What other organizations are you a member of and why?
I'm a member of the Timber Framers Guild. They did couple of projects in KY that I helped with, mostly as the on-site coordinator and number one gofer. I'm in no way a timber framer but I do admire the skilled work they do and the good works they accomplish for communities and for education. So I'm glad to pay my dues to support them. Maybe I can help again on a project sweeping up behind these skilled folks.

Favorite aspect of working in or with the trades?
Tell is a little about your life away from work (family, hobbies, etc.)?
I'm married to Dara Carlisle and now we live in rural Owen County, KY.
I like to keep up the grounds around the house. I enjoy mundane tasks like getting the firewood up and ready for use in the winter, clearing out old wire fence from our wooded areas and helping Dara with the gardens. I walk regularly for exercise and supplement that with bicycle riding in warmer months.

PTNnews is a benefit of membership in the Preservation Trades Network. It is our goal to publish this newsletter four times a year. In the upcoming year, each issue will feature regular columns like The New Book Review and Member Spotlight. If you would like to contribute to future issues, please contact Dave Mertz at dmertz@belmontcollege.edu with your story. Please submit all potential articles in Microsoft Word with pictures as separate files in high resolution jpeg. Once we establish the newsletter with consistency, our goal is to begin selling advertising to support the cost of the publication. Enjoy!

At the 1995 conference of the Association of Preservation Technology (APT) in Washington, D.C., a group of interested craftspeople, educators, and preservation specialists met in an ad hoc roundtable meeting to discuss the state of the preservation trades. Many were concerned that the tradespeople who for many years were an integral part of the APT community were being left behind. I can remember someone standing up and saying that "we didn’t need a $50 per person black tie ball...what we needed was a keg of beer and mud volleyball.”

From that initial meeting, the overwhelming consensus of those attending sparked the creation of an APT Task Force to address the perception that the preservation trades contractors were not adequately recognized or acknowledged in the preservation industry. A working group was formed and held meetings throughout the remainder of 1995 and through 1996. From those meetings, the International Preservation Trades Workshop (IPTW) and the Preservation Trades Network (PTN) were formed.

The first gathering of the preservation trades occurred in Frederick, MD in 1997 and was a huge success. The idea that tradespeople could share their knowledge through a new kind of conference was novel. Gone were the “slide shows” of the 80’s and in were the hands-on demonstrations and direct one-on-one interaction that has become the hallmark of every IPTW since.


The 2001 IPTW in Brooklyn was scheduled at Floyd Bennett Field soon after the tragedy of September 11, 2001. There were discussions about cancelling the event, but it was decided by event organizers to move forward due to large part to a commitment to build the “Ecology Camp Shelter.” While attendance was low compared to previous IPTWs, the feeling of camaraderie reaffirmed the decision to hold the event.

With education as a key component of PTN’s mission, at the Mobile IPTW in 2003 efforts were undertaken to begin planning for the first of what would be many International Trades Education Symposiums (ITES). Held the following year at Belmont College in St. Clairsville with support from the...
The Preservation Trades Network Presents the 20th Annual International Preservation Trades Workshop on September 9-11, 2016, at Clermont Farm, Berryville, Virginia.

Clermont Farm is a 360-acre 18th century plantation surveyed out of the Fairfax Proprietary in 1750 by George Washington in the Northern Shenandoah Valley near Winchester, Virginia, given to the Virginia Department of Historic Resources (DHR) in 2004, and used as a research and training site in agriculture, history, and historic preservation. It is funded and managed by The Clermont Foundation in partnership with DHR. It is a working cattle and sheep farm, co-managed with Virginia Tech, and archaeology and cultural landscape research are conducted in partnership with James Madison University and the University of Virginia. Clermont provides a lab farm for the Clarke County Public Schools. Its 18th and 19th century buildings are undergoing stabilization and preservation. Studies on the social and economic history of Clermont, and a very detailed Historic Structure Report, are available for download from the website: www.clermontfarm.org. Clermont is open by appointment to researchers, teachers, and students; it is only open to the public for specific scheduled events.

The 2016 IPTW will be held on the grounds of Clermont Farm, with events being held in the main barn, tents around the property, and the springhouse. There are tentatively scheduled pre-conference workshops, focusing on repair of the Spring House. On Saturday night, the yearly dinner and auction will be held to benefit the PTN Misia Leonard Scholarship Fund.

