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above: Ehecatl, Aztec god of wind Museo Anthropologico, Mexico DF photo: T L

below:

Nant Conwy, Snowdonia, Wales photo: Peter Ogwen Jones

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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. nexi 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



TWO OF FIVE PAGES



STONES ON VIEW

The aesthetics of stone appreciation, specifically of Japanese suiseki and Chinese gongshi-or, as they are better known, 'scholar stones'-has long been a subject of personal interest to me and one worthy of exploring in STONEXUS.

American Viewing Stones, a book recently published by Jim Greaves, has reawakened that interest and opened a window onto a fascinating world that invites exploration.

The book can be seen as an portfolio of objets d'art and its text as an informative catalogue that enables us to better understand what is on view here. As this 'catalogue' makes clear, stone appreciation is considered to be, by those involved in it at least, an art, an art which does not reside in the *objet* itself, but in the eye, and mind, of the beholder.

The introduction to the book is the introduction to an ancient avocation, providing as it does an overview of this peculiar relationship between man and stone, an act of appreciation that has evolved over time, become a culture unto itself, spread geographically and developed stylistic distinctions and a complex array of categories.

As Greaves informs us, "The formalized appreciation of stones originated in China. Collecting rocks for religious or aesthetic purposes can be traced back to the Han dynasty (206 B.C.-A.D. 220)." Garden rocks with special qualities were held in high esteem during the Tang dynasty (618-907); and, during the Song dynasty (960-1270), the appreciation for larger garden rocks was extended to smaller stones, the *gongshi* (spirit stones) that have come to be known in English as 'scholar stones.' These could be brought into the house and placed there to be admired; some were small enough to be carried in the sleeve of a robe. The quality of the *gongshi* was considered to be a reflection of the sensibilities of its owner.

In the early 7th century the Chinese Imperial Court sent gifts to the Empress of Japan—*penjing* (rocks and trees displayed in basins) and gongshi, which the cultured Japanese greatly admired. Initially the Chinese aesthetic prevailed, but stylistic differences manifested as the Japanese connoisseurs were affected by a growing acceptance of Zen Buddhism which led to a "pronounced shift away from the energetic, convoluted Chinese styles, toward subdued, horizontal



landscape stones. This shift to more subtle stones culminated under the influence of Zen priests and tea masters of the Muromachi Period (1338-1573), who saw the more subtle, suggestive stones as an aid to communication with nature from which one might attain inner awareness. refinement and. ultimately. enlightenment."

Just as the Japanese expression of the art of stone appreciation was initially influenced by the Chinese aesthetic, so Korean sensibilities were influenced by the Japanese aesthetic until their own more rugged character asserted itself. I find these distinctions of character intriguing. Though they sprang from the same source, the way that the Chinese scholar stones, the Japanese suiseki and the Korean suseok differ from each other is remarkable. American 'viewing stones' represent yet another mode of appreciation, one informed by its Asian origins but evolving in its own way, as might be expected by an emerging 'school.' The Chinese have been at this for 1500 years at least, the Japanese for several hundred years, whereas it is only in the last 50 or so years that the art of stone appreciation has itself come to be appreciated, and practiced, in this country.

Another way the aesthetics of the various schools differ is in the attitudes toward altering the form of a stone. Ideally the stones selected and presented are nature's pure creations, weathered by time and the elements, yet for more than a thousand years there has been a tradition in China of 'enhancing' a stone's shape. During the Tang dynasty extraordinary pieces of limestone were carved and then deposited in Lake Tai for a few generations to 'maturate.' That tradition survives and in China today the prevailing philosophy

is that the hand of man may be skillfully employed to enhance the forms wrought by nature—thus making the piece in part, at least, a 'work of art.' As much as 20% of the surface of a gongshi can be worked and Chinese collectors consider it a 'natural' stone.

The Japanese did not adopt this practice. In theory a suiseki stone cannot be altered in any way, but in practice flattening the bottoms of stones is generally tolerated. (There is, however, another classification in Japan called *biseki*, stones polished to heighten their mineral beauty.) Koreans are the most strict about not enhancing stones and tolerate no alterations. American collectors also refrain from altering stones but creating a flat bottom is a common practice; they will, without compunction, slice the top off a large boulder to obtain a stone worthy of display.

