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Consell Insular de Minorca

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well, well, well...

stone (ston) n.

1. a. Concreted earthy or mineral matter; rock.
b. Such concreted matter of a particular type.
Often used in combination.
2. A small piece of rock.
3. Rock or piece of rock shaped or finished for a particular purpose, especially a piece of rock that is used in construction.

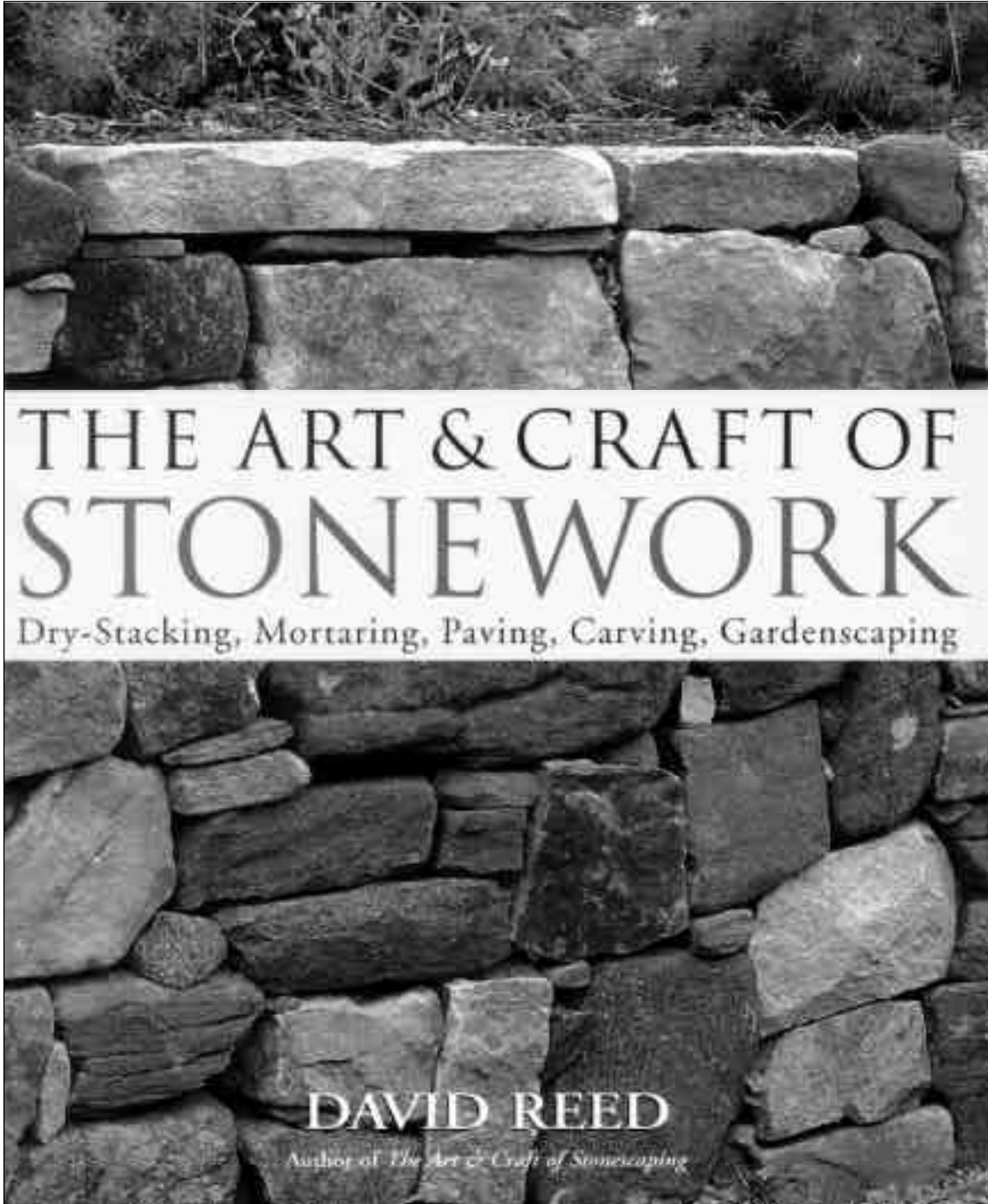
nex-us (nek' sas) n., pl. nexus or nex-us-es.

1. A means of connection; a link or tie.
2. A connected series or group.
3. The core or center.

mag-a-zine (mag-úh-zeen), n.

1. A periodical containing a collection of articles, stories, pictures, or other features





THE HOW-TO BOOK SHELF has been enriched by this well crafted publication written for beginning and/or intermediate stonemasons. David Reed has made available what 15 or so years of experience in different aspects of the craft (and the art) of stonework have taught him. The book is informed not only by his work experience, but by the love which he obviously feels for STONE - and for what can be accomplished with it.

"A Stone Mason's Primer" is the subtitle of the first chapter. It begins with the basics, the distinctive nomenclature of this obdurate material, and the tools and techniques that have evolved over time through working with it. Basalt and limestone, hammers and chisels, ramps and rollers, patios and walls from foundations to capstones, are all described in some detail.

Dry stone walling is fundamental to stonemasonry. The principles inherent in assembling stone without mortar, in utilizing gravity and friction as cohesive forces and, with ingenuity, weaving the material together are basic and building in this fashion is the best introduction to stonemasonry. Accordingly the first projects covered involve dry stone masonry, freestanding walls, retaining walls, benches, borders and steps.

Then the course of instruction proceeds into mortared masonry, paving and walls, both structural and veneer. As in the dry stone section the author provides many useful tips.