This year the IPTW will be held in conjunction with the National Barn Alliance, which is planning a barn tour on Friday, as well as a track of speakers and demonstrations focused on these historic buildings.

The International Preservation Trades Workshop is the only annual event in North America which brings the foremost practitioners of the traditional trades together in a single event, dedicated to sharing the skills and knowledge of all the trades employed in the conservation of the built environment. Since 1997, masters, timber framers, carpenters, painters, roofers, plasterers, metal workers, and practitioners of other traditional trades from more than a dozen countries have come together to share their knowledge and demonstrate their skills. Every IPTW draws a diverse audience of tradespeople, architects, preservationists, students and home owners, and offers unique learning opportunities for people of all ages, skill levels and interests.

Misia Leonard Scholarship Available

PTN is pleased to begin accepting applications for the first annual Misia Leonard Scholarships. Each scholarship recipient will have their costs associated with attending the IPTW in Berryville paid up to $1000. This includes their conference fee, lodging and travel costs. Applicants need to send a letter to PTN President, Ian Stewart (at the return address on this newsletter), explaining the reason they would like to attend the IPTW and include their contact information. They will also have to show proof that they are eligible for the scholarship based on one of the three criteria listed below. Once the awards are made, recipients will be notified by mail or email and given a special code by which they can register for the conference. Lodging, travel and meal costs (outside the IPTW) will be handled through reimbursement after the conference ends. Each award winner will be required to write a few paragraphs about their experience to be published in a future PTNnews.

To be eligible for the scholarship, you must either:

A. enrolled in or recently graduated from a recognized historic preservation or preservation trades program at a high school, college, university or technical school (include a photocopy of Fall or Spring schedule) or a high school student who is contemplating a career in the trades (letter from High School teacher or guidance counselor); or
B. enrolled in an official apprenticeship program (include a copy of your official apprenticeship agreement); or
C. employed by a PTN member’s firm for less than one year (include a letter from the company owner on company letterhead stating the date you started employment).

A scholarship committee consisting of the PTN President, Education Committee Chairman and the PTN Treasurer will select the winners from the applications received. Applications are due by June 30, 2016. It is PTN’s intention to select the five winners by mid-July so that they have time to register and make plans to attend the conference.

Field Documentation for Project Planning

The National Center for Preservation Technology and Training (NCPTT), the Friends of NCPTT, the Historic Preservation Training Center (HPTC), Heritage Documentation Programs, and the Preservation Trades Network will offer a three-day workshop on field documentation and the methods needed for project planning. Experts will work with participants to increase their understanding of various types of documentation and what methods are best utilized for field documentation to assist in project planning. Hands on training will be provided in field sketching, photography, building measurement, and documenting existing conditions.

The workshop will be held at Clermont Farm in Berryville, Virginia. Clermont Farm is a 360-acre research and training site in history, historic preservation, and agriculture, owned by the Department of Historic Resources of the Commonwealth of Virginia. The farm and the foundation were a gift to the people of Virginia by Elizabeth Rust Williams in 2004. The main study of the workshop will be the Spring House that is scheduled for stabilization work during the International Preservation Trades Workshop in September.

Learning Objectives

At the end of the training the learner will be able to:

1. Differentiate which type of documentation is appropriate for various project types.
2. Explain the different methods, purposes and uses of Field sketches.
3. Create field sketches of a small building and document existing conditions through visual and written notation.
4. Utilize measuring devises, pencil and paper to capture visual information to produce architectural field sketches.
5. Understand the basics of photography, equipment needs, and the types of photos needed for project planning and documentation.

Field Documentation for Project Planning

The workshop will be held at Clermont Farm in Berryville, Virginia. Clermont Farm is a 360-acre research and training site in history, historic preservation, and agriculture, owned by the Department of Historic Resources of the Commonwealth of Virginia. The farm and the foundation were a gift to the people of Virginia by Elizabeth Rust Williams in 2004. The main study of the workshop will be the Spring House that is scheduled for stabilization work during the International Preservation Trades Workshop in September.

For more information contact Sarah Jackson at the National Center for Preservation Technology and Training at sarah_m_jackson@nps.gov or phone 318-356-7444.