The broader classifications of viewing stones-Landscape, Pattern, Object, Color, Figure, Embedded Image-are described and illustrated and the topic of presentation is discussed, but the principal contents of the book are the stones themselves, depicted in over 150 excellent color photographs. We are pleased to present a selection of these photographs here. Note that the author, preferring natural appearance to dramatic effect, has chosen to depict each stone against a neutral background.

American Viewing Stones will inspire and inform those with a predilection for stone appreciation, particularly those who have already begun to develop an 'eye' or even, perhaps, their own collection.

'The Midnight Hills' Three-peaked Mountains stone Sampo-seki Thomes Creek. California collected by Frank English

below: 'Demon' (Oni) Embedded-image stone Mokelumne River, California collected by Jim Greaves

ΤL



PHOTOS TO THE EDITOR





In *Stonexus VII* we published a report on a burgeoning international stone-related cultural phenomenon within which a nascent art form was developing—balanced stone sculpture.

Now five years later the internet, that hive of hyper-conductivity, has facilitated the growth of an international community of individuals with a shared fascination for stone balancing. A group of stone balancing enthusiasts on Facebook has grown to nearly a thousand, surely but a fraction of folks around the world involved in either an active or appreciative way. A society of sorts—the Balanced Art World International or BAWI—has formed, a magazine is in the offing and stone balancing symposia have taken place in Italy and Ontario, Canada. There will be stone balancing happening at Stonework Symposium 2013 in Santa Fe, New Mexico.

Stone balancing is an often astounding feat of equilibration using found objects but also it is, or can be, a creative act. In the hands of its most talented devotees it is a true art form—additive (and balanced) stone sculpture—a challenging, improvisational art form that contains the seed of its own destruction: a delicate balance.

As the objects created are ephemeral, the art of stone balancing has evolved a graphic art aspect: the photographic record. The best of the artful balancers are also skilled photographers and use highgrade equipment to render tasteful (and saleable) images of their achievements granting them a longer life. And when it takes place in the public eye, stone balancing qualifies as performance art.

The first issue of *StonEzine*, the digital edition of *Stonexus*, featured photos of a select few pieces by three of the leading international practitioners of the art: Renato Brancaleoni, Paul Volker and David Smith from Italy, Germany and Ireland respectively. These individuals as well as Bill Dan, the Bay Area pioneer of the art; Peter Juhl, who has just written a book about it; Gabriele Meneguzzi, Carlo Petrarossi, Adrian Gray, John Felicè Ceprano, Heiko Brinkmann—and too many others to mention—are the visible vanguard of the art.







The aforementioned practitioners have all developed distinctive personal styles: a Brancaleoni would not be confused with a Volker or a Ceprano. The rather sudden advent of young Michael Grab into this society of stone artists must have been remarkable, like the young genius poet Rimbaud bursting upon the scene in literary Paris, or young Charlie Parker blazing through Manhattan jazz-club nights like a lyrical comet. An informal conclave of the cognoscenti concurs: *the kid's got something*. His style is original, multi-faceted and responsive to the material at hand be it creek rocks, beach stones or the quarry stones with which he has made such amazing balances.

Michael has achieved cyber-social popularity—he went from 700 to almost 10,000 Facebook 'likes' since last May. His art could become his livelihood, if so he hopes it won't be degraded in the process.

Yet more important to Michael than the artistic aspect of stone balancing is its spiritual aspect, its value as a meditation practice. Trying to bring disparate elements into balance is a hands-on *koan*, one that results, not in enlightenment, but in a state of equilibrium. It is a western sort of Zen practice whereby inner stillness is achieved, not through attentive immobility, but through creative activity—the kinesthetic act of equilibration. As one strives to achieve balance the breath, unbidden, slows and deepens. The mind focuses on the moment. Spirit and matter dance. Here and now meet. Creation occurs.