In the final section, "The Romance of Stone" more creative approaches to stone, including carving, both relief and three dimensional, "boulderscaping" and Japanese style gardens are introduced.

The color photographs are excellent. In some you can almost taste the stone. Included are depictions of stonework other than the author's, of stonework of other lands and other times as well. Most of the photographs are David's, but to his credit he has included many more by other photographers.

Some offer aesthetic pleasure but most are instructive. For instance, the photo on the right illustrates an effective way to trim flagstone. The stone has been shocked along the desired line, then "nibbled" away until the line is reached. To attempt to do this all at once could well have an unintended result.

The picture below is included here because it addresses one of my pet peeves. When building a wall on sloping ground, many stonemasons, even experienced stonemasons, instead of keeping the courses horizontal and stepping the base stones and the top of the wall, will slope the wall and its courses to match the slope of the ground, so the wall seems to be sliding downhill. Please don't do that. The photo shows the plywood that the waller has

put down to protect the surface of the driveway and the landscaping cloth that prevents loose soil from infiltrating the wall.

Also instructive is the lower half of the photograph on the book cover which offers two examples of running joints.

"A Stone Mason's Primer", is the subtitle of the first chapter, but in a way the entire book is a stonemason's primer. With information and inspiring examples it primes the reader, particularly the novice or novice-to-be, and prepares him or her get on with it. Everything one needs to know to begin is here. Experience will provide further instruction (and a few blue fingernails), and more information can be had, if sought, from observation, from more experienced practioners of the craft, and from other books. ◻

TL

David, a Stone Foundation member, is the author of another Lark Book, "The Art and Craft of Stonescaping".



TEKTONIKA

a photo gallery

currently showing:

an exhibit of photographs of the stonework of the Balearic Islands and the Catalan mainland
visit the TEKTONIKA gallery page at www.stonefoundation.org
to see these photographs in color



AN ADVENTUROUS AND AMIABLE GROUP, the so-called Balearic Lithological Expedition, five stonemasons, a geologist and a couple of camp followers, rambled around the islands of Mallorca and Minorca off the Mediterranean coast of Spain this past October, exploring the excellent stonework there to be found. The tour culminated in Barcelona.

Over the course of five millennia, successive cultures have made creative use of the abundant and eminently workable limestone of which the islands are constituted. Examples of their handiwork were sought out, studied and photographed over a two week period. The tour culminated on the mainland, in Barcelona.

The group was happiest in the distant past, in the realms of prehistory. The islands were first settled by Neolithic peoples, those intrepid souls who ventured out into what must have seemed open sea in vessels we can only imagine to arrive at and to establish themselves on the isolated specks of land scattered here and there throughout the Mediterranean. (This is a subject that will be revisited more extensively in some future issue.)

Sa Canova, in Mallorca, the megalithic structure on which the group is pictured, has a center support, a round column that was incrementally widened while the circular wall surrounding it was narrowed until the gap between them could be spanned by lintel slabs.



The Birth of a Bridge

By Norman Haddow and Dieter Schneider



Early in 2003 Norman Haddow , a Scottish dry stone waller, was asked to tackle an interesting job. The owners of the land in a remote glen near the village of Butterstone in the Highlands wished to commemorate the engagement of their marriage with a three metre (ten foot) span dry stone bridge built with local rock in the traditional manner.

THE SITE for such a construction would normally be carefully chosen by looking for a narrow gap on the river where large bedrock outcrops could be used as a substantial foundation. Here, however, the site had to be as close as possible to the flat rock where the romantic proposal had been tendered. Fortunately there was an outcrop of bedrock near to but not exactly on the bank. Other large foundation rocks would have to be brought to the site and the banks dug out to embed them.

Four rocks of approximately one ton each were found in from the surrounding area and transported to the site using heavy equipment. The final positioning was done by hand with crow-bars. They were placed so that their flat topsides were roughly level with the winter high water line. Another four large boulders were placed on top of these as risers to withstand the outward pressure from the arch that was to be built.



Now Dieter Schneider, a friend and dry stone waller, joined Norman to assist with the project. A wooden form in the shape of a half moon was made by a local joiner. This filled the gap between the large rocks set into the bank. It was supported on wooden struts that could easily be knocked away to allow it to drop clear of the stonework after the arch was built. To avoid problems resulting from the form sagging, even slightly, it is very important that it be strong enough to support the entire weight of the finished arch -in this case roughly 8 tons. A different system was traditionally used in Scotland called centering, which consisted of two half wheels joined across the top.

Ideally flat-bedded building stones, which can be shaped as required, would be used for the outside face of the arch at least. The rock type in the Butterstone region is a soft, often rounded, mica schist that weathers quite rapidly to blend in with the surrounding countryside. It did, however, cause some problems during the building of the bridge.

Starting with the riser, the arch was built up one course at a time from each side. This was continued gradually until the two sides were close together. At this highest point a complete row of stones was driven into place right across the top of the arch. The result looked like the back of a hedgehog.

Now the arch stones had to be stabilised to prevent any movement, downward or outward, when the form was removed.

This is normally accomplished by driving stone wedges between the stones to pin them in place. The soft local schist, however, tended to crumble when hammered into the tight spaces. Fortunately there were many scattered lumps of granite lying about, deposited about ten thousand years ago when the ice cap retreated from what we now call Scotland. The granite was split with a large mash hammer to create the wedges.

Removing the support is the most exciting time in the building of an arch and a group of spectators gathered to observe the formwork being dropped. It is at this stage that the success of the job is assessed. If there is any movement at all the entire arch must settle very slightly as one.

