professional education.

Courage and insatiable curiosity. The world's best architects are not just problem solvers, they're problem seekers. They look to design solutions that address some of the most challenging aspects of the environments in which we live. Architects have the capacity to integrate multiple perspectives—to see the connections between the arts, science, technology, engineering, and culture—into informed solutions that provide value to communities.

Andrew Caruso, AIA, LEED AP BD+C, CDT, Head of Intern Development and Academic Outreach, Gensler

› An architect needs to be an integrative thinker who can pull the assets of a place into a design trajectory that shapes the project and tell the story of space.

Katherine Darnstadt, AIA LEED AP BD+C, Founder and Principal Architect, Latent Design

› An architect must love the environment, both built and natural. As a professor of mine once said: the love of architecture comes first. Without love first and foremost, the challenges and complexities of architecture can be mentally exhausting.

Joseph Mayo, Intern Architect, Mahlum

› The ability to process and convey information from a multitude of [mental] perspectives; more specifically, this would include drawing



Rotunda, University of Virginia, Charlottesville, Virginia. Architect: Thomas Jefferson. PHOTOGRAPHER: R. LINDLEY VANN.

skills, the kind that allow one to convey an idea through an image; and traveling, which exposes the senses and psyche to more and varied information than can be received from a textbook.

Sarah Stein, Architectural Designer, Lee Scolnick Architects & Design Partnership

› The most important skill is the ability to communicate. One needs to be able to communicate the ideas they have to someone who may not completely understand. If you are unable to communicate, your idea will not progress.

Nicole Gangidino, B.Arch. Candidate, New York Institute of Technology

› Creativity, *true* creativity: A creative mind will be able to analyze this unique set of problems and discover the best solution, ensuring the best product for our clients.

Teamwork: Architects must work collaboratively with a diverse set of stakeholders to achieve the best result for the collective. In many cases, different stakeholders will have conflicting definitions of what the “best result” is for the project, and they will all look to the architect for leadership.

Empathy: Architects must possess the ability to listen to and understand the needs of our clients to ensure we are making the right decisions.

Cody Bornsheuer, Associate AIA, LEED AP BD+C, Architectural Designer, Dewberry Architects, Inc.

› Adaptability. We must infuse in our contributions to the built environment adaptive traits. That is, we too often think of our buildings as locked in a moment in time serving one function. They must do that and do it well to be useful in their time, but to be useful to our society, the buildings must be willing to adapt to changes we cannot even pretend to predict.

Adaptability also serves us well professionally. The world is full of change, and we must evolve with it and adapt. For some, this means changing how they approach projects, communication, or even design philosophy. For others, it means pursuing creatively other interests and passions.

Joseph Nickol, AICP, LEED AP BD+C, Urbanist, Urban Design Associates

› Communication and problem-solving skills are the most important. An architect needs to be able to communicate their idea and vision to coworkers, clients, and consultants, whether through drawings, diagrams, or words. Problem-solving skills are also very important in architecture, interior design, and planning; you need to be able to analyze a problem critically and create a safe, accessible, and beautiful solution.

Amanda Strawitch, Level 1 Architect, Design Collective

› A talent—one that is often lacking in our profession—is an in-depth understanding of the business side of architecture. Possessing the relevant knowledge of and skill in finance, negotiation, and strategic planning are critical keys to a successful practice.

And the aptitude to successfully both offer and accept criticism is an oft-overlooked skill, in architecture as in so many other fields. When offering criticism, take care to frame your thoughts in a way that will be respectful of, and constructive to, your colleague. In taking criticism, listen carefully to any concerns, and do not take them as a personal attack. Criticism may not be comfortable, but it is necessary in our profession at every level.

Kevin Sneed, AIA, IIDA, NOMA, LEED AP BD+C, Partner/Senior Director of Architecture, OTJ Architects, LLC

What Are the Most Important Skills an Architect Needs to Be Successful? (Continued)

› Communication, dedication, and perseverance.

Sean M. Stadler, AIA, LEED AP, Design Principal, WDG Architecture, PLLC

› To be a great communicator, to be able to influence others, and to think like a designer. Design thinking, unlike traditional models for developing new ideas, involves abductive reasoning—imagining an end state and then building a plan on how to get there. It also really helps to be well versed in more than one discipline. Great thinking and ideas come from having multiple perspectives. Some of the greatest “architects” of our day have backgrounds in physics, environmental science, biology, psychology, engineering, computer science, or industrial design.

Leigh Stringer, LEED AP, Senior Vice-President, HOK

› Patience. Patience is key in almost every aspect of the design process. Patience to let your idea run its

full course. Patience to continue with your concept despite roadblocks that might pop up along the way. Patience when deadlines loom and the natural urge is to panic and possibly compromise.

Another skill would be balance. Learning to balance the demands of architecture and studio with the rest of your interests is challenging. Having a narrow focus based solely upon architecture limits your abilities as a designer. Your experiences outside of architecture will help define yourself. Do not be afraid to leave the studio and go something entirely unrelated to the project at hand!

Makenzie Leukart, M.Arch. Candidate, Columbia University

› An architect needs to constantly question—question existing situations, find the problems, and discover the best solution. This is the definition of the architectural design process.

Danielle Mitchell, B.Arch. Candidate, Pennsylvania State University

Creator of Space

JOHN W. MYEFSKI, AIA

Principal

Myefski Architects, Inc.

Evanston, Illinois

Why and how did you become an architect?

› I wanted to shape the future built environment. I feel that architects have such a profound impact on the way we live that I thought it would be great to create. I also had the chance to work for an architect as a high school senior. This experience really set the stage for my future.

Why and how did you decide on the University of Michigan to attend for your architecture degree? What degree(s) do you possess?