ΤL

facing page, above: A certain quarry in Boulder, Colorado. This photo has enjoyed great popularity on the web. It provides an opportunity to compare the character and quality of a digital image (www.gravityglue.com/) and this printed one.

below: Boulder Creek, Boulder, Colorado where Michael often performs.

this page, above: At BAWI 2012 in Portonovo, Italy. left: the quarry, Boulder, Colorado (this viewer's favorite piece)

FOLLOWING THE OLD STONE ROAD: ÉIRE

by Tomas Lipps

The *Féile na gCloch* (Festival of Stone) is an annual dry stone walling festival/workshop that is held on Inis Oírr, the smallest of the Aran Islands.

This year I had the good fortune to be invited to come and participate and to give a presentation. It was a pleasure to associate with yet another gathering of stone-oriented folks in a place remarkable for the extent and character of its stonework. Following the event I took the opportunity of being in Ireland to schedule another two weeks there, rent a car and meander around the country photographing noteworthy stonework for STONEXUS.

The invitation to Inis Oirr came when I was absorbed with organizing Stonework Symposium 2012 in Asheville, North Carolina and the four workshops associated with that event. After the Symposium ended I had less than a week before flying out so research was scant, the result being an all-too-short and somewhat cursory exploration with an improvised and constantly changing itinerary. But it was both interesting and rewarding, more so because of the gracious character of the Irish folks I encountered along the way.

The places visited initially are all located along Ireland's rugged west central coast as shown below on the geological map section: the **A**ran Islands, the **B**urren, **C**onnemara, **D**ingle and **G**alway. This account will commence with the Aran Islands.

The first of two (or more) parts. All photos by author unless otherwise labeled. Map courtesy of the Geological Survey of Ireland.





Port of Entry.

From Shannon Airport to Galway city takes about an hour and a half by bus. Ten minutes into the drive and less than ten miles from the airport I saw, in a field a short distance from the highway, a *gallaun*, an ancient standing stone—a 'preminder' of the depth of the island's history. Welcome to Ireland.

Once settled in, I went for a walk around the old town that is the heart of the city. Much has changed in the forty-three years since my last visit. The quiet port and county seat I knew has become one of Europe's most popular tourist destinations and the music and arts festivals held here have earned it regard as Ireland's cultural capital.

In 1124 the King of Connacht built a fort where the River Corrib met the bay. The settlement that gathered around the fort evolved into a port town that was visited by the mariner Cristoforo Colombo in 1477 (as commemorated by the sculpture of a dove, *un colombo*, shown at right). The city walls were extended in 1580 to protect the quays. In the 18th century the Spanish Arches (bottom of page) penetrated the walls to give access from the town to the newer quays outside.

The very first photograph I took in Galway (below) seemed to presage two sources of pleasure that I would experience in the days to come: stonework and Guinness.









stylistically speaking ...

The stonework of the Aran Islands is unique unto itself. Like the other islands, Inis Oirr is almost totally composed of limestone (except for the granitic immigrants mentioned earlier) but there is some variance in the way the stone is formed and when human peculiarities are factored in an amazing variety of walling styles results. Families tend to build in a particular way; if shown a photograph of a section of an island wall, an island man, at least one who builds walls, could identify 'who done it'.

There are horizontally coursed walls on Inis Oírr, some good ones (photo, facing page) and wall ends are stabilized with large horizontally oriented stones, but what Inis Oírr and the other islands are noted for are walls built with stones aligned vertically.

Equilibrium is the goal in building a wall. Horizontally coursed walls in which stones are placed in a stable position have *static* equilibrium.

Walls with stones standing or leaning against each other are (like polygonal walls in which the stones are placed so they are not at rest, but acting against each other) in a state of *dynamic* equilibrium. *Wedge-walling* is a good way to describe this system.

the mothers ...

On the Aran Islands, styles of walling have evolved which combine vertical and horizontal elements. The stones in wall ends framing an opening are horizontally bedded, but stones in the body of the wall and those used to close the opening may be placed vertically. Sometimes the lower section of a wall is horizontally coursed, but row upon row of vertical stones are placed on top. One style that is characteristically 'Aranesque' is the 'family' style wall, examples of which are shown below and at the top of the facing page. The large stones aligned vertically in the lower parts of the wall are called the mothers, the small stones they bracket are the children, the fathers go on top.