Access onto the bridge from one bank was already provided by the large piece of bedrock. By the use of stone in-filling the pathway was extended over the arch between the single stone parapets on each side.

Turf was placed on top of the in-filling to form the surface of the path over the bridge. Ideally this turf is taken from a grassy area with few weeds that has not been disturbed for at least five or six years. Each section is cut to a depth of ten centimetres (four inches) and chopped at an angle to ensure a close fit to the next one. It is important to use double sods for this job. The lower turf is placed grass face down and acts as a seal that prevents the soil from filtering down into the stonework. Earth mixed with rock can result in frost damage.

Immediately upon completion the bridge and path over it gave the appearance of having existed for many years.

There was a grand opening of the bridge in August 2003 when family members, friends and workers gathered to celebrate and enjoy a fine lunch together. A piper was ceremoniously followed out to the bridge where the best malt whiskey was poured over the keystones as a final sign of approval. ■

[STONE FOUNDATION HOME PAGE](#)

*About the authors:
During the 1990s a determined effort was made by a group of workers in Switzerland to revive the art of dry stone walling. Several wallers exchanged ideas and experiences between Switzerland and Scotland where there was still a strong lasting tradition of building without cement.*

Dieter Schneider and Norman Haddow met during this exchange. Both are now enthusiastic professional wallers and find time, even on holiday, when they can work together. They look forward to their next dry stone project.



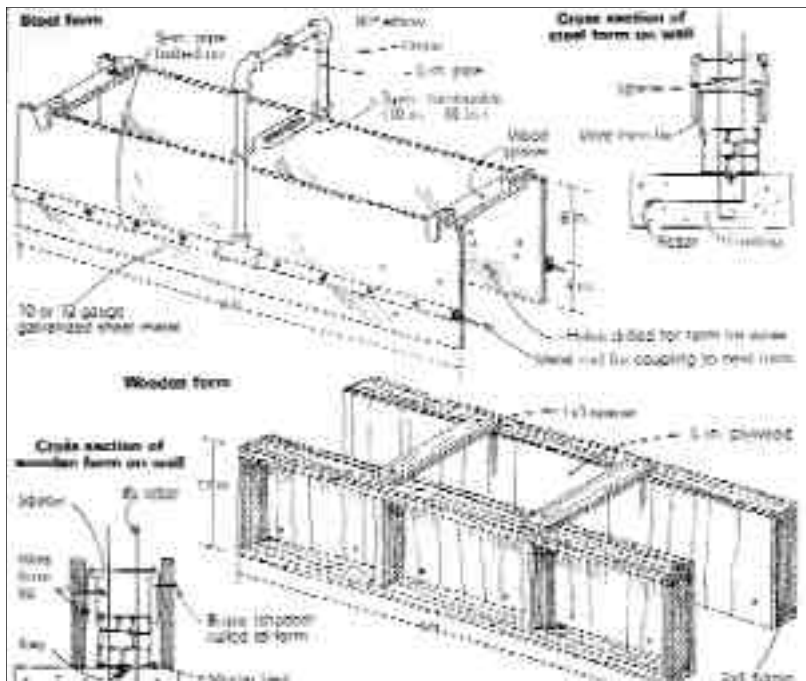
SLIP-FORM STONEMWORK:

First of six pages.

AN ALTERNATIVE APPROACH TO TRADITIONAL STONEMASONRY

by Jim Underwood

MOST STONEMASONS, especially those who love traditional, well-crafted dry stonework, are uncomfortable with regard to slip-form stonework. Some abhor the very idea of it. I believe, however, that there is a valid niche for slip-form stonework in the array of approaches we use and that it is a practical alternative for the owner-builder who in most cases lacks the experience, skills and confidence of a mason.



Engineers and the building code people may or may not have aesthetic sensibilities but their mandated professional responsibilities are codified in manuals that focus on structural safety. In a recent history film that I saw there appeared a list of the stone-built cathedrals and castles in medieval England that had collapsed not long after they were constructed. Lessons learned from buildings that endured through the centuries and, probably more importantly, from buildings that failed in short order, gradually brought engineering and code standards to dominate our building practices. Generalized standards sometimes seem very unreasonable, especially in specific circumstances, and we complain of a society too litigious to allow the use of many traditional materials such as stone in modern construction, except as veneer. Other than landscaping walls, most stone work today is relegated to non-structural aspects in building.

Excellent dry-stone work is a personal love and profession; but my sympathy is with owner-builders, with helping them utilize inexpensive and locally available natural materials as much as possible to build tight and efficient buildings. Consequently I like approaches and materials that engineers and code officials understand and accept, and that the less skilled person can comprehend and use. In addition to building dry-stone and mortar-laid walls I have over the years adopted, modified and practiced a slip-form approach to stone work. Each approach does, in fact, tend to address a different masonry purpose.



Figure 1. Machu Picchu has endured for centuries because of the care taken in its construction. This National Geographic Society photograph was used for their AD 1530 reconstruction of Machu Picchu map that appeared in the May 2002 issue of the National Geographic magazine.

A Visit to a Prehistoric Construction Site

First of six pages.

by Kenneth R. Wright, Andrew Earles and Eric A. Bikis

ANCIENT STONEMASONS are the friends of history scholars because it is the long-ago work of this noble profession that tells modern historians what prehistoric people were like, how they lived, and what standard of care they practiced.

The Inca of 500 years ago had no written language, no iron or steel, and they did not have the wheel. It is the stonemasonry at Machu Picchu that we can use to learn about these early talented Americans; people who had a great civilization long before Columbus sailed for America!