Advertise in PTNnews

Are you interested in supporting PTNnews? We have begun to sell advertising to help support the publication of this newsletter. A full page ad will cost $100, half page will cost $60, a quarter page ad will cost $55 and a business card ad (1/8 page) will cost $25. These prices are per issue. Scanned artwork can be sent to dmertz@belmontcollege.edu in high resolution jpg format. Text should be in Word or pdf format. Originals also can be sent to Dave Mertz, Belmont College, 68094 Hammond Road, St. Clairsville, OH 43950. All active PTN members receive the PTN news as a benefit of membership. If you advertise in four issues, you will receive a 20% discount at the time of your order.
Well, 2016 is underway and so are the preparations for the IPTW in Berryville, Virginia. This event is going to be a big one, so mark your calendars. As always we are looking for donations for the auctions on Saturday night, so start looking around and see what you might be willing to donate. Remember the auction proceeds go to further the scholarship fund. Speaking of which, we are also looking for applicants for scholarships for the IPTW this year, so if you know of any students or apprentices who could use some help getting to the IPTW, let them know about the scholarship fund. The demonstrator and reservation forms should be going live on the website shortly, and we are sorry for the delay. It turns out that our new website, while beautiful, is not as easy to update as we’d hoped, but we are finally getting this under control. The Board has voted to hire an outside contractor to handle our updates, and this should all be squared away very soon. I thank you for your patience.

As you know all of the work done by the PTN Board is voluntary, and I assure you, your Board is working very hard to make the organization better. Though the best way for the organization to improve is to have the active involvement of its’ members. We are looking for members to sit on various committees (Education/Events, Membership/Communication, Governance, and Finance). If you think you might be interested in being on one of those committees, reach out to me or to any members of the Board. The Committee general meet by phone once a month. Along those same lines, we are looking for new applicants for the Board, who will stand for election in September at the IPTW. So, consider serving as a Director and help us continue to grow the organization.

We have been reaching out to members of various organizations to get their involvement in the IPTW and with PTN in general. We feel that this is something which can only help PTN. If you know of an organization which might benefit with a connection to us, please let the Board know. So far, we’ve been speaking with the Timber Framers Guild, the Window Preservation Alliance, and members of the slate community. We’d love to keep adding to this list.

I am issuing a challenge to myself and to all of the members of PTN. I am looking for all members to submit ideas on how to get their involvement in the IPTW and with PTN. Plans are already well underway for the IPTW in 2017. We’ll be giving you details on that at the IPTW in Virginia, so come and find out the next exciting chapter in this great organization.

And my humble thanks to all the people who have volunteered over the years to help make PTN great. No matter what the service, any time donated to PTN is time from your life that you have given to help make this organization strong. I truly feel that should be recognized, and often. So I say again, thank you.

Until next time,
Ian Stewart
President

(A Brief History of PTN, continued from page 1)

World Monuments Fund, trades educators from around the world gathered to compare models and discuss the future of trades education worldwide. Since then, PTN has been at the forefront of the discussion concerning trades education and continues to examine new and unique ways in which to provide support for the movement. PTN also has participated in a number of “hands-on” workshops and events outside of the IPTW umbrella. The most significant of these was the work completed in the Ninth Ward in New Orleans following the devastation caused by Hurricane Katrina.

Today, PTN exists as a 501(c)(3) non-profit educational organization, a status it has held since 2005. The Board is currently examining the benefits of creating a separate 501(c)(6) trade organization which could provide the membership with more benefits, like a public database of members, insurance, etc.

PTN Welcomes these new members since our last newsletter!

Pete Bank, Duluth, MN
Janet Booth, Brooklyn, CT
Rolf Haggberg, Duluth, MN

At the publication of this issue, PTN was holding steady with around 220 members currently listed in our membership database. Since membership is the heart of any “Network,” we are encouraging all members who will be attending the 20th Anniversary IPTW in Berryville in September to “Bring a Friend to PTN.”

All attendees at the IPTW will receive a one-year free membership in PTN and will be able to take advantage of all the benefits that PTN provides, including access to the “Members Only” portion of the website and a subscription to PTNnews. The goal of this initiative is to increase our membership to 250 members, a level that the organization hasn’t seen in some time.

The Membership Committee is looking for new ways in which to encourage new members to sign up, recruit young people into the trades, bring old friends back into the fold, and make sure that we provide enough value for the membership that current members want to keep on renewing. Any suggestions would be welcomed.