A properly built vertically coursed wall is similar to a horizontally coursed wall with respect to the primary rule of stonemasonry: "one over two, two over one"—except that in a vertically coursed wall it should be one against two, and two against one. The photo above is a section from the wall in the photo to its left. It has been rotated 90 degrees. Note how much this looks like a well-built horizontally coursed wall.





The Burren (Irish: *bhoireann* meaning stony place) is at the seaward edge of a vast limestone *massif*. It was subjected to the glaciokarstic weathering previously described with regard to Inis Oírr, a process that produced terrain with thin but well-drained soil (good for grazing) and an abundance of stone that is well suited for structural purposes.

For the last 9,000 years the Burren has been inhabited. An extensive Neolithic civilization left its mark on the landscape in the form of dolmens. Wedge tombs, so called due to the shape of the space enclosed by stone slabs, were common. A prime example is Poulnabrone dolmen pictured on the cover and above. This early Bronze Age structure is not as large as it appears in photos (though the capstone does weigh about six tons).

Later in the Bronze Age, the Burren was occupied, as was the rest of the island, by the Celts who built the *caisels* (stone ringforts) the ruins of which dot the contemporary landscape.

The first stone castles in Ireland were built in the 12th century by the Anglo-Normans who controlled the north and east of the island. Gaelic chieftains were content with more modest accommodations within their caisels until they began to build structures like those of the Normans—the tower houses.

These were called castles but essentially they were fortified residences, often one room to a storey, three to five storeys tall with a machicolation projecting over the doorway from which to discomfit unwelcome visitors (and anyone intruding through the doorway was under threat from the 'murder hole' in the ceiling). The stout defensive character of the tower house (below) built in the Burren by the O'Brien clan was appropriate, boldly sited as it was at the junction of three rival territories rather than in the center of its own.

The southern face of the manor house that was added later proclaims a much different attitude toward light and life than the earlier tower. Both buildings were taller than they now appear.





left: Ballinaboy Church. I was drawn to this site by a sketch I'd seen in a guidebook. It did not disappoint. Standing out in low relief is the form of a double-armed cross that is integrated within the matrix of fitted stonework.

below: Another cross, the high cross of Dysert O'Dea (dysert from the Latin word for hermitage) stands on the brow of a hill overlooking the monastery (not shown here). In the distance catching the last of the sun is O'Dea Castle, a fortified tower house standing 50 feet tall.

facing page, top: Poulnabrone dolmen, rear view.

facing page, bottom: Leamaneh Castle, a 15th century tower house onto which a 17th century manor house was grafted.

lower left: Entry into the manor house, Leamaneh Castle. This was not as much a fortification as the tower house, but care was taken to forestall any abrupt arrivals into the hall—the short staircase necessitated a turn to the side rendering visitors vulnerable. Note the chamfers of the door jambs—from a rectangular opening they flare to form the traditional Irish portal that narrows at the top.



AUGHNANURE CASTLE

"... the finest fortified dwelling upon any part of the shores of Lough Corrib..."

Logistically and defensively, Aughnanure Castle is ideally situated upon a limestone bluff beside and under which the Drimneen River flows on its way to nearby Lough Corrib.

This was O'Flaherty country, a Gaelic clan noted for bravery in battle. An O'Flaherty fortification here would not have been a castle, but a traditional Gaelic *rath* or *caisel*, an earthen or stone ring fort. The first castle on this site was probably built by Walter de Burgh, son of Richard de Burgh, the Anglo-Norman knight who invaded, subdued and occupied the province of Connacht in 1256.