The Research of Wright Water Engineers, Inc. at Machu Picchu started in 1994. Since then, their engineers have answered many questions about how Machu Picchu was built and how it functioned. What we learned was that the Inca were good engineers and that their stonemasons practiced a high standard of care; no detail was overlooked.

The Machu Picchu we see today was never finished. It was still very much a work in progress when Inca workers packed up their tools in 1540 AD and went home. While working at Machu Picchu, we didn't realize, at first, how many buildings were still under construction. In fact, what we found was mind boggling and even surprised or colleague, Dr. Alfredo Valencia Zegarra, a veteran local archeologist who grew up with Machu Picchu and who we consider the world's leading expert on the site.

There is abundant evidence that work in progress had been interrupted. For instance, we found a temporary construction ramp near the Sacred Rock. Sloping 30-degrees, this ramp served to lever huge stones up onto a high wall. Nearby, a large stone has been left on the wall. It is tilted at a 45-degree angle so that the bottom could be shaped to make it nestle snugly onto the stone below.

The huge stones of the Principal Temple were still being

Der Steynmeß.



Ich bin ein Steynmeß lange zeit/
Mit stangn/Winckelmäß vñ Richtscheit/
Ich auffrichte Steynheuser wolbsinn/
Mit Keller/gewelb/Bad vnd Brunn/
Mit Gibelmauern von Quaderstein/
Auch Schlöffer vnd Thürnen ich meyn/
Seh ich auff festen starcken grunde/
Cadmus erslich die Kunst erfund.

DER STEINMETZ

The Stonemason

*Ich bin ein Steinmetz lange zeit/
Ich hab ein Winkelmaß vñ Richtscheit/
Ich auffrichte Steinhauser wolthun/
Die Welt genusslich zu brün/
Mein Fliesenmason von Quaderstein/
Auch Schösser vñd Thürnen ich meyn/
Seh ich auff festen starcken grundt/
Eadmus erslich die Kunst erfund.*

by Tadeusz Wodarczak
translated by Juliet Golden

THIS GRAPHIC PORTRAYAL of Medieval stonework was made by Jost Amman, one of the best professional wood engravers in Germany during the latter half of the 16th century. It is from the "Eygentliche Beschreibung Aller" ("Description of All Professions") which was published in Frankfurt in 1568. It is contemporaneous with the Brother Book of the Guild of Workers in Stone, which appears on the following pages. Hans Sachs wrote the verse beneath the illustration. An English language reprint of the book has been published by Dover.

The image presented portrays the well-honed dexterity of workers who employed simple, handmade tools to create architectural masterpieces. The masons' total concentration and dedication, the freedom and elegance of their movements tell us we are witnessing the work of true masters.

The carvers, who, from specially prepared blocks of stone create fascinating and intricate architectural details, figure most prominently in the composition. Others, who often do the hardest work of all but whose work is not evident in the final product, are seen in the background. The masterfully presented scene – undoubtedly the work of someone familiar with the particulars of the craft, or someone extremely observant - serves as a primer on the techniques of transporting and cutting stone.

Everyone is totally absorbed in his work; perhaps they know they are being

"photographed". I would love to ask them what they are working on and where, in order to be able to go and see what remains of this job completed centuries ago.

Does the image portray a workshop providing services for some city or are we looking at the construction site of a cathedral or the palace of a prince? Most likely we are witnessing the building of a church or monastery. The site is surrounded by a high wall, beyond which no trees or other urban structures are visible. The wall is not defensive but seems to offer a haven for isolated contemplation rather than to guard property. I find it tempting to take an aerial view of the scene playing out before our eyes.

Here is the result of my "flight of imagination":

This is a large, well-organized building site. The stonemasons are only one part of a large construction team, which includes bricklayers, carpenters and blacksmiths who work side-by-side to ensure that all the elements designed by the architect fit together perfectly to create a beautiful whole.

Examples of such "family" cooperation by master craftsmen can be found all around the world. The organization of the building site has changed little throughout the ages. A 1912 German manual for stonemasons presents model plans for the organization of a stone carving workshop almost identical to the one presented in

this drawing. It even includes the same cart for transporting stone and tools similar to those shown in this woodcut. In a business where success was determined by the skills of the artisans and the strength of their muscles, the techniques and methods developed over thousands of years have hardly changed. The age of steam and electricity, the industrialization of the production of building materials and the mechanization of construction sites brought an end to the romantic "human" skills of creating beauty in architectural structures. However, I do sense that there is an ever-growing demand for "romantically" carved stone. It is for these romantic souls who want a little more than something created with the help of electric tools and pneumatic carving hammers that I will attempt to decipher what our brother stonemasons from a bygone age are doing in this tableau.

In the background four people are expending enormous efforts to move a large stone block on a two-wheeled cart. Somehow they are getting by. Fortunately, today we have hydraulic forklifts at our disposal, so let's not turn back the clock at this point; it's too much effort.

Closer up a workman is sitting on a stone cylinder and is creating the base of a column. Since we can't decipher too many details, and the man still has his work cut out for him, let's leave him alone.

Ich bin ein Steinmetz lange Zeit/ Mit Stangen/Winkelmaß von Richtigkeit!

two smaller pieces. What a wonderful, calm and majestic silhouette! He is a master at breaking stone blocks. We can be absolutely certain that the stone will crack exactly where the master plans so that his colleague, the one in the round hat, won't have too much work to transform the split stone into a "slab", a block of stone whose dimensions are determined by the architect's structural drawings. Of course, today we can split stones and prepare large, flat surfaces by hand. We have better tools: electric drills, patented wedges and shims, wide carbide chisels, pneumatic solid tooth bush hammers and laser spirit levels, which facilitate "finding" the surface of the stone. We also have frame sawing machines and diamond blades used to cut slabs. We have the choice whether to toil or not to toil at this point in the job. I suggest not toiling and let the machines do their job, particularly since the two masters shown in the foreground will do the most important work from prepared blocks.