› I grew up in the upper peninsula of Michigan, and the idea of going to a school that was in the Midwest was important because of cost; cost was a strong consideration when selecting the University of Michigan. I was fortunate to have one of the best public schools in my state. I attended the pre-architecture program at Northern Michigan University for my first two years. All of my credits transferred to the University of Michigan. This saved me money and allowed me

Private Residence, 317
Adams, Glencoe, Illinois.
Architect: John W.
Myefski, AIA, Myefski
Cook Architects, Inc.
PHOTOGRAPHER: TONY
SOLURI PHOTOGRAPHY.





1220 J St., San Diego, California. Architect: John W. Myefski, AIA, Myefski Architects.

to flourish in a small university before graduating from Michigan with my bachelor of science. Because I really enjoyed the architecture program, I stayed to graduate with my master of architecture two years later.

After receiving your master of architecture, you had the opportunity to study abroad in Denmark as the recipient of a Fulbright fellowship. Please describe this experience and how it shaped your career as an architect.

› Because I received both my degrees from the same school, I felt that my education needed a

boost or outside shock to complete my studies as a well-rounded student. My solution was to attend a program in Europe; the Fulbright provided me that opportunity in Copenhagen, Denmark. The Royal Danish Academy was a great chance to study abroad and spend the time traveling throughout Europe. I cannot tell you how this changed my life as an architect and person. The exposure to living in Denmark and what I saw enriched my soul and improved my work. Travel is the most important part of your education!

Private Residence. 1319 Lincoln, Evanston, Illinois. Architect: John W. Myefski, Myefski Architects. PHOTOGRAPHER: TONY SOLURI PHOTOGRAPHY.



What has been your greatest challenge as an architect?

› Waiting to peak! Now that I have turned 50, architecture is just beginning to be fun again. With an encouraging amount of activity in the profession, it is clear the recession is behind us. The Great Recession was clearly a step backwards for anyone interested and working in architecture, but for those who prevailed through the troubling times, the future is bright. The demand for architectural services has been growing and we are seeing an abundance of clients requesting new work. Architecture students graduating within the next five years will become an integral part in this increased demand for work.

It takes time to build a practice and even more dedication if you want your work to be substantial, and not a momentary flash in a magazine. Starting your practice is similar to constructing a home from the ground up. At this point, I feel I have laid a solid foundation and have reached the second floor ... I cannot wait to get to the roof! I think most architects hit their stride at age 55 to 60, so I have plenty of time to improve.

What are your primary responsibilities and duties as the principal of your own firm?

› Everything! In a practice of 15 architects with two principals, you really do everything. That is the best part. I find the work, do the design, oversee the building of the project, maintain contact with the client, fix just about any problem that exists, and run the day-to-day of a business. Most people do not understand that it is the architect's job to solve problems. Life is a series of logjams, and I am constantly trying to keep the water flowing.

Why did you decide to open your own firm?

› I had been working for Helmut Jahn and loved my job but needed to look to the future and develop my own work. I started the firm because I found a historic home that I was saving by literally moving it to a new site; it went so well that the owners of the home asked me to take over the new home they wanted. This was my first job, and saving the home made me a hero in my small community—the rest is history.

When designing a project, how do you begin? What is your inspiration?

› I pull the pen out and sketch on whatever I can find. The ideas are created from inside but they are influenced by the program, client, site, locale, history, and so on. I love to feel and experience the site and its surrounding context. Buildings do sometimes have a metaphor, but mainly it comes from someplace within. I think if you could discover the exact point, you would unlock the future.

Who or what experience has been a major influence on your career?

› My childhood was key, and that is because I spent much of it traveling. The exposure opened my eyes, and I have a hard time closing them to this day. My education was a strong second, and that is because I had great professors and a wonderful facility to explore at the University of Michigan. It is simple; you need pen and paper; the rest comes from your exposure and professors. My first position at Murphy/Jahn was the best and gave me the chance to work on wonderful projects.

Making a Positive Impact

KATHRYN T. PRIGMORE, FAIA

**Vice President, NCARB, NOMA, CDT, LEED AP
BD+C**

HDR Architecture, Inc.

Alexandria, Virginia

Why and how did you become an architect?

➤ Architecture allows me to make a living doing everything I like and everything I am good at. These are not necessarily the same thing!

My interest in architecture began when I was in middle school. The City of Alexandria Public Library had an extensive collection of architecture books and journals. After I had read all of them, I ventured out to the Fairfax County library and the library at the AIA headquarters. Living in the Washington, DC, area is such a great thing!

Architecture is a dynamic discipline. Throughout my career as a practitioner, an educator, and a regulator, my education in architecture has allowed me to utilize multiple abilities and skills to expand my knowledge base or to pique my interest in other ways. Architecture provides flexibility. As a result, I have always been able to find satisfying career paths in the profession as I have matured or as life situations created challenges and opportunities—often unexpected.

Why and how did you decide on which school to attend for your architecture degree? What degree(s) do you possess?

➤ My high school physics teacher suggested I apply to Rensselaer Polytechnic Institute (RPI), partly because at least a dozen of my classmates were applying to my first-choice school and he knew the pro-



New Federal Building, Washington, DC. Architect: HDR Architecture, Inc. PHOTOGRAPHER: HDR ARCHITECTURE, INC.

gram was just as good, although not as well known. I visited RPI and immediately became intrigued with studying architecture there. The university was smaller than most of the other programs I had applied to, and it was in the heart of a small, very “walkable” city. I also liked the fact that the school of architecture was relatively self-contained and that the entire faculty had active professional practices. Although located within a technical university, the creative aspects of architecture were infused into the pedagogical approach.

Another reason I decided to attend RPI was that I would be able to obtain two degrees within five years—a bachelor of science in building science and the accredited bachelor of architecture. After I began to take courses, I found out that it was very easy to receive minors and that my advisor did not prevent me from taking overloads as long as I did well in my courses. I also took courses during the summer at various universities in Washington, DC. I ended up graduating four-and-a-half years after I matriculated with both degrees, with a minor in architectural history and one in anthropology/sociology, and with a few extra credits related to the history of technology during the Industrial Revolution.