Whatever de Burgh built was undoubtedly Norman in character and of stone. Norman fortifications had evolved from a model consisting of the *motte*, a raised mound of soil, and the *bailey*, a lower area (which had provided the soil for the mound) surrounding the motte and protected by a timber wall. A wall would also be built atop the motte with, sometimes, a square wooden building in the center, a *keep* as it came to be known. By the 13th century when de Burgh built his castle stone was the material of choice, both for the central structure and the walls protecting the bailey or *bawn* as the Irish termed it. This became the fortified tower house/ castle that would be the model habitation of the landed gentry for several centuries. More than 3,000 were built in Ireland. Galway town was lost to the Anglo-Norman occupiers but the O'Flahertys soon regained Aughnanure. For more than 300 years it was their main stronghold and from it they ruled the lands from the western shore of Lough Corrib to the Atlantic coast—*lar Connacht*—while paying nominal obeisance to the Crown. They were a constant threat to the citizens of Galway; the walls of the town were fortified *expressly* for protection against the 'ferocious O'Flahertys'. In the 16th century Morogh na dTuadh, a minor figure in the clan, was pardoned by the Queen for his offenses (which included soundly defeating an English force sent against him). In return for 'observing the Queen's peace,' he was appointed chief of the clan over the head of the legitimate chief in residence at Aughnanure. When an O'Flaherty uprising was quelled (with his help) and the castle taken by the English, it was granted to Morogh. He greatly improved Aughnanure and its defenses, bringing them to the standard seen today.

above: Latter-day Aughnanure had a double bawn, an outlying area protected by a second perimeter wall. Here we are looking from the outer bawn toward the inner one and the six-storey tower house. The circular two-storey watchtower stood at a corner of the wall protecting the inner bawn and keep. There is a corbelled dome over the lower room and a corbelled conical roof over the upper.

above right: Detail of the bartizan, an outer-work supported on corbels with gunports to protect the tower's doorway and the gate in the bawn wall (now gone).

right: No one has lived here since Peter O'Flaherty in the mid-20th century (after turning it over to the state and helping to restore it). This handsome fellow is now the sole inhabitant of Aughnanure. The Lard of the Manor, so to speak.



STONE STORY

by John Shaw-Rimmington—an excerpt from a lengthy serial saga of lithic life focused on the adventures of a small 'family' of dissimilar geological personalities whose fortunes are fused by contemporaneous events.

THE STORY UNTIL NOW ...

The Squire (a squarish stone) and Rhonda (a roundish one) were making their lithic way down the side of a hill (slowly) to join other stones being assembled by humans into a dry-stone wall then being built in the valley below

They were waylaid by Myron (an unusual pyramid-shaped stone) who persuaded them to divert their trip temporarily and follow him to see a wall not made of stones and not held together without glue or mortar, which he was worried was built in a way that would soon be replacing the proper dry-stone wall method, which had always been the traditional way of building walls in that area.

They began their journey in that direction, and then after being assembled by a stranger who had stopped to balance them, tried to attract another passerby to notice them in that configuration and be impressed enough to carry them off, hopefully in the direction they needed to go, only to be thwarted in their endeavors. Instead, they were apprehended by two trail workers, bundled into a cargo bag with some other rocks and flown by helicopter to the north side of Scafell Pike and dropped there. Along the way they had picked up Michael (a flattish rock) who had only recently regained his influence over humans to be 'picked up,' after having been unable to do so for many years.

Now the Squire peered over the fells and the hills towards the east.

Though rocks don't attach a lot of weight to issues of ancestry and breeding the Squire was quite familiar with lower parts of this country, through the connection of his being 'descended' from bedrock in the vicinity. Although he wasn't of the specific family of volcanic rocks that originally inhabited Scafell Pike, his beginnings were associated with the nearby granite deposits formed millions of years ago, at this their geological origin—'orb earth,' not far from Scafell Pike. He was somewhat amused to find himself back on his 'turf' so to speak, but other than it being a coincidence, he connected no earthly importance to it.

In fact, rocks find it quite puzzling how much emphasis humans place on knowing where they come from. 'They' being both humans themselves and also rocks. Apparently not just their own species (and all the other varieties of things) but even rocks come under their inane scrutiny.

"It is crazy," thought the Squire, "that they try to make sense of something so scrambled and ultimately unimportant; endlessly hypothesizing and speculating about geology, trying to determine the 'lineage of rocks,' rather than making the more important connection, that of the 'alignment of rocks,' which is simply determining their best configuration in the present". "Is there any point to trying to decipher every swirl in a 'marble cake'? he wondered. "It's just like them to miss the point entirely. All the scientific knowledge contained in books and charts that they've come up with, showing the supposed 'past' ages and periods of geological development, with every far-fetched configuration of plate tectonics imaginable, amounts to very little," he thought, "compared to the wisdom contained within a single rock, existing in all its potential, right here and now".

