

Craftsmanship in Architecture

AIA Small Project Forum

PIA

Abstract

The brief articles and "tips" included in this Small Project Forum publication focus on Craftsmanship in Architecture. Authors weave personal accounts, advice, program details, outreach initiatives, and design ideas around the all-important concept, the revered quality, and the illusive goal of craftsmanship. Readers will undoubtedly note some striking similarities in issues. Do more of our colleagues need to be asking themselves how they might strive for craftsman-worthy products and designs? What are the obstacles and constraints, that impede craftsman-minded intentions?

However, as consistent as these common themes might be, analysis of the following articles reveals some interesting discrepancies found across the various authors' texts, discrepancies which lead to provocative questions: Is craftsmanship a dying ideal in need of rescue, or the immutable foundation upon which our entire profession will always be built? Might craftsmanship be something innate (i.e. natural to those who possess the "gift") or a skill one acquires only

through experience and practice? What is the connection between technological breakthroughs and precious moments of creative inspiration? Although important to consider, these questions do not demand an immediate response or resolution. Instead, the authors' various perspectives on these issues raise our awareness of the complexity surrounding Craftsmanship in Architecture.

These articles point out that craftsmanship is more than a buzzword, more than a feigning fad, and more than one person's memories. Craftsmanship is essential, evolving, and very, very subjective.

Craftsmanship

by Alfred Godfrey, AIA
Limbacher & Godfrey Architects
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Like most architects, we often allow ourselves the conceit that craftsmanship is everywhere in our projects—if not, why would we bother with architecture anyway? But in more reflective and private moods, we admit that all craftsmen are not created equal, and that special attention to certain details can

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Note from Incoming Chair

In our attempt to constantly improve the "Report", I am pleased to announce an additional column from "MASTERSPEC" for all issues to come. I hope you find this useful. MASTERSPEC invites questions to be addressed in future articles. (See article on page 8 for address and phone number.)

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be rewarding. This was the case with one recent project—a private library for a novelist. This example of a craftsmanship opportunity is described in detail below.

The charge was to design a classical building. References included Italian hilltop architecture as well as the Paul Crete work of the 1930's. The design had the usual touchstones of classicism, a strong sense of order and rhythm, symmetry all around, and a concern with proportion and grace. The windows were arched, and the cabinetry was terminated with a classical cap. But unlike most classicism that revels in its sense of luxury, we chose to downplay the project's affluent roots and to rely, instead, on an attitude of confident simplicity. So we punctuated the main space with four raw concrete arches spanning the 26 foot width. To be successful, the arches needed to belie their considerable weight. They needed to be graceful. Here was a case of needing a certain detail to pay off, and we gave it special attention.



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The basic tool, of course, was a clear drawing. The essential issues of radius and chamfer were indicated, and the extra steps of locating the tie rods and the form panels solidified our grip on the construction process. The end brackets, however, were a more delicate matter. Their shape was a collection of curves and steps we were uncomfortable leaving to form in the field. Here we provided a full-sized template from which a set of fiberglass molds were fabricated. This ensured that all of the brackets would be alike, and if we got one right, they would all be right.

During construction, we maintained an especially active presence in the field. While this included the usual review and inspection, we also used our time with the workers to reinforce our

vision for the finished product. This was especially important because the result needed to look like natural, raw concrete—in other words, not perfect. This can be a difficult discussion when the workers are proud craftsmen and are used to achieving perfection. When the forms were struck, we assured them that the minor variations in color and surface were not blemishes in our vision but were part of concrete's appeal. Very little was done to dress the concrete, and the result is just what we hoped for. The arches offer dramatic counterpoint—shocking and raw—to an otherwise highly refined interior.

Alfred Godfrey, AIA, is principal in the firm Limbacher & Godfrey Architects of Austin, Texas.

Craftsmanship In Drawing

by Cynthia K. Pozolo, AIA
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AIA Detroit

Pondering this report topic, *Craftsmanship in Architecture*, evoked a certain nostalgia for me. A longing to be part of an era gone by—as though craftsmanship were dead.