“Bring a Friend to PTN”

Calendar of Upcoming Events

2016
June 3 : Practical Preservation: Masonry, Roofing and Windows, Oh My!, Oneida, NY
June 8-10 : Arizona Historic Preservation Conference, Phoenix, AZ
June 8-9 : Building a Place for History, 2016 New Jersey History and Historic Preservation Conference, South Orange, NJ
July 6-8 : Stained Glass Association of America 107th Annual Summer Conference, Evanston, IL
July 13-16 : ABANA 2016 Conference, Salt Lake City, UT
June 17 : APT Masonry Cleaning Workshop, 2nd Presbyterian Church, Chicago, IL
June 19-22 : Country School Association of America Conference, Pioneer Museum, Fredericksburg, TX
June 21-23 : A Century of Design in the Parks: Preserving the Built Environment in National and State Parks, Sanie Fr, NM
July 12-14 : Field Documentation for Project Planning, NCPF and PTN, Clermont Farm, Berryville, VA
August 7-Sept. 2 : 2016 Pacific Northwest Preservation Field School, Mount Ranier National Park, Longmire, WA
Sept. 9-11 : 2016 IPTW: 20 Years Under Our Belt, Clermont Farm, Berryville, VA
Oct. 30-Nov. 2 : APT Annual Conference, San Antonio, TX
Nov. 15-18 : National Preservation Conference, National Trust for Historic Preservation, Houston, TX
The Creation of the Window Preservation Alliance

It started with Facebook. A private group was created with the lofty title of “National Association of Window Restorers.” Suddenly, there was a group of people sharing pictures of their restoration projects, asking for help finding rare hardware and lamenting the woes of difficult customers and projects. Then, an invitation to exhibit at the Traditional Building Conference in 2015 was received by several window restorers.

Having a booth at a major event like the Traditional Building Conference would be great, but did it make sense for a small window restoration company? We seem to barely have enough time to run our businesses, let alone take 2 days to man a trade show booth! But, if there were no restorers, then it would have seemed that window replacement was the only answer.

So the idea was hatched to form a trade association for those who repair and restore windows. A steering committee was formed and suddenly, rather than scraping paint or hanging weights, we were hanging out on conference calls trying to figure out how we could raise thousands of dollars to pay for a booth and create splashy display materials. With time running out, we decided to just hold a gathering at the Traditional Building Conference to see if there was any interest in creating an association for real, not just on Facebook. We wanted to see if people would invest their hard earned money in such an endeavor.

About 35 people from across the US and Canada met in a room commandeered from the hotel where the conference was being held. After a brief presentation, the response was an enthusiastic YES and people started signing up to be members.

The name, the Window Preservation Alliance, was chosen from dozens of potential names, mostly because we loved the acronym, WPA. The Works Progress Administration, the Depression era work program, left an enduring legacy of public art and construction. We thought it gave us a visceral tie to history, tradition and craftsmanship.

The Steering Committee became the Board of Directors. The Association filed papers to become a 501(c)(6) trade association. There are currently over 130 members. We held our first Annual Meeting in Florida in February 2016. We had a booth and demonstration area at the Historic Home Show in Valley Forge, Pennsylvania, another in Manchester, New Hampshire at the Old House and Barn Expo and a table at the Traditional Building Conference held in Chicago. With four to five local window restorers working together, manning a booth has proven to be easy. It is a great member benefit, as the WPA pays for the booth and members get the exposure.

Our mission is to raise the awareness of window restoration. Too often the only option building owners or architects consider is to replace original windows. We want to be the go-to resource for information on the re-use of historic windows—including reports on energy efficiency (the window replacement industry’s biggest target). We plan to revise the specification template which architects use. We will continue to help our members have a presence at events and assist related organizations like PTN by providing speakers, demonstrators and any other support where we can add value.

Written by Allison Hardy, President of the Window Preservation Alliance. For more information, contact Allison at ahardy@window-woman-ne.com

IPTW 2016 PARTNER: the NBA

No...not the National Basketball Association...the National Barn Alliance! The National Barn Alliance (NBA) believes that the American countryside would be made poorer by the loss of its historic barns and farmsteads. These buildings and the rural landscape that encompasses them, are remnants of our cultural heritage and reflect what daily life was like for a majority of Americans until the latter half of the twentieth century. Barns represent the heart of the farm. Through their physical construction and placement on the rural landscape, they illustrate our connection to the land and the many ways in which our ancestors have relied upon nature’s flora and fauna to survive.