This background was invaluable. During the early part of my career, the technical aspects of my education prepared me to take the lead on aspects of architectural projects my peers had little interest in and no foundation to perform. Later in my career, my social science background has provided tools and insight that have been invaluable as a manager and studio head.

What has been your greatest challenge as an architect?

➤ I am sure there have been lost opportunities because I am both African American and female, but the most blatant discrimination I have faced seems to be because I look 10 to 20 years younger (on a good day) than I am. Invariably, when I show up for an interview or to a first job meeting, it is clear that the participants do not believe that a person my age could have my credentials.

What are your primary responsibilities and duties as an architect?

➤ In recent years, my focus has evolved from leading a wide range of project types that are outside of the firm's regular portfolio to being an expert in the management and design of facilities that support high-profile critical missions. Many of these projects have been for the federal government and include the Pentagon and the DHS Headquarters

2001 M St., Washington, DC. Architect: Segreti Tepper Architects, PC. PHOTOGRAPHER: KATHRYN PRIGMORE, FAIA.



consolidation currently under way. These are multifaceted projects for which effective client management and team development strategies are important to the success of the project. A lot of time is spent doing proposal development and contract management, which some may not consider architecture, but if we didn't do them, we would not have projects to work on!

Challenges of working for clients include managing client expectations relative to available technology and available budget; creating and documenting a process that could be easily followed as the composition of the teams constantly evolve; and maintaining the morale of the design team, which often work for months under a relentless schedule.

A colleague and I lead a studio of about 20 architecture and interior design staff within an office of about 140 staff. (HDR Architecture, Inc. has about 1,700 employees; the company as a whole has about 8,000 employees.) The studio system is relatively new to our organization. Over the past months we have been trying different ways to create an identity for the studio and develop it while supporting the individual goals of our colleagues. Managing and developing studio resources (staff) presents a set of challenges much like those I would encounter if I had my own firm. The financial accountability aspects of studio management are not much different from managing projects, but work-life balance and similar considerations are just as important to maintaining a healthy, productive work environment.

What is the least/most satisfying part of your position?

› The most satisfying aspect of architecture is the ability to make a positive impact on others through

my work. On a daily basis, it is building teams or helping a designer and an engineer resolve a problem. In the long term, it is seeing the glow on a client's face as they enter a completed building for the first time or having a former student tell you they just got licensed.

I sometimes feel internal conflicts because I like what I do so much that I often work too many hours. This is sometimes to the detriment of maintaining good relationships with my family and with others outside of the workplace.

Previously, you taught at Howard University; why did you choose to teach?

› I spent 13 years at Howard University teaching and nurturing the students. During about half of these years, I also served as associate dean. Teaching has been my most rewarding undertaking, with the exception of being a parent. To teach, you have to learn, especially when you teach technology-based topics as I did.

The ideal career situation for me would be to teach and practice. I started and finished my teaching career doing both, and I plan to return to doing both at some point in the future. In the interim, I have found opportunities at the firms I have worked with to satisfy some of the yearnings that draw me to teaching. I currently lead a professional development group that encourages staff to pursue licensure and the various certifications that have become critical to the success of our practice.

The reward of teaching, however, surpasses everything else I have done as an architect. There are no words to adequately express the satisfaction I feel for the gift of being able to inspire others to learn.

What was your role in serving on the board for Architects, Professional Engineers, Land Surveyors, and Certified Interior Designers and Landscape Architects (APELSCIDLA) in the state of Virginia? What does a state board do?

› State board members are responsible for upholding the laws and regulations related to the practice of architecture. This includes approving candidates for examination and acceptance of individuals for licensure. The board also hears and decides disciplinary cases brought against individuals and entities with professional credentials. During my tenure on the board, we reviewed and updated the regulations and assessed the need for continuing education.

Through my appointment to the APELSCIDLA board, I was able to serve on many NCARB committees. I was a writer and grader for the

Architect Registration Exam (ARE) and chaired the Committee on Examination—the committee that is responsible for development of the ARE. I have also served on the Broadly Experienced Architects (BEA) Committee that reviews the qualifications of individuals without a professional degree to determine if they are eligible for an NCARB certificate. After completing a number of years of service to the NCARB, I was appointed to, and eventually chaired, the AIA National Ethics Council. All of these service activities support my commitment to improving the profession and to opening up opportunities for younger architects in leadership roles.

1001 Pennsylvania Ave., N.W., Washington, DC. Architect: Segreti Tepper Architects, PC—Architect of Record; Hartman Cox—Design Architect. PHOTOGRAPHER: KATHRYN T. PRIGMORE, FAIA.



I found an article that talked about your mentoring students—do you still mentor students? Why do you feel mentoring is important?

› I have been mentoring students who have been interested in architecture since I was in college. A few years ago, I found out that a young lady I started mentoring when she was in eighth grade eventually did graduate from architecture school. I continue to mentor students, former students, and others.

Mentoring is important because it makes a better world for all of us. I also know that mentoring can change people's lives. I have two primary mentors, one for over 20 years and the other for almost 30 years, who have helped me plan my destiny. They have supported my decisions along the way whether they would have chosen the same path or not. Therein lies their legacy to me. Mentors do not dictate; they do not impose their will on their protégées. They listen, offer options and support, and open doors when they can. Like your parents, mentors are there no matter what.

About five years ago, three other African American women (Barbara G. Laurie, Kathy Dixon, and Katherine Williams) and I presented *Vortex: African American Women Architects in Professional Practice* at the AIA National Convention. Since then, it has been presented across the country as part of a dozen AIA programs or National Organization of Minority Architects (NOMA) programs. *Vortex* has evolved and taken firm roots as

a mentoring and leadership development vehicle. Its success seems to come from its flexible format, its dedication to giving a voice to the unknown at every presentation, and for the way it encourages audience participation in honest dialogue about the challenges African American women and others face within our profession.

You were one of the first African American women licensed to practice architecture—why do you think that was the case?