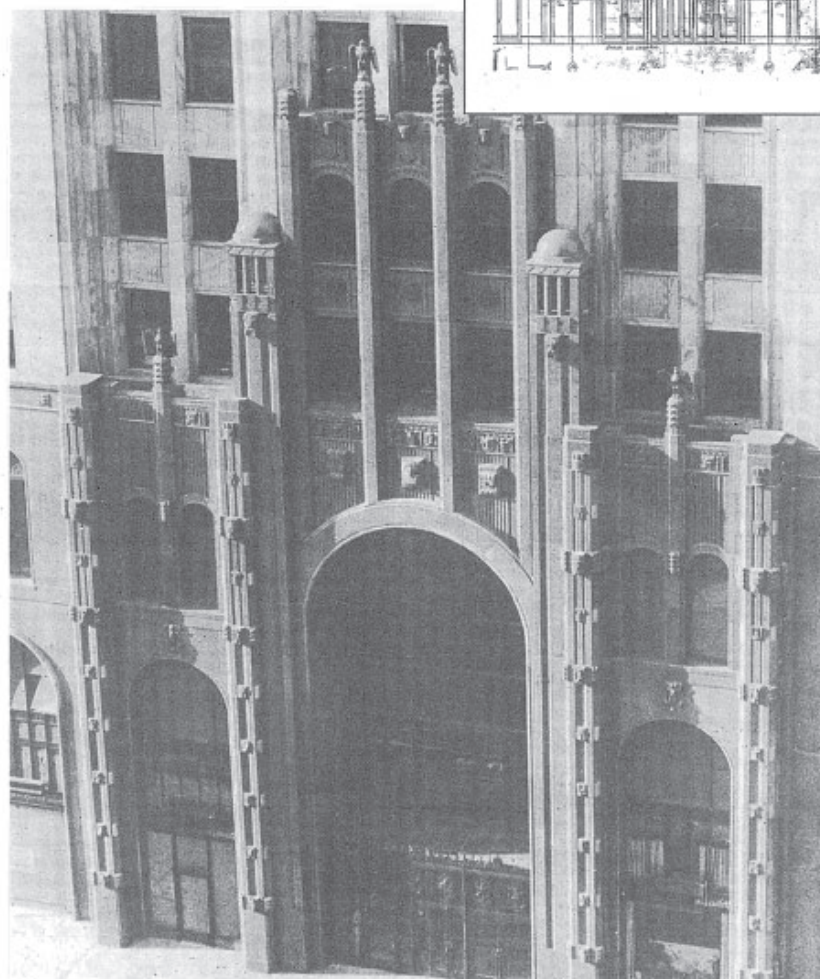
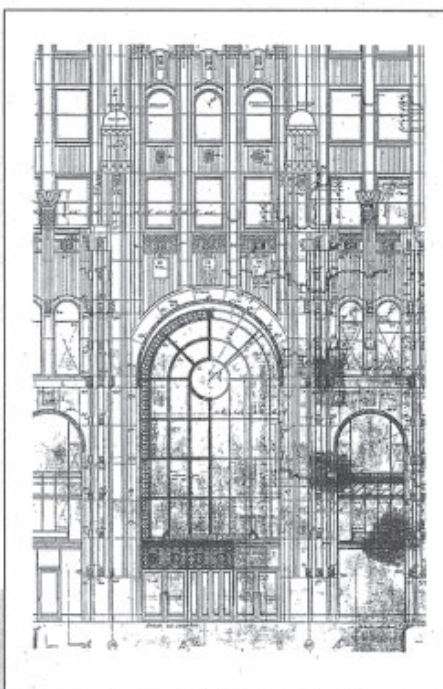
Throughout my career, I have been fortunate to experience the richness and heritage of craftsmanship in the evolution of twentieth century architecture. From the elaborate Art Deco office buildings of the 1920's to the "state-of-the-art" media centers of today, craftsmanship in architectural drawing has paralleled craftsmanship in architecture. Perhaps even guided it, or derailed it, depending on your perspective.

Working in a century-old firm has fostered my unique perspective. When renovation projects send me to the vault to retrieve those aromatic ink-on-linen drawings, the mystery and mastery of the past unfolds. With precision that rivals the (decimal-to-the-fourth-place) CAD drawings of today, they portray a simpler, less litigious society and profession. Straightforward notation and dimensioning are artistically combined to portray design intent. Imagine—design intent conveyed without key words, ConDoc, or CSI numbering! Even long-span truss and sawcut roof details look intriguingly elegant as one imagines the Model T's or Packards once assembled below them.

Though technical information was integral to those highly specialized industrial designs, the ornamentation on other building types was detailed quite differently. Intricate drawings, often with minimal notation, guided the artisans of the day. Imagine the

talent and training of the craftsmen who constructed Albert Kahn's Fisher Building in less than a year! Twenty-eight stories of limestone, marble, granite and bronze came together in 1928 to create "Detroit's biggest work of art." In less time than it might take to complete its cast-in-place concrete structure in today's world, a landmark was created.

Ink on Linen
Grand Boulevard entrance,
Fisher Building, 1927
by Albert Kahn Associates, Inc.



The Fisher Building, designed by architect Albert Kahn and completed in 1928, was acclaimed by the New York Architectural League as "a work of major importance." Kahn was awarded the League's Silver Medal for "a splendid solution of a commercial building, modern in character and admirable in detail."