In the woodcut the two masters are positioned next to one another just for this "photo" session. Under normal circumstances their stones would be situated at least six feet apart. The master standing on the left employs a two-handed hammer-axe to shape a cornice. He strikes with care, using a precise pendular swing, to come as close as possible to the final surface of the stone. His right hand grips the end of the handle and keeps it close to the groin to stabilize the striking motion. The left hand guides the strikes, permitting the carver to remove the excess stone faster than with a chisel. The cornice profile shown here is almost complete, so we are probably seeing the stonemason making his final strikes.

The master seated on a one-legged stool will be responsible for putting the final touches on this piece of stone. In the meantime, he is in the final stages of carving out a profile in a sunken surface of the pedestal. The stone element he is working on has been carefully placed on wooden

beams. The beautifully made measuring tools placed in the extreme foreground of the woodcut suggest that perfection is the order of the day. This is the artisans' code of honor.

The seated master, with his rich attire and a measuring tool attached to his belt, is most certainly the leader of this group. He is the person who appoints tasks to be completed and monitors the quality of the work. He is responsible for the final outcome, which is why the final finish on the stone and the cleaning up of the inside edges are jobs performed by the master himself. The stones will take on his personality and will bear his signature. This man does not make mistakes. The master's motto: "Nobody corrects my work".

The use of a one-legged stool in stonemasonry is an old and all-but-forgotten invention. Maintaining balance while having only three points of support forces the stone carver to sit up straight and keep his head erect with each change in position. This posture also facilitates "sensing the plane" with the entire body. In this fashion the master works freely and confidently. In his left hand he lightly holds the chisel, "aiming" precisely at the excess stone that is about to be removed. In his right hand, he holds a round wooden hammer using a light grip. The evenly worn surface of the hammer shows that the master strikes the chisel with the weight of the hammer and not the strength of his arm. He also lightens his grip on the hammer with each strike, which allows him to slightly rotate the hammer in his hand before the next downward motion.

An old adage of artisans maintains that the condition of one's tools reveals the truth about their owners. The tools used by the masters here are absolutely beautiful. Both the two-handed hammer-axe and the chisel would have been custom made by master blacksmiths.

The eulogistic, rhymed text under the

woodcut is a wonderful ode to and ad for stonemasonry. Written in charming and mysterious old Middle German, here is how the text might read in prose form in keeping with its original intent and spirit:

*I've been a stone mason for a very long time.
Using rods, an angle and straight edge
I erect stone buildings properly
With vaulted cellars, baths and wells,
With venerably hewn stone facades.
On strong and solid foundations
I also build castles and towers.
Our art was invented by Cadmus*

Yes, this was an art form developed not by virtuosi, but by stonemasons who passed on the know-how, the traditions and the mysterious nuances of their profession from generation to generation. We have yet to decipher all of the secrets of stone structures from the past. But our brothers somehow managed to build the pyramids, the temples of the Acropolis and Angkor Wat, the Colosseum, the Inkan walls in the Andes, the cathedrals of Westminster and Cologne, as well as the monumental marble buildings in Washington D. C. What stone structures will our age leave behind? ■

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Last year at STONERWORK SYMPOSIUM 2003, Tadeusz Wodarczak, a Polish stonemason/stone carver who made a presentation on the subject of traditional stone carving spoke in some detail about the authenticity of this woodcut used as a graphic element on the flyers for that event. His elucidation was so interesting I asked him to enlarge upon the subject in this magazine and he has graciously complied. I am pleased to announce that Tadek, a Stone Foundation member, will conduct a stonecarving workshop at STONERWORK SYMPOSIUM 2004.

Thanks to Dirk Schmerschneider, Schlossbergmuseum, Chemnitz, Germany, for help in translating the verse.

A Labyrinthian Labor of Love



WORD reached Kevin Avants that there were plans being made to build a labyrinth into the floor of the entry plaza in front of the Cathedral Church of Saint Francis of Assisi in the heart of Santa Fe, New Mexico. It would be based on the famous labyrinth in Chartres Cathedral - and it was to be built with concrete pavers. Kevin, a landscape and hardscape designer (and a Stone Foundation member) had an special interest in labyrinths and he felt it was inappropriate to use such material; that the nature of the project called for natural stone, in fact, a noble stone.



Porphyry is such a stone and MILESTONES Imports, one of the largest distributors of porphyry in the country is located in Santa Fe. Avants discussed the project and the material with the owner of MILESTONES, Miles Chafee (another Stone Foundation member).

For his model Avants selected green porphyry, which is rarely encountered or used, for the borders and lunations and a red-grey porphyry for the pathway. He approached the landscape architect and discussed with him, and later with the Rector, Father Jerome Martinez the importance of the project and how porphyry, with its long history in sacred architecture, would be the perfect choice. In the end the use of porphyry was approved and Kevin and stone-mason William Campbell were commissioned to carry out the pro-

ject.

The Labyrinth would be a faithfully reproduction of the Chartres Labyrinth though it would need to be scaled down slightly to a 6:7 proportion in order to fit in the circular void with the arbitrary diameter of 36 feet that had be left in the paving.