› When I became licensed in 1981 there were fewer than 20 African American women licensed to practice architecture in the United States. As of today, there are approximately 300 African American women out of about 1,876 African American architects. There are approximately 280 women architects. I was the fifth African American woman elevated to fellowship in 2003.

As the legend goes, the practice of architecture is a rich, white, male profession. Even as opportunities opened up, we were often relegated to the back rooms of offices. This practice persisted blatantly well into the 1970s in many firms for both women and minorities. Rather than face discrimination, many opened their own firms, some married partners who were the “face” of the office, but unfortunately many were driven away. Today, the hearts of many are in the right place, and we are taking our places in the front offices of many firms. For some firms, however, the risk of diversifying their senior leadership is still perceived as too great.

Environmental Design Excellence

NATHAN KIPNIS, AIA, LEED BD+C

Principal

Kipnis Architecture + Planning, Inc.

Evanston, Illinois

Why and how did you become an architect?

› Near where I grew up, along the North Shore of Chicago, there are amazing homes designed by everyone from David Adler to Frank Lloyd Wright. The residences in the area were built starting in the late 1800s, with construction peaking between 1910 and the late 1920s. Many of the homes located right along the lake on Sheridan Road are textbook examples of great European homes mixed in with the very first Prairie homes designed by Wright. In addition, there are also various contemporary designs, though not as numerous.

My parents would drive into Chicago, and we would occasionally travel along Sheridan Road to get there. I would be glued to the window watching these great homes.

Later, the 1973 Arab-Israeli war and ensuing Middle East oil embargo opened my eyes about America's dependence on foreign oil. I felt that designing energy-efficient buildings would help decrease our reliance on that volatile energy source.

Why and how did you decide on which school to attend for your architecture degree? What degree(s) do you possess?

› I applied to several schools but chose the University of Colorado. I wanted to attend a school that offered an architecture program but also

was not a very large university. The University of Colorado had a pre-architecture program and was not an overly large school.

At the time, I misunderstood the implications of a pre-architecture program, which means that the degree I would receive, a bachelor of environmental design, was not a professional degree and would require that I obtain a master of architecture to complete my studies. (My well-meaning career counselor in high school assured me that this was the same as either a bachelor of architecture or a bachelor of arts in architectural studies.)

I also chose Colorado because of its highly renowned solar architecture program. Located in Boulder, the university was a natural center of interest in solar design. The climate and location are nearly perfect for studying solar design, being up at 5,000 feet above sea level and having more than 300 sunny days a year. Boulder is known for its liberal thinking, which went along with alternative energy research.

For my graduate studies, I researched more on where to attend. Arizona State University (ASU) in Tempe, Arizona, was recognized internationally for its solar and energy-conscious architectural design. Along with the University of California at Berkeley and Massachusetts Institute of Technology, I felt that ASU was one of the best schools for this field of study in the country. I was provided a partial scholarship, which made the decision very simple. I enrolled at ASU and graduated in the master of architecture program with an emphasis in energy-conscious design.



Mid-Century Modern Addition, Glencoe, Illinois. Architect: Kipnis Architecture + Planning. PHOTOGRAPHER: WAYNE CABLE PHOTOGRAPHY, <http://selfmadephoto.com>.

What has been your greatest challenge as an architect/principal?

› Originally, my greatest challenge was convincing clients to let me push the envelope with what I want to do with “green” design. I would try to nudge them into going to a higher level. With the recent explosion of interest in green design, I now actually have the opposite problem. I have people coming to me with so many green ideas for their projects that I have to spend time prioritizing their goals and selecting the ones that are most appropriate for the project location and budget.

Another major challenge is to be constantly bringing in high-quality projects in a timely manner. I have been very fortunate to have had a nearly constant increased demand for our services, while rarely running slow periods or periods of too much work. I have also been able to obtain commissions that allow me to do quality design that generates positive publicity, which in turn provides me with the ability to bring in work of that caliber or higher. This is the kind of cycle that feeds upon itself in a positive manner.

What are your primary responsibilities and duties as an architect?

› My specific responsibilities are threefold. The client comes first and foremost. It is very important that I carefully listen to their requests and make sure we achieve them, even reading “between the lines.” I let them know that it is their project, but my name is also associated with it. As a result, there are certain design and technical standards that I want to make sure are achieved.

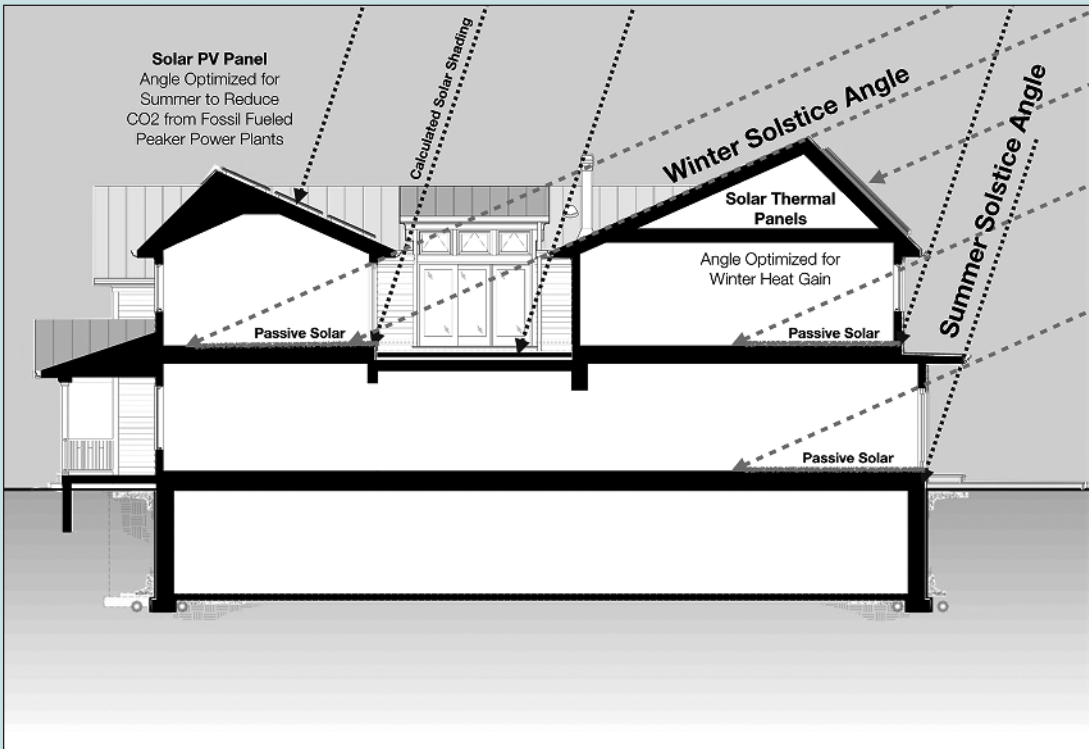
The next responsibility revolves around my office. I have to make sure we are properly compensated for the work we do, make sure the contracts are correctly set up, and be smart about how we market ourselves. Marketing is an ongoing commitment that requires constant attention to make sure we have new ongoing media material “in the pipeline.”