What happened to those details? What happened to those artisans? As the industry moved toward "plastic lead" on mylar, then into pin-bar drafting, the details became more formal, more annotated, and less artistic. (Remember, it's all a matter of perspective!) Ink on mylar did lend itself to the hand-drawn poché that gives wood and brick some tactile appeal, and every now and then I reminisce over some of my drawings that someone else has pulled out of the vault. He or she, on the other hand, moves quickly to transfer that information onto CAD, to transform it into something "useful." Then, onto bigger and better things, like 3-D modeling or details and notation in triplicate, just to make sure it's obvious to the contractor.

So much for the drawings, but what about the artisans? They are at a premium for materials like terrazzo and tile setting. They are sometimes available for good plaster and stucco work. And, except for shortages due to the recent building boom in the area, they are generally available for masonry and finish carpentry. Just as the definition of the architect has been redefined, so has the definition of the craftsman. The skills required to survive in today's complex industry have spawned new requirements of today's contractors: a flexibility to work under piecemeal and value-engineered contracts; a necessity to maintain business consultants and attorneys; a requirement

to work from drawings full of repetition, versus clear delineation. These are just some comments from a contractor's perspective. Perhaps *their* opportunities to perform as artisans have also diminished.

How can we restore craftsmanship in architectural drawing? (This one will amuse my AKA colleagues...) We tested a CAD program intended to make hard-line CAD drawings look like hand drawings. Whether or not it was intended to create "lines that look like they were drawn by an architect who drank too much coffee," which it did so far the program has been a bust. Not that it wouldn't be useful for landscape work or furry furniture, it just does not do what we had hoped!

Neither did level symbology. Delineation was at its best for our purposes with a highly customized pen table, which has now been outlawed by the CAD standards group, in response to our clients' request that we comply with A/E industry standards.

So, grab those unassigned CAD levels, use sketch paper when appropriate, and listen to your contractor to find out what works and what doesn't. And, if you have any suggestions about how to make those marvelous machines do the tricks our predecessors did, please feel free to update all of us via the next report. After all, craftsmanship in computer drawings is our next evolutionary milestone. It just doesn't seem like we're there yet!

Publicizing

*by Hy Applebaum, AIA
R & A Architects
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It is a well known fact that many small project/small practice architects are extremely talented designers. As often is the case, their projects have tighter constraints due to unrealistic time and client demands. Many skilled architects will simplify a design in general to meet the budget, yet offer a very focused area of the building with quality design to balance the plainness. The clients are pleased because they feel the architect was creative and respected the constraints put upon him or her. How unfortunate for the architect that he or she does not get just praise and recognition for pulling the proverbial rabbit out of the hat, for being an articulate craftsman instead of giving in to mediocrity. Are you that architect?

In the last year I have given considerable thought and visualization to the concept of recognizing and rewarding such architects. I have developed a program that I plan to organize through the Microfilm Roundtable of the Houston AIA component. I will share my thoughts with you and perhaps you may want to develop a similar program to fit with your local chapter activities. The "Award of Merit for Craftsmanship" is what I call this program. It is not necessarily a competition, but it can be. The program recognizes unique design of a detail through the use of a building material, or awards are offered in various categories relating

to any aspect of building components. The program will be presented in an organized manner to the local press for purposes of publicity. It will give architects an opportunity to gain a distinguished certificate to display, and, most importantly, it will inform the public of the importance of the services of an architect.

I have discussed this with one of my former college professors with the hope that he would assist me in selecting a jury. I discussed it with the Houston AIA President and the Awards Committee Chairman both for their approval and to be sure that it would not interfere with or dilute their activities. The enthusiasm I received was absolutely overwhelming.

The Award of Merit for Craftsmanship program was recently announced, with entrants signed in by September, and submittals due November 1. The entry fee will be nominal. Jury activity should take place between Thanksgiving and early December. The award presentations will be made at the December meeting of the Roundtable. I expect the press to use our material in a January edition.

I would appreciate hearing from others who could utilize this program and how they will use it. What suggestions they might have, or what information is still unclear.

Hy Applebaum is Vice Chair of the SPF and past chair of the AIA Houston Microfirm Roundtable. He is the principal of R & A Architects and has been practicing for 35 years.

Craftsmanship

by Jeff Williams, AIA

*Jeffrey Charles Williams Architect, AIA
AIA Idaho*

This is a broad topic, as diverse as our practices. What is craftsmanship as it relates to our profession? Without detailing the myriad ways that craft plays into what we do, my take on craftsmanship in architecture is that it represents the ways in which we reinforce excellence. These reinforcements of excellence are our tools to help us produce the "well done job" leading to a great work of architecture, happy clients, profit, referrals, and jobs that are built within budget and time requirements.

Craft is the structure on which the art of architecture is built.