.

Rocks are good at waiting. They have got it pretty much covered. It is a function of their makeup, their composition. Nothing needs to happen for them, or to them, for great lengths of time. They can out-wait huge oak trees and giant redwoods. They can out-last storms and floods and upheavals. They can put up with both the wear and tear of continuous activity, and the gnawing boredom of inactivity.

The Squire and his three friends were waiting. Not waiting for something to happen—just waiting. Apart from being heavy and having hardness and 'rocking' (as the Squire had reminded Rhonda)—'waiting' was what rocks do!

So they waited.

Long before time can remember, rocks as we know them today had no recognizable form at all. Somehow something happened, which even they can't explain, and they collectively made a quantum leap from a primeval state of non-being onto the stage of physicality and cosmic consciousness.

Before that, they were all just one big timeless swirl of gasses and molten minerals. They were the true mineral spirits. This was about 4.6 billion years ago, before the earth's surface started to solidify. It was a big happening back then. It involved many things that can't be understood without metaphors and metaphysical ambiguities.

The time 'before time' was a very creative time. Everything was a solution. There were no problems, only a huge gassy liquidmix of 'remedy'. As this solution 'cooled,' the ingredients of raw potential solidified into what we understand to be the essential pre-historic building blocks of matter: which includes all the rock material on earth and throughout the universe.

The basic ingredients back then were silicon and oxygen and a smattering of other trace elements which had begun to consolidate into infinite configurations of something they had never been before. They turned from a kind of big swirling etherial 'problem solvent' into a more solid manifestation of spacial 'problem solvers'. The 'solution' had been mixed well and given time to

THE (DRY STONE) BRIDGES OF HILLSBOROUGH COUNTY (NH)

Wooden bridges, vulnerable as they are to wear, tear, rot and streams in flood, have short life spans. Stone bridges were a logical alternative in New Hampshire, aka the Granite State, and their longevity justified the expense of construction. The productivity of its many quarries had increased in the 1830's with the introduction of the plug-and-feathers method of splitting so there was abundant material to hand. Granite was already being used for the piers and abutments of the state's many wooden bridges, and stone-arched bridges were inevitable given the examples of arches successfully employed in bridges downstream in the lower Merrimac Valley. The first stone-arch bridge in New Hampshire was built in 1834 in Henniker just down river from Hillsborough.

In Hillsborough there was a bridge that had been constructed in 1824 with drystone abutments and a timber structure spanning the distance—40 feet—between them. In 1839 this was converted by replacing the timber structure with a stone arch and the result provided the impetus for 11 more stone-arched bridges to be built across the Contoocook River and its tributaries in Hillsborough County. Of these, five have survived. Two are out of service—the by-passed bridge in downtown Hillsborough (photo, top left) and the one under the waters of Lake Franklin Pierce (sorry, no photo)—but the others are still in use.

Local stonemasons soon learned the principles and techniques of arch construction and more than 40 stone bridges were built in New Hampshire before the 1900's. These were all dry-stone structures because the lime mortar available then would deteriorate due to damp caused by rain or flooding and leach out, leaving voids, and leading to failure. Bridges constructed of mortarless stonemasonry had advantages: if inundated during a flood, contact between the stones was unaffected and the masonry would drain and dry out readily when the water level dropped.

Note that the arches or, more correctly, the vaults in these photos are carefully constructed of a single curving 'course' of well fitted and bonded split granite *voussoirs* (individual arch elements); while the *spandrels* (the space between two arches or between an arch and an abutment) are composed of loosely fitted rubble walling. These slender shell-like arch/vault units are bearing the combined weight of the spandrels, the kerb wall containing the roadway, the mass of the roadway itself and the vehicles that pass over it—and doing it gracefully.

Primary toocool photos, left, far bottom











ΤL

Primary resource: James L. Garvin. Notes on the Origins of Arched Stone Bridges in the Contoocook River Valley of New Hampshire. New Hampshire Division of Historical Resources.

photos, upper left: Sawyer Bridge, Hillsborough town

left, far left and below: Gleason Falls Road bridges, pages 69-70: Gleason Falls Bridge bottom left: The old Carr Bridge carries Jones Road across Beard Brook.