The requirement that the reproduction remain as true as possible to the original meant not only recreating exactly the many inter-related proportions of the Chartres Labyrinth, but also capturing a paradox that lies at the heart of its beauty. Although the ideas symbolized in the proportions of the Chartres Labyrinth allude to mathematical perfection, there is a noteworthy lack of perfection in the actual labyrinth itself. This is despite the obviously superior caliber of the masons who did the work. The implication, to the designers of the Saint Francis Labyrinth, is that the beauty of the Chartres Labyrinth lies not in the perfection of the thing so much as it does in the perfection of the ideas behind it. The key then was to strive for perfection, but build by hand.

Templates for the paths, border-lines, labryses, lunations, rosettes and everything else were all drawn actual size using a compass and a string. The templates – 296 of them were created for over 1,600 stones – were transferred to the stones which were each, in turn, rough cut by hand with a 14" Imer Combi-cut 100, and then finished with 4.5" grinders. There are no rectangular pieces in this puzzle. Each stone was cut on the exact arc of the circuit in which it lay; there are 12 bands within the 36' diameter of the Labyrinth and an 8' rosette at the center. Joints between stones are a regular 1/8". The sacred geometry of the original was preserved in the reproduction; in order to have the exact number of lunations, the semi-circular indents in the outer perimeter it was necessary to fabricate a custom 9.5" core drill .

The choice of split-face porphyry was a perfect compliment to the design concept. The natural variations in color of irregular surfaces provide balance and counter-point to the over-all precision of the labyrinth design.

Construction methods were derived from the location, the stone itself and the expectation of years of heavy use. Due to the instability of the soils around the Cathedral, and varying thickness of the stones from which the pavers were cut, the decision was made to set the stones in a bed of mortar on a reinforced concrete slab. Once 80% of the stones were cut, the labryses were laid out, set in mortar and then the path stones were fixed in their proper circuits.

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Mysterious Rock Markings Baffle Archaeologists

First of two pages.



THE DISCOVERY of a series of mysterious rock carvings by Newcastle University archaeologists has sparked a quest among experts to find out exactly what they are. The Newcastle University team, who were alerted to the carvings by a local farm-hand, are baffled as to what they mean or who created them. Fellow experts they have consulted, from bodies like English Heritage and The Royal Commission on the Ancient and Historical Monuments of Scotland, are equally confused. As far as they know, nobody has ever reported anything like them before.

The markings, found hewn into one, isolated sandstone boulder, include a group of concave spherical shapes of around 20 centimetres in diameter, another which resembles an adult footprint, several deep scores and another, heart-shaped marking.

People are now being encouraged to come forward with explanations and to help solve the mystery.

Newcastle University researchers were alerted to the markings by a local farm-hand while the team was carrying out fieldwork for a project funded by the Arts and Humanities Research Board looking at prehistoric 'cup and ring' rock art in Northumberland in North East England. A typical cup and ring work of art would feature cups or cups and rings of various sizes carved into a slab of rock.

Dr Aron Mazel, research associate with the School of Historical Studies, has been investigating the markings with Northumberland and international rock art authority Stan



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THE GUILDS OF THE MEDIEVAL WORKERS IN STONE

The revised laws that resulted from the meeting of 1563 were printed in folio and copies distributed to every lodge of importance that was willing to subscribe to the same. They are entitled the "Brother Book of 1563" and the following is a translation of the ordinances as found in "Gould's History of Free Masonry."

THE BROTHER BOOK OF 1563

First of five pages.

His imperial Roman Majesty, our most gracious Lord, having in this one thousand five hundred and sixty third year most graciously renewed, confirmed and approved to the general fellowship and brotherhood of the stonemasons in the German lands their regulations and duties: and whereas, for some time past many irregularities and bad habits have arisen and obtained in the craft of Masonry; therefore, have many masters and fellows of aforesaid craft and fraternity, as they are named hereafter, met together in the aforesaid sixty-third year, at Bale on St. Bartholomew's, and at Strassburg on St. Michael's day, in order to elucidate and better aforesaid ordinances and articles of the craft and brotherhood, and the aforesaid have elucidated and bettered said ordinances, and settled that they shall be held as hereafter follows, and no one who is of this guild shall do or act contrary thereto.

ARTICLE I. That if any article in this book be too hard or heavy, or any be too light, then may those who are of our guild, being in a majority, alter, lessen, or increase such articles according to the times the necessities of the land, and the course of affairs. And when there is a general summons they shall meet together in chapter form, according to the contents of this book, and (that their resolutions) shall be kept on the oath which each one has taken.

ART. II. Who so comes into this guild of his own good will, as hereafter stands written in this book, he shall promise to keep every point and article if he be of our craft of Masonry. Those shall be masters who can erect costly edifices and such like work, for the which they are authorized, and serve no other craft unless they choose so to do. And be it masters or fellows, they shall and must conduct themselves honorably, and none shall be wronged by them: therefore have we taken power in these ordinances to punish them on the occasion of every such act.

ART. III. Whatever regular buildings are now under journey work, such as Strassburg, Cologne, Vienna, and such like works, and in the lodges thereto belonging, as according to custom have hitherto been completed by journey work, such buildings and work shall remain under journey work, and in no wise shall a contract be made, in order that the work so far as possible, be not cut short by reason of the contract.

ART. IV. If any craftsman who has a regular work should die, then any craftsman or master who understands masonry, and is sufficient and able for the work, may well aspire and apply for the work, so that the Lords who have such work in hand may again be supplied according to the necessity of masonry. So likewise may any fellow who understands masonry.