I love to draw, to draft, and to be completely immersed in the process of creating a building out of thin air. My reason for becoming a sole practitioner was to focus on the craft of architecture as it serves the art of architecture. Drawing a project is to me like writing a story. Detailing is similar to flushing out the characters that help to define the overall story you are telling. A building that adds to the cultural richness of our country is rare. While many of us are adept at the craft of architecture, there seem to be very few "story tellers" out there. Many of us focus exclusively on our tools and forget that they are just tools—they exist to serve inspiration.

The moment of creation has for many of us shrunk to a very compressed event.

Something that bothers me about my own work, and that of others, is that this one moment of creation is not allowed to deepen (for a variety of reasons—time, money, uncaring client, etc.) before it is elaborately elaborated, offering a kind of verbose banality. In a way, the craft starts driving what's left of the art. The craft tries to become the art. One thing that history has shown us is that when craft serves art, cultural miracles can occur; but craft without inspiration is mostly embarrassing, especially with a few years distance to add perspective.

Let us not put these incredible tools to waste. I was pulled into this profession and into this chair I am sitting in by those great "story tellers" of modern architecture. We may not all have monumentally important stories to tell, but we do have stories, and their telling is our uniqueness, or, as Louis Kahn would say, our "singularity."

At the national AIA convention in San Francisco, I attended one seminar where another sole practitioner, David Salmela, had presented a project for which he had won a national honor award. This small project is a "story" of lyrical beauty, crafted with loving care.

In the final analysis, all the work we do is built around those short moments of creative thought at the beginning of a project. From the construction drawings to the marketing, the real defining moment is the conception, and if we put all we can into those few short moments of creation, all of the rest of what we do becomes easier and infinitely more rewarding.

Creativity and Craftsmanship in Modeling

by Edward A. Kundla, AIA
AIA Middle Tennessee

It can be said that at the heart of architecture is the idea that we, as architects and designers, are really craftsmen. In medieval times, the master builder (i.e. architect) came from the craft guilds. His skills as a craftsman required manual dexterity and the ability to turn two-dimensional ideas on paper or thoughts in his imagination into three-dimensional realities of brick and mortar. Our manual skills as master builders have diminished due to the complexity and specialization of construction since medieval times (and the advent of computers and technology), but there is a way to keep those skills alive. One way of expressing our craftsmen roots is through model making.

We all wish we worked with clients whose lengthy schedules and deep pockets allowed us to create and exemplify—in balsa, glue, and chipboard—a collaborative 3-D vision of the project. To that end, if you find such a client, here are a few techniques to make your model worth the owner's time and money.

The following inexpensive modeling techniques depict landscape and ground/surface textures:

1. For different ground textures, coat your base with a thin layer of glue and cover it with sand, baking powder, or sawdust. Spray paint the sand green for grass; leave the baking powder white for snow, and use the sawdust to simulate a forest trail of wood chips.
2. Use thin opaque blue plastic sheets for rivers, lakes, and detention ponds. Paint with a gloss blue/green paint for depth, or paint with acrylic gloss varnish for a rippling effect.
3. For underwater effects, fill a container with clear hair gel and suspend colored bits of paper and fabric. It really looks like an aquarium!
4. Use black, green, or red peppercorns for small-scale shrubs up against a house model to add color as well as depth.

We can probably all remember when we first wanted to become architects. We hearken back to our craftsmen roots as children when we constructed structures from cardboard boxes or tents from two dining room chairs and an old blanket. In time, we moved on to wooden blocks, then Lincoln Logs, Erector Sets, and Legos. A wooden birdhouse might have been next.

As children, we used our imaginations all the time to make models of spaceships to send to the moon or a house to play in for hours on end. As an exercise to see if today's computer-savvy students would exhibit

old-fashioned, hands-on creativity, I conducted a modeling competition. This competition is the culmination of a curriculum based on the book *Architutelage* that I am currently writing. The students were asked to model building types found on a typical town square and indicate the function of the building through its form and without the use of signs. They overwhelmingly proved their creativity, as well as budding craftsmen abilities to construct quality models. Some of their choices for finishes and textures were inventive and may help you when building your next presentation or study model.

1. One student used clothespins as fence posts to surround his model townhouse. This very domestic shape was a fitting choice.
2. Another student used S-shaped Styrofoam peanuts as pilasters for her bakery model.
3. Lastly, for the model of a garden/hardware store, one student covered the exterior with cut pieces of sandpaper of different grades. It gave a realistic impression of rough cut stone or ashlar masonry.

Go ahead! In honor of your master builder heritage, try to use some of these inexpensive and imaginative techniques the next time you're tasked to build a model, and become a true craftsman again.