And, finally, I have significant responsibilities to the people in the office. They must feel that they are part of the team and that their input is important to me. I have them attend various “green” seminars or events to further their education. I also try to get them to sample a very wide range of experiences in the office, from computer-aided design (CAD) work, client meetings, and field administration to public presentations. It is mutually beneficial.



◀ Sturgeon Bay Green Vacation Home, Sturgeon Bay, Wisconsin. Kipnis Architecture + Planning. PHOTOGRAPHER: WAYNE CABLE PHOTOGRAPHY, <http://selfmadephoto.com>.

▼ LEED Platinum North Shore Home, Glencoe, Illinois. Architect: Kipnis Architecture + Planning. COMPUTER RENDERING: KIPNIS ARCHITECTURE + PLANNING.



Your firm is strongly committed to integrating excellence in design with environmental awareness. Can you provide more detail to this statement and describe how it is accomplished?

› What my firm attempts to do with as many projects as possible is to incorporate “green” principles at as many stages as possible. We try to do this in an integrated way, as opposed to “tacking on” green technologies and materials and as early as possible.

At the beginning of the project, I try to see what design decisions make the most sense in terms of “green” design and in response to the project’s specific goals. If there is a solution that I feel works to satisfy both, I pursue it in detail. There is usually a single overall theme that unifies a design. Finding it is really the challenge. If I can get that one big idea to solve the project’s key problem and make it work “green,” it usually can be done in an economical way and helps the client support it. To me, designing a green project is an opportunity to make the pure design even better and have more meaning. It should not be a burden to design green.

Where do you see the field of green architecture heading in the future?

› I believe that in the short term green design will be integrated into local and national codes on such a level that the term *green design* will disappear and become ubiquitous. Beyond that, however, there will be significant challenges as natural resources become scarce enough that it impacts people’s lives on a daily basis. The consequences of the disappearance of cheap oil are becoming more and more evident.

This is not a political problem that can be solved by drilling for more oil to the corners of the earth, but requires a fundamental change in how society

functions. Politics being what they are, this message will no doubt be twisted every which way, but in the end, the path away from a fossil-fuel-dependent society is critical for its very survival. Renewable energy and appropriately designed built environments are the only way to accomplish this. Because existing buildings use so much energy and generate such enormous amounts of CO₂ emissions, architects are in a unique position to lead this change by designing super-efficient homes and communities. The difficult aspect for this is to make people understand that in fact life influenced by cheap and abundant power will need to be scaled back. Hybrid Escalades are not the answer; they are the problem.

How did your education help you prepare for these challenges?

› By their very training, architects are able to think outside the box and look for solutions where others see only problems. “Celebrate the Problem,” we used to call it in school. A specific part of that training is the ability to look back at historical precedents to see how they could inform a current problem. I like to examine how homes functioned before cheap oil and see what can be gleaned from those time-tested designs and integrate them aesthetically into the twenty-first century.

Who or what experience has been a major influence on your career?

› As I mentioned, the single biggest influence in my career was the 1973 oil embargo and how I thought I could contribute to a solution to it. This event is what started my career in energy efficiency, which has grown into “green” design in all of its forms.



Steiner Electric Headquarters, Elk Grove Village, Illinois. Architect: Kipnis Architecture + Planning. COMPUTER RENDERING: KIPNIS ARCHITECTURE + PLANNING.

Professors Philip Tabb at the University of Colorado, and John Yellot and Jeffery Cook at Arizona State University influenced the way I practice environmental design by showing me the importance of integrating energy efficiency into architectural design and understanding where the historical roots of environmentally sensitive architectural design were derived from. Amory Lovins, who taught a summer school class at Colorado, made a huge impression on me relative to how architecture, energy, and national security can be interrelated.

I was also fortunate to have worked in two very good, though very different, firms. At Porter Pang Dearnorff and Weymiller in Mesa, Arizona, the design principal, Marley Porter, had a great outlook on how fun design should be. It was an infectious quality that spread through the office. The other partners were also very generous in sharing their skills. It was a great work environment.

At PHL of Chicago, it was much more production based and very serious. Once you were at the project manager level, you ran a project like it was your own firm. They really taught me how to run an office.

Creating a Framework for Collaboration

GRACE H. KIM, AIA

Principal and Founder

Schemata Workshop, Inc.

Seattle, Washington

Why and how did you become an architect?

› My path to architecture was not a deliberate one. As a high school senior, life beyond graduation was far from my mind. I listed three “areas of interest” on my college application, one of which was architecture. My guess is that the admissions officer chose alphabetically and I was assigned to architecture for freshman advising.

From my first day of classes, I really enjoyed the architectural courses and I never looked back. The problem solving and ability to shape the built environment was fascinating and challenging. And the idea of positively impacting the people who would occupy the buildings was a strong motivator.