The USDA has estimated that approximately 90% of America’s workforce was engaged in agriculture in 1790—a number that began declining sharply in the last quarter of the 19th century, as the industrial revolution drew more workers to cities. Since 1950, it has been estimated that less than 3% of Americans work in agriculture.

Unfortunately, 12 out of 20 Americans no longer maintain a direct connection to farming. There is an increasing knowledge gap between farming families—and the rural citizens who encounter barns on a regular basis—and the growing number of people who reside in urban environments and rarely visit a farm.

Mon-Ray, Inc. is a manufacturer of high performance aluminum window and door products. The Company manufactures three trade name product lines: “DEVAC” aluminum windows for commercial applications; “Mon-Ray” storm windows and doors for residential and commercial applications; and “Glasswalls” porch enclosures for residential applications.

For over 65 years, Mon-Ray products have been recognized for establishing high performance standards (air leakage, water resistance, structural load, and acoustical). While its products are suitable for both retrofit and new construction projects, the Company has concentrated its efforts in three specific market areas: 1) Energy Conservation; 2) Sound Abatement; and 3) Historical Preservation.

Some notable recent Mon-Ray projects, in the historic market, include Winterthur Museum, the Henry DuPont home, in Wilmington, DE; Old South Church, in Boston, MA; the Petersen House, where Abraham Lincoln was taken from the Ford Theater, in Washington, DC; and numerous buildings on the Harvard and Radcliffe campuses, in Cambridge, MA.

Mon-Ray, Inc. is based in the Minneapolis, MN area, and ships products nationwide from its factory in Osage, IA.

www.monray.com
(800) 544-3646

Every other issue of PTNews will feature one of our regular IPTW vendors. If you would like to be listed as a featured vendor, the first step is to sign up as a vendor at the next IPTW. Vendors get a free conference pass and a tent, table and two chairs in the vendor area, typically located near the lunch distribution area. It is a great opportunity to get to talk one-on-one with a crowd of people who most likely will use your product at some point in time. Plus, you will be supporting the Preservation Trades Network. Check the PTN website for more information.
Mostly I was impressed by the passion of the folks there. by all the workshops and skilled preservation contractors. I was blown away (I know that’s trite and overused) by all the KY contractors who were being selected for projects. I expand preservation trades skills and knowledge for the better the people who make up our organization and introduce some of the community to new members.

Patrick Kennedy
How and when did you get involved in the trades?
Early 70’s I got a job on a renovation project of an 1880’s firehouse in Covington, Ky. I was low man there, paint removal in baseboards and trim. But I got to meet and observe professionals in the trades. The two that got my attention, a carpenter and window restoration guy.

What made you join PTN?
I was working for the Kentucky Heritage Council/SHPO to work for which they had oversight. While there I was able to connect with the contractors on projects for which I had oversight in ways my colleagues couldn’t. This worked well for the office as we teamed up on various projects. I was able to get my hands dirty again when I helped establish the series of “hands on” preservation trades workshops at Pine Mountain Settlement School and elsewhere around the state. I made a lot of contacts during those years and now continue assisting preservation trades educators like Bob Yapp or Jim Turner. As a “wingman” I back them up and assist during the workshops. I’ve also led workshops and work on historic sites. I was fortunate to be asked by Bob Yapp to assist him I’ve been working too each season with HistoriCorps as a project supervisor. In that capacity I lead volunteers on the restoration of historic buildings located in National Forests.

(Continued on Page 12)

Member Spotlight:
Each edition of PTNnews will feature a short interview with an active member. We feel this is a nice way to get to know a little better the people who make up our organization and introduce some of the community to new members.

Who or what influenced you the most in your life?
My Father was a big influence. He supported me in my chosen path though he probably would have preferred I become a white collar professional. The afore mentioned carpenter and window restoration contractor. The carpenter took me under his wing and showed me how to use tools. He instilled in me a reverence for old tools and the skills that went with them. Also he impressed me with his work ethic of doing the job to the best of your ability. The window guy opened my eyes to how beautiful and significant windows are to a building. I remember too how he “thought smart”. Working in a cold drafty building in the winter we all bundled up to keep warm. He set up a tent in the building, installed a heater and lights and had his warm shop to do his work.