The Art of Craftsmanship

by Donald Wardlaw, AIA
AIA Oakland

One way to think of craftsmanship is to imagine a craftsman at work. I see: attention to detail; deep knowledge of craft; patience; sensitivity to materials; respect for tools; and, oddly, compulsive behavior—sometimes called perfectionism. This image is a romantic one. Indeed, I think this concept is rooted in the Arts and Crafts Movement, a romantic theory of architecture and design. So on one level craftsmanship is an individual effort, at times an heroic effort.

The problem I face as an architect is that I want my built projects to be characterized by high quality craftsmanship, but I have limited influence over those who will be responsible for the final assembly of materials. That is, those who are crafting and assembling materials are not working for me and are not people of my choosing.

Drawing can prescriptively influence craftsmanship to a degree. I can prescribe that materials be assembled in a particular, thoughtful, functional, interesting, and craftsman-like way. I can prescribe certain finish qualities. I can even prescribe that the mechanics have certain qualifications or certifications, but I can't prescribe caring and sensitivity. I can't prescribe compulsive behavior. I can't prescribe craftsmanship.

As I see it, craftsmanship is part skill and part attitude. I could just ignore this and hope for the best, but my objective is to ensure an outcome if I can. If I then accept the challenge, I must confront

the question as to whether I can have a meaningful, positive effect on attitude. If I suppose that I can, craftsmanship then becomes not just an individual matter, but a matter of teamwork and some leadership on my part.

In fact, I do believe that teamwork is an important element necessary for ensuring craftsmanship at the level of individual effort, and I think I have a responsibility to nurture an effective team identity. That would be one where winning or success is defined in part by the quality of the work. It would be one where all participants share in the accomplishment.

One natural connection between those who design buildings and those who assemble them lies in the use of hands. Skilled hands. Further, there is in both cases a close connection between hand and mind. Mind instructs, hands act and report back, mind adjusts. Think of the process of drawing (with lead or mouse). It can be done haphazardly, or carefully.

I presume that just as I notice the care with which a finish carpenter works, the finish carpenter notices the care with which I produce my drawings. If my drawings are sloppy, inconsistent, and untrustworthy, I will not have much leverage to persuade others to exercise care in their work.

Although I have done all my work on computer for a few years now, I am creaky enough to have labored 10 or 15 years over a drafting table. In those days, an architect could step up to the table and draw. Apprentices were guided not only in the craft of building, but also in the craft of communicating with pencil and paper. I learned that builders paid more attention to drawings that

were carefully prepared, and when builders paid attention, they built what was drawn.

At the end of this article, is a detail drawn in Minicad from one of my projects. Part of it originated in an exterior elevation prepared during the design stage. I include it to illustrate how I express my concern for craftsmanship on my end. For example, no line is drawn that does not represent something in particular. Builders will sense that what I've drawn, I've drawn for a reason. It is a basis for their trust in my work and essential in having them build what I instruct.

Line weight is chosen for clarity. Here the computer drawing conveys more visual information than a pencil drawing would, but the principle is the same. Also, shading is used to identify some materials in a way that assists in a more direct apprehension of what is depicted. Shading and line weight are used to "make it read," to use an archaic phrase.

Text is arranged neatly so as not to cause clutter that would interfere with the clarity of the graphic image. In pencil work I learned to group various note blocks and align their left edges. And rather than have leader lines occur randomly, they spring either from the first word (left side) or last word (right side of a note). It is not only visually near, it prevents confusion over where notes begin and end.

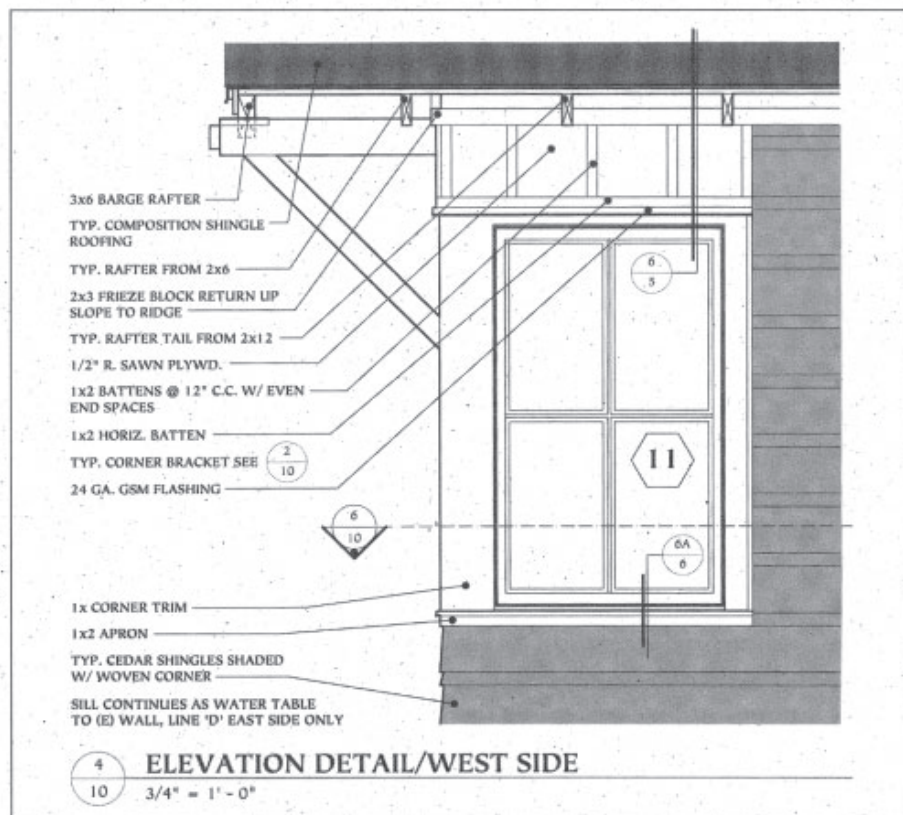
All of this would be too tedious if it were not a matter of habit. Some things like the neat arrangement of text are much easier and faster on the computer. For me, in fact, this detail is created in substantially less time than I would require to do it in pencil.