Why and how did you decide on which school to attend for your architecture degree? What degree(s) do you possess?

› I have a bachelor of science in architectural studies and a bachelor of architecture from Washington State University—the only in-state school to which I applied. At the time, I did not know I wanted to study architecture, so it worked out great that I ended up starting in a five-year bachelor of architecture program. The program structure provided the fundamentals to put me on a level playing field with my classmates in terms of skills and knowledge by the end of the first semester.

After over a decade of practice, I decided to return to school to complete a post-professional master of architecture at the University of Washington. I chose this program because I was a working professional, managing a small practice, and needed a program that would be adaptable to my educational goals (research in a specific topic) as well as my work schedule.

Aqua Lair, Seattle, Washington. Architect: Schemata Workshop, Inc. PHOTOGRAPHER: SCHEMATA WORKSHOP, INC.



Cosmetology
Institute, Seattle,
Washington.
Architect: Schemata
Workshop, Inc.
PHOTOGRAPHER:
SCHEMATA
WORKSHOP, INC.



What has been your greatest challenge as an architect/principal?

› Maintaining balance in life and work.

Unfortunately, I am not always successful at this.

Within the studio, it means balancing the time to draw, manage, and obtain new projects. We try to achieve this balance by the flat structure of the office. As the principal, it is not healthy to control everything. Our employees have a lot of autonomy in creating the work, and they are privy to and accountable for the budgets of their projects as well as the office.

In my life, it means balancing work with time for my husband and daughter, friends, and family. All are important, and despite the fact that my husband is my business partner, we try to make a conscious effort not to spend all our time talking about work or the firm. While philanthropy and community service were of high priority a few years ago; nowadays my top priority is exploring the city and seeing the world through the eyes of my five-year-old daughter.

How is being a principal of Schemata Workshop different from being an intern at Skidmore, Owings, and Merrill?

› As an intern at Skidmore, Owings, and Merrill (SOM), I felt like a cog in a large machine. I did my job and understood that others were also doing their part to make sure the project was successfully completed, but I never had a sense of the greater picture, not just architecturally but also from a management standpoint.

As a principal of a small firm, I have a comprehensive view of both the business and practice of architecture. I also make sure that everyone else in the studio is aware of this as well. Open communication and a clear understanding of our business objectives ensure that we all satisfy the contractual requirements to our clients while helping the company make a profit, which ultimately translates to bonuses and profit sharing.

The other major difference is in the projects. At a large firm, you don't have the ability to influ-



Roanoke Residence, Seattle, Washington. Architect: Schemata Workshop, Inc. PHOTOGRAPHER: SCHEMATA WORKSHOP, INC.

ence the types of projects to pursue or the clients for whom you work. As a principal of Schemata Workshop, I am able to strategically select clients who share our values of sustainability, community, and livability.

How did you arrive at the name Schemata Workshop and how does that describe the philosophy of your company?

› My partner and I did not want the name of our newly incorporated firm to be our last names—meaning we did not want to be the “bosses” with our names on the door. Instead, we wanted to create a collegial studio environment, where everyone felt that they contributing as an integral member of our team.

A *schema* is a framework or outline. It describes the overarching ideals of the studio and our design approach—to focus the creative efforts of the entire design and construction team during the schematic design phase to create a strong conceptual framework that is then carried throughout the detailing

and construction of the project. It is also a psychology term used to describe the way people perceive and organize information—as architects, this is what we do. We paired the plural, *schemata*, with *workshop* to signify that it was a hands-on kind of place where serious work got done, but that it wasn’t a rigid corporate environment.

We are dedicated to a collaborative design process that provides innovative and client-specific design solutions. Schemata Workshop produces great design work, but as a secondary goal to client satisfaction.

As the first recipient of the Emerging Professionals Mentorship Award and the 2008 Young Architects Award, can you define “mentorship” and describe how an aspiring architect finds a suitable mentor?

› Mentoring is more about leadership than it is about satisfying Intern Development Program (IDP) requirements. A good mentor is a role model, giving others the courage and confidence to tackle a situation in a way that is appropriate for the individual.

Mentorship is not about being a seasoned professional imparting sage advice to someone their junior, but in fact, a continuum of learning throughout one's career. At any point, one should be both a mentor as well as the recipient of mentorship.

For this very reason, I started the “Laddership” mentoring program in Seattle. Laddership is a group-mentoring model where a licensed architect facilitates a group of 5–7 emerging professionals with differing levels of experience. As a group, they share their own experiences and insights in order to enable an individual seeking advice to make an informed decision that suits their particular situation.

Mentorship is also a bit like dating. You might be lucky to find a mentor easily and organically, or it may be hit-or-miss with formal mentoring programs. Your needs will evolve over time, so it is important to seek out multiple mentors throughout your career. Remember, mentors don't always have to be older than you.

When seeking a suitable mentor consider someone in your office, such as a supervisor. But be sure to seek out formal mentors outside your firm as well. This will help in the long run as your career develops within the office and the “politics” come into play. It may be difficult for a supervisor to advise you about a job change if they are motivated by keeping you on their team to complete a project.

Following are some avenues for finding a mentor:

- Ask your professors about colleagues or alumni who might be interested.
- Consider asking the principal of that firm with whom you interviewed and had a great conversation, but who had no available position to offer.
- Attend AIA or other professional organization functions and seek out the familiar faces.

- Ask a fellow young architect serving on a committee with you if they could recommend their supervisor or someone else from their firm who might be a good mentor.
- If you work in a large firm, you could possibly consider finding a mentor from another studio within the firm.
- Contact your state IDP coordinator and ask for help in locating a mentor.

What are your primary responsibilities and duties?

➤ *Vision:* Setting direction for the firm and helping the staff see their role in “steering the boat” toward that direction.

Mentorship: Leadership through actions.

Marketing: Strategically pursuing new projects and nurturing relationships with current and potential clients.

Design direction: Working with the project team to establish a strong design concept and provide critiques/reviews as the design progresses.