Tell us about your current job?
I’m a few weeks from 69 as I write this. I’ve worked 40 + years in the preservation trades. I worked “hands on” until I took a job at the SHPO when I was 50. I was an anomaly in the office as the rest of the staff had degrees in multiple academic preservation disciplines but little to no real experience in the actual skills needed for the preservation work for which they had oversight. While there I was able to connect with the contractors on projects for which I had oversight in ways my colleagues couldn’t. This worked well for the office as we teamed up on various projects. I was able to get my hands dirty again when I helped establish the series of “hands on” preservation trades workshops at Pine Mountain Settlement School and elsewhere around the state. I made a lot of contacts during those years and now continue assisting preservation trades educators like Bob Yapp or Jim Turner. As a “wingman” I back them up and assist during the workshops. I’ve also led workshops and work on historic sites. I was fortunate to be asked by Bob Yapp to assist him I’ve been working too each season with HistoriCorps as a project supervisor. In that capacity I lead volunteers on the restoration of historic buildings located in National Forests.

(Continued on Page 12)

The New Book Review
by our favorite “old book” seller Steve Schuyler

The Tile that Time Forgot
I can remember vividly being the bookstore for our co-located meeting (with APT) down in Charleston. Because so many APT members bought books from me, they asked me to consider being the bookstore the next year, at the APT annual meeting scheduled for New York City. And I did.

It made for a ‘complicated’ weekend: there was a lot going on, not the least of which was the Columbus Day parade! I can remember it took me 2 hours to drive two blocks to get my blue van and books to the loading dock at the midtown hotel. It was one of those “You can’t get there from here” moments!

But along with the APT meeting at the midtown Manhattan hotel, there was a Guastavino Vault Workshop: in this two day extravaganza, held at the Ottovino Stone Corp. headquarters, with tiles donated by Boston Valley Terracotta, the participants split up into two groups and built two small tiled vaults. I heard a lot about the event because two of its members are close PTN friends: Bob Zoni and Ken Follet. And I saw a photo of one of the 2-day-old vaults, with the group’s participants STANDING on top of it!

Which brings us back to our book for this newsletter. John Ochsendorf’s excellent history of the company, family and technology that produced over 800 of these amazing vaulted ceilings. We have all seen these Guastavino tile vaults, but few have known the name of this remarkable system, an oversight that is now corrected by the appearance of this impressive publication.

Interestingly, the tile vaulting method that the Guastavinos introduced into Europe from in the late nineteenth century was not new: it was used in Spain as early as the mid 1300s. Tile vaults, unlike heavier stone of poured concrete construction, can be built without heavy timber centering to support the work. The secret lies in using fast-setting plaster of Paris to create strong bonding in the first course of tile that cantilevers over open space. As soon as the plaster sets, a second overlapping course of tile, set in Portland Cement mortar, is laid on top of the first, followed in due course by a third course. It is worth noting that no Guastavino vault has ever collapsed!

Even if it is not your area of interest or expertise, I would recommend taking a look at this remarkable study. I think it is a must-read for anyone working in the many fields of restoration. If you want to own a copy, we have a few left, at www.rarebookstore.net. Our copies are, of course, signed by John Ochsendorf, who is a good friend and customer, and an MIT professor. If you’d rather just leaf through the volume to get a feel for the history and technology, you can borrow a copy from Bob Zoni!

Guastavino Vaulting: The Art of Structural Tile
By John Ochsendorf; Photos by Michael Freeman
Princeton Architectural Press, New York, 2010
256 pp; hardcover; 174 full-color images, 161 b/w.
The Classical Orders of Architecture

Throughout the history of architecture, a variety of ordering devices have been used to establish proportions in a building and its components. From the Golden Section to Anthropomorphic Proportions, architects and designers have continued the search for a perfect way to establish the ideal sense of space and proportion. One of the most important and enduring systems originated in Greece and was later added on to by the Romans. Eventually it was readopted during the Renaissance and made its way to America during the last half of the 18th century.

The Five Classical Orders of Architecture are still used today to help properly proportion building components in buildings that pay homage to classical design. While they were not considered “orders” during their heyday, Renaissance architects and theorists coined the phrase during the 16th century based most likely on the works of Vitruvius. As they studied the ancient Roman buildings, they began to understand the mathematical relationships that exist between the parts of each order. Giacomo Barozzi da Vignola published Regola delli cinque ordini d’architettura (Canon of the five orders of architecture) in 1562 which was basically a rulebook designed for Renaissance architects regarding the use of the five classical orders. This book became the most published book in architecture history due to its simple presentation and practical examples.