This is only my way, not the only way. But imagine the thought stream of a carpenter, "... which way is the grain running, where is the balance point of this hammer, how much pressure should I apply to this chisel, how long is 5-5/16...?" There is tedium in these details, particularly in the recounting. But there is also a basis for understanding, typically unspoken, between myself and those who work with their hands to put things together, who either leave a mark of craftsmanship or not.

So aside from the joy of craftsmanship that I feel when I "draw," there is another higher purpose: I use my drawings to set the tone for a job, to show clearly that I value craftsmanship, that I, too, am a craftsman. I use them to convey that craftsmanship is a part of the game plan.

I never have to state this. My drawings by themselves communicate whether or not I care about what I am doing. By themselves, they communicate whether the work at hand is a serious matter. They convey whether or not I have mastery not only of my craft, but also of the project.

If attitude is an issue, human nature must be taken into account. The antithesis of craftsmanship, the easy way, must be considered. I note that people who are capable of fine work may be tempted by the easy way, but generally they do not want to be the careless one. If a standard of good work and caring is set, pride advances project quality. Even the natural cultural tensions sometimes seen between architect and builder can become a beneficial contest. If a builder wants my respect, all he or she needs to do is show the same seriousness, professionalism, and concern for quality that I do. Better still would be if the builder would challenge me by the quality of his or her work.



A guitarist I like, John McLaughlin, once said something like "we're all mad." I like his form of madness. It has nothing to do with irresponsibility or pathology. He was, I think, referring to the loss of self in the creative act, which is not unlike the state of mind I associate with an act of craftsmanship. I find this basic identification with what is being done in the work of a carpenter planing wood, and myself in creating diagrams to describe the work. I see it in all serious and creative people.

If there is a madness in my method, there is also a method in my madness. There are subtle forces at play when an architect considers leadership skills to be a factor in project quality or the level of craftsmanship in the work. I have found that the manner in which I present my work affects the work of others. The art of craftsmanship is entwined in the craftsmanship of my art.

Book Review: "The Architecture of Edwin Lundie"

Author: Dale Mulfinger, AIA
Review by: Robert Gerloff
AIA Minneapolis

Recommended Reading:

Edwin Lundie is perhaps the best known of Minnesota's many unknown architects. But with the long-awaited publication of Dale Mulfinger's monograph *The Architecture of Edwin Lundie* (Minnesota Historical Society Press) the work of this uniquely talented Minnesota architect is out of the shadows of anonymity.

Oddly enough, the state-wide reputation of this largely residential architect rested primarily on two of his most anomalous buildings—the Minnesota Landscape Arboretum and Lusten Resort, the only two buildings he

designed open to the public. While the Arboretum and Lusten are delightful, "Mister Lundie" (as he is known) reserved his greatest artistry for single family residences, most notable in two genres: the large country house and the northwoods cabin.

Mulfinger's book contains plans, text, and gorgeous photographs (many by Peter Kerze) describing such Lundie masterpieces as the Driscoll House (Sunfish Lake, 1930–37), the little-known Slade House (North Shore, 1940), and the Clifford Cabin (North Shore 1947–49).

Each project is an essay in architectural craftsmanship. Lundie believed in "total design" and often designed the lighting fixtures and even the hardware for his projects. In the Slade House for example, "each room displays a different wild game theme, such as pheasant, deer, or trout on the door hinges. Latches, although not exhibiting figurative motifs, also varied from room to room".