ART. V. Whatever master it may behove, beyond his own work, to undertake a work abroad, or any other master whom it may

behave, though he have no such aforesaid work in hand, such master shall, as he best can or may, in good faith set or continue such work or building by journey pay, so that there be no danger of the work being cut short according to the rights and usages of masonry. And if a master do not make use of this [method of payment] for the persons who cause the work to be done, and it be found out upon trustworthy information, then shall the said master be taken to task of the craft, corrected and punished after it be proved against him. But if the Lords will not do it so, then may he act according to the Lords desire.

ART. VI. If a master who has possessed and had such a work and building in hand should die, and another master come and find hewn stone work, be it set or unset, such master shall not pull down the set stone work, nor shall he in any way cast away the unset hewn stone work, without the council and agreement of other craftsmen, so the Lords and other honorable persons who cause such buildings to be raised be not put to unjust expense, and that the master who left such work after his death be not defamed. But if the Lords wish such work removed, then may he allow it to be done, provided he seek no dishonest advantage thereby.

ART. VII. And every master who has practised masonry his five year with a stone mason, shall be permitted and shall have power to hew stones and build by contract of journey work, without fear if it so please him, nevertheless without trespassing against the articles written herebefore or hereafter.

ART. VIII. If any one contracts for a work, and gives a plan for it how it shall be, the work shall not be cut short of anything in the design, but he shall execute it accordingly to the plan which he has shown to the Lords, cities or people, so that nothing is altered on the building. Unless it be that the Lords will it so, then may he alter it according to the Lords wishes, without seeking undue advantage.

ART. IX. And no two masters shall have one building or work in common, unless it may be a small building that may be brought to an end in the space of a year: such may he well have in common with him who is a fellow citizen.

ART. X. A master may grant employment as follows: Should it be that masons are required, say for foundations, or to build a wall, for which they are capable, the master may well give them employment, that the Lords be not delayed on their works, and they that are employed shall not be subject to these ordinances: but they shall not be further set to hew stones, because they have not served according to our ordinances.

First of eight pages.

FICTION

A STONE WOMAN

BY A. J. BYATT



At first she did not think of stones. Grief made her insubstantial to herself, she felt as if she were floating lightly from room to room like a moth. The apartment seemed constantly twilight, although it must, she knew, have gone through the usual sequences of sun and shadow over the days and weeks since her mother had died. Her mother—a strong, bright woman—had liked to live among shades of mole and dove. Her mother's hair had shone silver and ivory. Her eyes had faded from cornflower to forget-me-not. Ines had found her dead one morning, her bloodless fingers resting on an open book, her purchase eyeglasses down, as though she closed, a wry grimace on her fine lips, as though she had tasted something not quite nice. She quickly lost this lifelikeness, and became waxy and peaked. Ines, who had been the younger woman, became the old woman in an instant.

She buried herself with her work as a researcher for a major etymological dictionary, and she tidied love away. She packed it into plastic sacks—creamy silks and floating lawns, velvet and muslin, lavender crêpe de chine, beads of pearl and garnet. People had thought she was a dutiful daughter. They could not imagine two intelligent women who simply understood and loved each other. She drew the blinds because the light hurt her eyes. Her inner eye observed the final things over and over. White face on white pillow among white hair. Colorless skin on lifeless fingers. Flesh of my flesh, flesh of her flesh. The efficient rage of consuming fire, the handfuls of brown ash, which she had scattered, as she had promised, in the hurrying foam of a Yoda-shire beck.

She went through the motions, hoping to become accustomed to solitude and silence. Then one morning pain struck her like a sudden beak, tearing at her gut. She caught her breath and sat down, waiting for it to pass. It did not pass. It strengthened, blow on blow. She rolled on her bed, dishevelled and sweating. She heard the creature moaning. She tried to telephone the doctor, but the thing shrieked noisily into the mouthpiece, and this saved her, for they sent an ambulance, which took the screaming thing to a hospital, as

it would not have taken a polite old woman. Later, they told her she had had at most four hours to live. Her gut had been twisted and gangrenous. She lay quietly in a hospital bed in a curtained room. Numb and bandaged, she drifted in and out of blessed sleep.

The surgeon came and went, lifting her dressings, studying the sutures, prodding the walls of her belly with strong fingers. Ines was a crustaceous and shamefast woman. She did not want to see her own sliced skin and muscle. She thanked him for her life, unable to summon much warmth in her voice. What was her life now, to thank anyone for?

The anaesthetist came in to discuss what palliatives she might be allowed to take home with her. He said, "I expect you've noticed that there's no sensation around the incision. That's quite normal. The nerves take time to join again, and some may not do so." He, too, touched the sewed-up lips of the hole, and she felt that she did not feel, and then felt the ghost of a thrill, like fine wires shooting out across her skin. The anaesthetist said, "I see he managed to construct some sort of navel. People find odd, we've found, if they haven't got a navel." She murmured something. "Look," he said, "it's a work of art."

So she looked, since she would be going home and would now have to attend to the thing herself.

The wound was livid and ridged and ran the length of her white front, from the ribs to the hidden places below. Where she had been soft and flat, she was all plumpings and hollows, like an old cushion. And where her navel had been, like a button caught in a seam at an angle, was an asymmetric wheel with a little sill of skin. Ines thought of her lost navel, of the umbilical cord that had been a part of her and of her mother. Her face crossed into sorrow; her eyes were hot with tears. The anaesthetist misinterpreted them, and assured her that it would look much less angry and lumpy after a month or two, and if it did not it could easily be dealt with by a good plastic surgeon. Ines thanked him, and closed her eyes. There was no one to see her, she said, it didn't matter what she looked like. The anaesthetist, who had chosen his profession because he didn't like people's feelings and preferred silence to speech, offered

SHELTERS 1



The Shelter by the Bay



ARTISTS ARE BEING INVITED TO MAKE HABITABLE SCULPTURE as an integral part of The Wilderness Sanctuary, an artists' retreat center in SW Ireland. Called the 'Shelter Project', this book marks the completion of its first phase.