The first three orders, Doric, Ionic and Corinthian have their origins in Greek architecture. The Romans, after conquering Greece, would adopt and modify these three basic orders around the 1st century BC and add the Composite and Tuscan orders to round out the five. There are many variations to these five basic orders like the Scagmozzi, Greek Angular, etc., but their discussion will be saved for another newsletter.

The Greek Doric Order

The Doric Order is the simplest of the three original orders and consists of a column that is four to eight times its diameter in height. The Greek Doric column is the only order that has no base as it sits directly on a stepped platform called a stylobate. Because of its limited height, the Doric order appears to be the shortest and proportionately the widest of the orders. The shaft of the column consists of 20 vertical flutes that help texture the surface and give a vertical emphasis.

The capital is simple and made up of an echinus molding that sits below a large, square abacus that makes the transition from the round column to the rectilinear entablature. The entablature is divided into three sections, the architrave, frieze and cornice. The architrave is plain, consisting of a simple fascia molding. The frieze consists of alternating metopes and triglyphs. The metopes can either be blank or consist of some type of sculpture, often scenes from battles or even skulls. The triglyphs are made from three vertical bands. Guttae, or small conical shaped elements, extend down from the triglyphs into the top of the architrave. The cornice is a complex molding made from a series of basic, simple moldings discussed in the Winter Issue of PTNnews.

The Greek Ionic Order

The Ionic Order varies from the Doric in that it is nine times taller than its lower diameter. The base is made from a series of simple moldings that build from the base or plinth up to the start of the shaft of the column. The shaft typically consists of 24 flutes accentuating the thinness of the column and is capped by a complicated capital.

The Ionic capital is really an upside down scroll. The ends of the scroll typically face forward and are called volutes. The sides of the scroll are tied together with a ribbon. In between the volutes are a series of moldings, most typically an egg and dart molding near the top and a rod and bead molding near the neck. Instead of a plain abacus as found in the Doric Order, the Ionic Order has a thinner abacus lined with a Lamb’s Tongue molding.

The Ionic entablature consists of an architrave divided into three telescoping fascia moldings, capped by an upward turned convex molding. The frieze is plain, leaving the cornice to become highly decorated. The complex moldings of the cornice are often supported by a series of small scrolled brackets called modillions.

The Romans made some minor changes to the three Greek Orders. The most significant of these changes was the addition of a new order: the Composite and the Tuscan.

The Greek Corinthian Order

The Corinthian Order is the largest of the Greek Orders. It consists of a tall, wide base that sweeps up from the floor to the base of the shaft in a series of concentric moldings. The shaft of the order is fluted and typically ten diameters in height.

The capital of the Corinthian Order is the most decorative and often most expensive of the Orders to replicate. It typically consists of three layers of three-dimensional acanthus leaves that are topped off by curling stalks. A Rosette marks the center of a complex molded abacus.

The architrave is similar to the Ionic Order in that it is a series of telescoping fascia moldings, capped by an upward turned convex molding. The frieze is plain, leaving the cornice to become highly decorated. The complex moldings of the cornice are often supported by a series of small scrolled brackets called modillions.

The Romans made some minor changes to the three Greek Orders. The most significant of these changes was the addition of a base to the Doric Order. In addition, the Romans added two new orders: the Composite and the Tuscan.

The Roman Composite Order

The Composite Order is just what it sounds like, a combination of the Ionic and Corinthian Orders. Its readily identifiable capital uses the Volutes of the Ionic Order on all four corners (with out the sides of the scrolls) and combines them with the bottom two rows of acanthus leaves from the Corinthian Order. The column is is typically shorter but similar in proportion to the Corinthian Order, being ten times the diameter. It should be noted here that the diameter is determined by the diameter of the bottom third of the column. Classical columns have an entasis which begins about 1/3 up the column shaft from the base and then tapers toward the capital.

The Roman Tuscan Order

Finally, the Tuscan Order is the plainest of the Classical Orders. Similar in size and shape to the Doric Order, it consists of a plain shaft, echinus molded capital and a smaller abacus. The architrave and frieze of the entablature are plain with no decoration. The cornice is similar to the Doric cornice in that it is made up of a few simple moldings. Because of its simplicity both in design and cost, the Tuscan Order is very prevalent here in America and was a favorite of developers of middle class housing.