Personally, I find Lundie's more modest single-family designs the most inspiring. His Spink House (1937–38), for example, is a tiny, obviously low-budget five-room Cape Code in Saint Paul. Yet Lundie found ways to introduce character and charm; he overscaled the chimney, added a tiny window next to a child's pillow, and made the front door magically wide and low. To Edwin Lundie, Architecture clearly flowed from ideas, not money.

No one ever confused Lundie with the white-walled Modernists who constituted the avant-garde of his day. Lundie's designs were firmly planted within the architectural tradition often dismissed as "Period Revivalism" a style distinguished by historical references and rooted in recognizable styles. As historian David Gebhard writes in his introduction, the goal of Period

Revivalist architects was not to shock the bourgeoisie, like their Bauhaus-inspired colleagues, but to design projects suffused with "charm, romance, atmosphere, and personality."

Gebhard concludes that "there is an overriding quality present in his buildings, however, which sets many of them apart from the norm of these years." This quality Gebhard alludes to The Architecture of Edwin Lundie makes clear: Lundie's design talent transcended style and genre, setting a standard of quality and craftsmanship perhaps unmatched since.

Lundie's work, though historical, is anything but dated. Architects throughout the nation have much to learn from the work of this quite and unassuming Minnesotan.

Robert Gerloff is principal of Robert Gerloff Residential Architects in Minneapolis.

The Ultimate in Craftmanship

*by Rosemary McMonigal, AIA
AIA Minneapolis*

For the ultimate in craftsmanship, I recommend a visit to the Gamble House in Pasadena, California.

In the book *Gamble House*, by Edward R. Bosley, he says, "The Gamble House represents an ideal within the architecture of the American Arts and Crafts—a noble convergence of time, place, philosophy and art which endures as a paradigm for the study of the movement. Designed by architects Greene & Greene in 1907 and constructed in 1908 it exemplifies the highest levels of design talent and craftsmanship. The very best materials, judgement and care were lovingly focused on this house, and it continues to exert a profound influence on those who experience it."

The house became a California State Historic Landmark in 1974, and was designated a National Historic Landmark by the United States Department of the Interior in 1978. A permanent exhibition and collection of Greene & Greene furnishings and decorative arts commissioned for the Gable House and other structures is housed in nearby Henry E. Huntington Library, Art Collections and Botanical Gardens, San Marino. The Greene & Greene Library, adjacent to the exhibition, is an archive resource staffed by the Gable House Docent Council. Together, they constitute The Greene & Greene Center for the Study of the Arts and Crafts Movement in America—a joint effort of the Gamble House, University of Southern California, and the Huntington Library.

Mastering Your Specifications

Welcome to "Mastering Your Specifications", a new feature column, written by staff members of ARCOM, publishers of MASTERSPEC® for the AIA. ARCOM's staff includes 43 master specification writers, researchers, editors, software developers, customer and technical support personnel as well as nine consulting specwriters who develop and support MASTERSPEC.

To inaugurate this column, let's review specification development tools now available for small projects, which are defined by AIA as those that are modest in size, scope, and complexity and brief in duration. Future columns will cover topics, such as:

- "When and how to use proprietary specifications."
- "Do I need copies of all the standards that I reference in my specs?"

- "Writing specifications for small remodeling and repair projects."

We encourage you to comment on these topics as well as to send in your suggested topics.

At the 1992 AIA Convention, a resolution was passed to produce documents to meet the needs of those involved in small projects. To meet this objective, ARCOM developed MASTERSPEC SMALL PROJECT™ specifications. Intended for use with AIA Small Projects Documents A105/A205 and B155, MASTERSPEC SMALL PROJECT consists of over 165 short-form specifications that cover a variety of construction topics in Division 1 through 16 and follow CSI's specification guidelines. Initially released in early 1997, MASTERSPEC SMALL PROJECT has proven to be a very popular system for residential, light commercial, renovation, tenant improvement, facilities management, and design-build projects.

The new 1998 edition of SMALL PROJECT includes new sections and approximately 80 totally revised or significantly expanded sections. Also, included free with the 1998 edition is the MASTERWORKS™ specification production software—a \$300 value. MASTERWORKS operates seamlessly with your favorite word processor and automates most of the tedious production and editing tasks. With a simple mouse click, you can select, delete, or edit paragraphs and specification options. You can also format, spell check, search and replace strings of text, generate a table of contents,

customize headers and footers, and more—do these tasks across multiple documents. You can also easily convert your specifications into outline specs, or into sheet specs and drawings notes that can be integrated with your CAD system.

To quote Lisa Konie Stacholy, AIA, of LKS Architects, Inc., "MASTERSPEC SMALL PROJECT is so easy to use! A firm can recoup the system's cost much quicker than they can ever anticipate. SMALL PROJECT has cut my specification production time by two-thirds! Spec production has never been so easy."