Technical oversight: Ensuring that codes are adhered to and documents satisfy permit and constructability requirements.

Client management: Guiding the client through decisions and helping them identify opportunities that add value to their project.

What is the most/least satisfying part of your job?

➤ Most satisfying is making a positive impact on people's lives through architecture. Least satisfying: expending countless hours on a Statement of Qualifications and an extensive public interview process only to receive a letter from the owner stating that the project was awarded to another firm but that we were a close second.



McDermott Place Apartments, Seattle, Washington. Architect: Schemata Workshop, Inc. PHOTOGRAPHER: DOUG SCOTT.

Who or what experience has been a major influence on your career?

› Donna Palicka, an interior designer at SOM, whom I worked with for eight months on the programming for General Motors Global Headquarters. From her, I learned the importance of building relationships and that, as a woman architect, I could be feminine and still maintain a professional presence.

Mark Simpson, AIA, and Jennie Sue Brown, FAIA, are two principals of Bumgardner, a Seattle architectural firm that has been in business for over 50 years. Both were instrumental in helping me develop the necessary skills that would eventually enable me to start my own architectural practice.

My husband, Mike Mariano, AIA, has played a critical role in my career development—first as a classmate and fellow intern in the profession, and

now as a business partner. Mike has supported me through difficult career decisions and has been patient with challenging work schedules.

And a major event that profoundly influenced my career was Masonry Camp, a weeklong design-build program sponsored by the International Masonry Institute. Spending a week with apprentice tradespeople and other young architects, I realized that the adversarial relationship between architect and contractor that is typically seen on jobsites could easily be avoided if all parties had a mutual respect for each other and an open line of communication. While I was accustomed to working collaboratively with engineers and allied disciplines, I adopted a collaborative attitude with contractors as well. This has resulted in great experiences during construction for all parties involved.

Making an Unrelated Degree Count

LYNSEY JANE GEMMELL SORRELL, AIA, LEED AP

Principal

Perimeter Architects

Chicago, Illinois

Why and how did you become an architect?

› My undergraduate studies were art history and psychology. My emphasis was architectural history and my exposure to the theory and history of the practice of architecture led me to consider how I could continue my interest in the built environment. I no longer wanted to write about other people's buildings but to be involved in the design of buildings. In addition, I wanted to teach, and with architecture the possibility is open to teach both during and after practice.

Why and how did you decide on which school to attend for your architecture degree? What degree(s) do you possess?

› I chose an accredited graduate program at a school with a good, international reputation located in a large metropolitan setting. My undergraduate degree is a master of arts (first class) and my graduate degree is a master of architecture.

After many years in another firm as project architect, you are now a principal in the firm Perimeter Architects. How did this transition occur and was it on your career path?

› After 10 years at my first firm, I was in upper middle management and heavily involved in marketing and business development efforts. Many of my day-to-day tasks were rather removed from the practice of architecture. I took a teach-



Lakeview Residence,
Chicago, Illinois. Architect:
Perimeter Architects.
PHOTOGRAPHER: MIKE
SCHWARTZ.

ing position at the Illinois Institute of Technology College of Architecture and balanced teaching and practice for a year. This gave me a greater connection to design and refreshed me. With the birth of my first child, I took two-year break from practice and taught undergraduate and graduate design studios. I missed building buildings and “real-world” challenges; I also feel a responsibility to young female architects to ensure that there are enough women mentors and role models working in the field, especially those balancing a young family with work.

I did not want to go back to working in a big firm. I wanted to have greater control over the process and the design outcomes. In a large firm, one becomes pigeonholed or specialized, and I wanted to return to doing everything and being involved in all phases and scales of issue. If I had not taken the teaching position, I am not sure I would have changed the path I was on. I was challenged and had reached a level of success at my previous firm, but I suspect if I had stayed another five years, I would have become dissatisfied. Building your own firm is exciting and nerve-racking, but I feel that

the past 15 years have been preparation for where I am now in my career.

As a principal, what are your primary responsibilities and duties?

› As a principal in a small firm, my responsibilities are finding new work, defining our business model, creating marketing and business development materials, and ensuring that my team have the resources and support they require. We work on design collectively and charrette design solutions as a team. I also coordinate the work of any and all consultants, oversee the technical content of the documents, develop office protocols and standards, safeguard client satisfaction, and maintain project and internal budgets and schedules. I manage our employees and mentor them as they are learning their craft.

What has been your greatest challenge as an architect thus far?

› I cannot identify a single greatest challenge, but learning to accomplish as much as possible in the time available without working enormous amounts of overtime is a challenge. I continue to try and



Tasty Trade Office,
Chicago, Illinois.
Architect: Perimeter
Architects. RENDERING:
PERIMETER ARCHITECTS.

keep in mind the difference between professional responsibility and the end goal of the task at hand rather than one's ultimate design ambitions.

What are your 5-year and 10-year career goals relative to architecture?

› As principals in a new firm, we are focusing on short- and medium-term goals. We have broken the next two years down into quarters and have business development goals for each quarter—external and internal goals. We have defined the sectors we want to pursue and are aggressively pursuing these markets through our network of previous clients. In 5 years we want to have grown from five to about seven people and have two or three big jobs per year to support smaller, more boutique pursuits and to do some competition work.

In 5 to 10 years I would like to go back to teaching, as I have had to suspend teaching at the College of Architecture at IIT in order to focus on building the new firm, and I miss the energy and challenge that teaching provides.

What do you feel when you see a project completed?

› No matter your role in a project, the opening of a building that you helped create and hearing that a client is thrilled with their space makes all the hard work and painful experiences of coordinating projects large and small worthwhile.

Who or what experience has been a major influence on your career?

› In my undergraduate studies, I had an art history professor, Professor Margaretta Lovell at the



Spec House 1, Chicago, Illinois. Architect: Perimeter Architects. PHOTOGRAPHER: ANA MIYARES.