The brief for these first two sculptures, or 'Shelters', was to use materials found on the site itself. The artists, Alfio Bonanno, Alan Counihan and Chris Drury chose to use stone, an obvious choice as here rock shows through the earth everywhere – planet bones. The challenge, however, was to leave something behind whose presence did not destroy the very nature of this stone wilderness.

The book does not document the process of making the shelters, nor is it a critical evaluation of the sculpture. Its intention is to 'place' Shelters within a wider vision – to describe how a longing for wilderness could answer to our inner solitude. It also puts the Shelters physically on the map so that they can be found.

Alfio Bonanno decided to work in collaboration, in itself a response to a sense of human insignificance in relation to the place. *“Our so-called vision is only a seed that must be allowed to grow and be changed by those who use the dwelling. There must be a letting go so that the stamp of the individual is eventually obliterated. The Shelter only begins to live when it is lived in.”* (Chris Drury)

Describing his ‘Shelter of the Bay’, Alan Counihan writes *“It was blessed in the process and holds the joy of its making still”*. From a long way off you could hear the sound of stones being placed. As they fitted together they made a different, solid sound. Perhaps the oldest sound in the world.

Chris and Alfio were assisted by Gary Beshoff – “A man with great feeling for stone” (Alfio Bonanno). Alan’s helpers included the writer John O’Leary, and Martin Sullivan whose strength and insight were invaluable. John O’Leary’s experience finds voice in the words of this book – his poems dense and resonant as ‘true’ stones hitting home.

The Wilderness Sanctuary Artists Retreat Centre can be found on the Beara Peninsula in Co Cork, situated one and a half miles from Allihies on the Eyeries Road. It aims to provide small scale studio and accommodation facilities designed in such a way as to retain a sense of wilderness. When the studio and accommodations are completed, artists will be invited on the basis that their work will be enriched by solitude, or the wish to articulate a response to the spirit of the place, or they have been invited to work on a project with the local community. Meanwhile the next phase of the project is due to begin in 1999.

Rachel Parry Boydell

IRELAND WAS DIVIDED, according to myth into middle and edge. The middle was ‘the treasure, the herds and the fortresses’; the edge’ the cliffs and fjords, the salmon and the sea’ – a division between what is subject to man and law and what is wild. With the land dissolving into light, westwards, brilliance, the shore is the limit of reality, beyond this is no language nor land in these bounds.

Wilderness is the boundary between this world and the otherworld, a place of change and exposure. Its derivation from the Welsh Gwyllt (Irish *geilt*), meaning shaman or madman, underlies its meaning as a place of visions – healing or terrifying, which reach beyond what we know.

Some say that it was from here in Allihies that the monks, who also sought a wilderness and built shelters in stone, first went to the Skellig (offshore islands). The legend as I heard it says that when he decided to sail there with his Brethren, the Abbot blessed a boulder and it became a boat. The deep scar scored in the slope of rock by the keel of this Stone-boat as the dragged it down to the sea can still be seen at Point na Drimnagh – The Promontory of the Keel, in clear sight of The Wilderness Sanctuary.

“Recently several of our Brethren have set sail, in hope of finding a sanctuary in the measureless ocean. . .”

wrote St. Adamnan in his Life of Columba.

It is fourteen centuries later and we can still feel the exhilaration and loneliness of that. Imagine only the thin skin of the curragh stretched drum-tight over theribs and keel, trembling with the breathing of the ocean, between your body and the infinite blue depth below.

The image is of the at-oneness and insignificance simultaneously that is the meaning of wilderness.



The Keel Stone, Point na Drimnagh



The Mountain Shelter

THE ENDLESS VIEW WESTWARDS, the ceaseless sea sounds, these shelters are a concentration of the wilderness. *“Hives for the honey of the invisible”* (Tim Robinson). As the stones relate to the mountain from which they were hewn, their form evolving from the accident of the rocks, so the clochain relate to the landscape. They are inside the world, a curved, carved space inside the mountain where one may dwell. They are shelters for the inner life. A sanctuary is a place made safe by magic in which we dream the world.

Stonework is a symbol of the striving to coerce or charm the world into meaning and form. The Carmina Gadelica quotes a spell with which a monster is compelled to chant a building into existence . . .

*Stone on top of stone,
Stone on top of two,
Set the stones thus,
And the wall will be up.*

*Stone on top of stone,
Grey stone by its side,
Courses upon course,
From the base to the top.*

Each course drawing inwards, enclosing space. As the innumerable shades of grey mount up in their courses, the whole structure sings with torsion and tension (intention) under the great weight of itself. Stand in a clochan with your eyes closed And you can feel the heft and weight of it Under your feet, like stepping on solid ground after a long time at sea.

It is not cement or mortar which holds the structure up, but gravity.

John O’Leary at work while corbelling ‘Shelter of the Bay’



EVERY STONE must fit perfectly if the building is to stand. This is the magic that makes the place safe. There is a morality in this work. If you put even one stone in the wall (or word in the poem) for the ease or look of it, that is not right or 'true', the whole edifice will fall of its own weight. In this sense every wall is a manifestation of the sacred, a heirophany. The purity of intention is the beauty of the building.

John O'Leary



Alan Counihan working on his Shelter of the Bay



Gary Beshoff, Alfio Bonanno and Chris Dryry at work on the mountain Shelter

[STONE FOUNDATION HOME PAGE](#)

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