For more information on MASTERSPEC SMALL PROJECT Specifications, call 800-424-5080. The specification database (reference binder and CD-ROM) comes with a free copy of MASTERWORKS for \$495. Existing SMALL PROJECT licensed users may purchase the 1998 edition for \$245. Mention this article and receive a \$50 discount off your SMALL PROJECT purchase.

Please use this column as your specification resource. Have a specification-related question for our specification writers? A product-specific question for our information specialist? A software-related question for our software developers? We will answer your questions in our next column.

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Tips and Techniques

Crafting Craftsmanship

by Scott Hale, AIA

and Lisa Stacholy, AIA

Decatur and Tucker, Georgia

Is there a profession better suited to appreciate craftsmanship than architecture? Typically, when craftsmanship is discussed, the conversation begins nostalgically, with an appreciative up-beat tone (mostly in reference to historic architecture) then quickly degrades to bemoan the condition of craftsmanship (and lack thereof) today. Does it *have* to be this way? We would like to think that there is still some hope for a well-crafted built environment.

How can we, as architects, positively influence the builders or craftspeople? The one obvious quality control we do have is through our drawings and specifications. Although this does set a *minimum* standard for crafting the project, the human "caring" nerve must somehow be touched if a higher-than-average result is to be achieved. In many cases, generations of family pride are what fuels the fire deep within a good craftsman to create near perfection. What about the craftsman without a family tradition? Or how can family pride be reinvested? All craftsmen need additional positive (external) reinforcement. Additionally, we try to hold ourselves to the same high standards to which we hold our craftspeople. To attempt to achieve that, we've developed a small "tool box" for dealing with the aspirations of our architecture, and although we can't guarantee that our tool box will work for you, the concepts may help re-inform how we all can *Craft the Craftsman*.

Because architectural design is our business, it is the responsibility (in the broadest sense, not necessarily the legal sense) to maintain the focus as the "master builder" of all our projects. Conceptually, we bring the tools "dare" and "union" with us to each project. We view these as tools to better craftsmanship in the same way that we see two sides of the same piece of paper—inseparable.

In essence, "dare" (*i.e., we dare you*) are the challenges created by the project and issued by either the architect or the craftsman. To the architect, it is the desire to push the limits of good design, and to the craftsman, it is the desire to accomplish the construction to create something beyond the original concept. On the other side of the paper, "union" (*i.e., let's do this together*) is the communication necessary by all parties (especially between architect and craftsman) to execute the project to higher levels, producing results that surpass expectations.

So why not go out of our way to throw down a few design challenges? Foster and maintain the sense of team? Produce a project that exceeds our clients' (and our own) expectations? Unfortunately, present day reality is often driven by financial considerations, requiring faster turn around of projects from schematics to construction documents. When the deadlines draw near, it is all too easy to choose the simple "safe bet" detail that may have ho-hum, yet predictable, results. This is not to say that we have to totally blow the budget, but a few "spicy" details or familiar materials used in unfamiliar ways have the potential to keep a good craftsman's attention and interest throughout the execution of the project. These details

might also keep our attention keenly focused on the realm of possibilities before us in the project.

Craftsmanship in Architecture

by *James L. Donham, AIA*
AIA Wyoming

1. The craftsmanship expected by the owner and the architect on a project should be conveyed early on to the contractor. The architect can begin discussions of craftsmanship at the pre-bid conference so that all prospective bidders will know that craftsmanship is an important issue. The craftsmanship discussions should continue at the pre-construction conference after a contractor has been selected for the project.
2. The key to quality on most projects will be the contractor's project superintendent. The architect should continue to discuss craftsmanship with the superintendent at important milestones during construction. The architect and the superintendent should make sure that the subcontractors working on the project understand the quality and craftsmanship issues.
3. Don't rely solely on the drawings and specifications to get your point across with regard to craftsmanship. Talk about craftsmanship at every opportunity possible to personally convey your thoughts and concerns.
4. Even simple details can show care and craftsmanship, but a simple detail that is done poorly will stand out like a sore thumb. When you see a detail that has been nicely completed on the project, comment and compliment. The contractor and workman will appreciate the thoughtfulness.

Opportunities

by *Mark L. Robin, AIA*
AIA Middle Tennessee

The following tip came as a result of a conversation with another sole practitioner, Michael Murdock, AIA.

What's especially rewarding about working as a sole practitioner or working on small projects? The opportunity for craftsmanship. The time and effort necessary for special details are more likely to be available in the small project environment. A small project can be one of craftsmanship with a few special details that define the entire project.

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If you would like to report on issues relevant to the Small Project Forum from your area on a regular basis, we invite you to join our network of Local Advisors.

*Note: The previous SPF Report, "Convention Report" was mistakenly marked Report 14.