University of California at Berkeley, who pressed me to talk about what I wanted to do in the future. She encouraged me not to be afraid of the mathematics and physics that I thought would be involved in architecture (this has proved to be correct) and exposed me to the three-year master of architecture program for nonrelevant degree holders.

Leading by Design

SEAN M. STADLER, AIA, LEED AP

Design Principal

WDG Architecture, PLLC

Washington, DC

Why did you become an architect?

› It is the only career I ever wanted as far back as I can remember. I think as early as third grade it was decided. The funny thing is that I did not know anyone who was an architect. Legos were definitely where it all started. I would spend every waking hour as a kid either drawing or building Legos, and I think everyone just told me from an early age that, wow, this kid is going to be an architect.

Why did you decide to choose Kent State University? What degree(s) do you possess?

› I have a bachelor of science and a bachelor of architecture, a NAAB-accredited professional de-

gree. Unfortunately, I had no help in understanding how to evaluate schools, and I had no money to just pick the best school out there. So, for me, Kent State was affordable, and the little understanding that I had was it had the best program for Ohio schools of architecture.

What are your primary responsibilities and duties as a design principal in your firm? Please describe a typical day.

› As one of the three design principals of the firm, I lead the vision/direction of our design efforts for my projects and mentor staff. As the design leadership for the firm, we also work to develop a design process for our projects that is understandable by the staff and our clients. We are responsible to set the clients' expectations of how we deliver a building from a concept to a built project.

Northwest One,
Washington, DC.
Architect: WDG
Architecture, PLLC.
RENDERING: WDG
ARCHITECTURE, PLLC.





National Harbor (Aloft National and Fleet Street Condominiums), National Harbor, Maryland. Architect: WDG Architecture, PLLC. PHOTOGRAPHER: © MAX MCKENZIE.

Raising the level of design in the office is not just about the particular project, but it is also about the image of the firm. This requires us to not only design great buildings but also promote the work we do. Photography, design drawings, project narratives, design award submissions, marketing brochures, and our website presence all speak about our design abilities. As design principals, we are responsible to make sure that all of this is consistent and meets the standards we set.

Additional duties include hiring, marketing, and bringing in new business and operational and financial decisions for the business.

I am not sure that any day is typical these days. I come into the office thinking I am going to accomplish one task, and then quickly something comes up that needs immediate attention, and by the time I get to what I had planned to do it is late in the afternoon. Prioritizing what has to get done during a day is the only way I can make sure that everything gets done.

In 2011, you were the recipient of the 2011 AIA Young Architects award; the jury noted “you are a unique individual of outstanding talent and clear commitment.” Can you describe the meaning of receiving this award and what does it mean to have outstanding talent?

➤ The meaning of the award is a personal confirmation that my peers recognize the energy and effort I have committed to my practice and the profession. I do not think it is an award that too many people are aware of or take notice of, but for me it was a milestone that I wanted to achieve. I constantly set goals for myself that keep me focused on being a better architect, husband, father, and human being. Setting a goal to be recognized as a Young Architect recipient was one of the goals I had. I valued my predecessors who had been recognized with this award and looked up to them as role models in the profession. They set high standards, and I never felt that I deserved to be in the same list as they were. This kept me focused on how I wanted to make contributions to my projects, my office, and the profession.

Talent is a difficult word to define in the realm of architecture. There are so many ways that an individual can be a leader in the profession. My path has always begun with a commitment to design excellence. Everything that I am involved with I feel has to meet up to a certain standard that I believe is acceptable. Sometimes I am my own worst critic.

During your career, you have been involved with the AIA at its many levels, including the Young Architects Forum (YAF) and Intern/Associates Committee. Why has this involvement been important to you? Is it important for an architect to be a leader?

› My involvement in the AIA has been an important part of my professional development, and I immediately got involved with the local chapter during my first year after graduation. It was amazing how many opportunities were available through the organization during the early stages of my career. My involvement provided me an opportunity to speak and work on tasks that interested me or concerned me about the profession. These were things that I would not have done in the office setting.

During those early years of my career, the ARE was just making the transition from the one-week paper exam to the computer-based exam. We were, in fact, the guinea pigs for how the exam is administered today. I believe that my involvement in the AIA helped to make the transition easier and better for interns.

My involvement progressed from putting together social activities to leading committees at the local and national levels of the Institute. It is here in leading that I found the most reward. The skills that I learned by leading committees soon became skills that I could use in the office to lead certain aspects of the practice. As I matured and was more responsible for our projects, the leadership skills



Verdian, Silver Spring, Maryland. Architect: WDG Architecture, PLLC. PHOTOGRAPHER: © MAX MCKENZIE.

carried over to interactions with our clients and with the community and agencies.

What has been your greatest challenge as an architect?

› I think the challenges change from year to year, but I definitely think that starting a family and raising children with a spouse that is also a professional has been the biggest challenge I have faced. There is a delicate balance between the time and effort I spend with my involvement in the office and the profession versus the time and effort I dedicate to my family. It is difficult not to drop any of the balls that are in the air.

What is the most/least satisfying part of being an architecture student?

› The least satisfying part of being an architecture student is that the curriculum is so demanding that architecture students spend too much time with architecture students and not enough time with the rest of the university. I know this is an age-old problem, but there is little time for architecture students to take art classes, business classes, or philosophy classes. These general studies could also help architects in their profession.

Who or what experience has been a major influence on your career?

› I had an opportunity to study abroad for a semester in Italy and Switzerland while in school. The en-

tire class did not take advantage of this, but for me it was the first time I was ever out of the country and at that point I had not even traveled very much within the States. The experience was overwhelmingly powerful for me to have a semester to emerge myself in another culture and society. It really opened my eyes to things that I could have never related to growing up in suburban Ohio. It was that experience that really helped me understand what “urban” meant. It also made me realize that I enjoyed urban living and the scale of urban architecture. These realizations are what guided me when pursuing my first jobs out of college and eventually my relocation to Washington. That experience continues to have a strong influence on my interest in the type of work that we pursue.

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