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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.

Nexus (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.

Magazine (mag-úh-zeen), n.
1. A periodical containing a collection of
   articles, stories, pictures, or other features.
THE SECRET TOWERS OF THE HIMALAYAS

by Frederique Darragon

Review by Pierre de Montaulieu

THE RUGGED HINTERLANDS

of Western Sichuan province, between central China and the Tibetan Autonomous Region, is an area known as the Tribal Corridor, where at one time dotted with thousands of lofty stone towers cunningly designed, skillfully constructed, remarkable in form and scale, and mysterious in origin.

A few hundred of them still stand scattered amongst an indigenous populace largely ignorant of their history, indifferent to their presence and often detrimental to their well-being. Until recently that is.

The towers have acquired a champion in the adventurous person of Frederique Darragon, who became a dedicated amateur archaeologist as she delved into the mystery surrounding the origins of these remarkable structures. Who had built them, and why, and when, were the questions she set out to answer. In the process, she uncovered answers to another question, how were they built? These answers are to be found in her book, The Secret Towers of the Himalayas.

From her home bases in Sichuan (an apartment in Chengdu, the capital, and a house adjoining a tower in one of the many valleys), she has conducted what amounts to the first census-taking of the towers, counting them, mapping them, measuring them, drawing them, photographing them, categorizing them, collecting samples of wooden elements for carbon-dating, questioning the people living in proximity to the towers and researching the history of the regions in which they are to be found.

WHO

As Darragon recounts, the towers are found in what is known as the “Tribal Corridor” between Central Tibet and China. This area has been inhabited time out of mind. Based on the ancient texts as the Quiang Ren (ren means people), in the recorded history of ancient texts, many different tribes were found in what is known as the “Tribal Corridor” between Central Tibet and China. This area has been inhabited time out of mind. In the recorded history of ancient texts, many different tribes were found in this area. The current inhabitants of these regions are considered to belong mainly to the Tibetan or Qiang Minorities, but Darragon is convinced that their ancestors, who built the towers, were, in fact, subjects of fairly independent kingdoms, the Qiang of the Min Mountains, the Jiaron, the Minyang and the people of Nyang-Po. How they got there and the reasons they built the towers, as well as the range of purposes for which they were designed, skillfully constructed, remarkable in form and scale, and mysterious in origin.

Due to the diverse nature of their origins and the fragmented terrain in which they live, the languages spoken by the contemporary rural peoples are dissimilar, varying greatly from valley to valley. One thing these mutually unintelligible languages and/or dialects do have in common is the lack of a written form, therefore, there is no written history.

There are towers of various kinds and qualities throughout the Tribal Corridor, but only four regions where the star towers are to be found. The current inhabitants of these regions are considered to belong mainly to the Tibetan or Qiang Minorities, but Darragon is convinced that their ancestors, who built the towers, were, in fact, subjects of fairly independent kingdoms, the Qiang of the Min Mountains, the Jiaron, the Minyang and the people of Nyang-Po. How they got there and the reasons they built the towers, as well as the range of purposes for which they were designed, skillfully constructed, remarkable in form and scale, and mysterious in origin.

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China, there are few clues about these regions before the 4th century AD.

When China’s Sui Dynasty (581-618) and Tang Dynasty (618-907), a time when Tibet had become a military power, many independent-minded barbarian tribes created regional kingdoms in the rugged hinterlands between the two realms. The Tribal Corridor today is comprised of twenty or so regions that are home to more than a dozen minorities (as well as a number of Han Chinese that entered during the Qing Dynasty [1644-1912] and since.)

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WHEN

Conscientiously, Darragon collected samples from structural wooden elements for laboratory carbon-dating. The oldest towers are thought to be found from between 780 to 1040 AD; another from 900 to 1140 AD (of course, the wood samples might be older than the tower itself, so, bearing this in mind, she was careful to sample smaller pieces of wood which was less likely to have been reused.)

WHY

As the Smithsonian article relates, many theories have been put forward. Some say the towers were defensive in nature, that this was a lawless land subject to internecine raiding and invasion from outside. Indeed, many of them seem to have been designed for that purpose, as integral features of fortified hamlets. The entryways of some towers were several meters above ground level (like the towers built by the Irish monks to safeguard themselves against Viking raiders.) Sometimes the bonuses from structural wooden elements for laboratory carbon-dating. The oldest towers are thought to be found from between 780 to 1040 AD; another from 900 to 1140 AD (of course, the wood samples might be older than the tower itself, so, bearing this in mind, she was careful to sample smaller pieces of wood which was less likely to have been reused.)

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THE ART OF BALANCING STONES

by Tomas Lipps

an enduring material. We stonemasons assemble pieces of this obdurate stuff—STONES—with the intention that they stay assembled for as long as possible. Stability is the goal, to produce an enduring structure.

A BALANCE OF MATTER, A MATTER OF BALANCE

To spend time and effort in the act of putting stone upon stone in ephemeral configurations so delicately balanced that a breeze or the alighting of a bird is enough to bring them down is an activity that is marvelously absurd—and totally engaging. Balancing stones requires sensitivity, poise, physical coordination and a concentration of attention that results in what might be termed an existential state of being. It is, or can be, meditation, a physical feat, a creative challenge, an art.

The impulse to put stones upon other stones is instinctive. Killing, cutting, cooking, and building were not the only uses early man found for stone. It was also a means of expression. Marking terrain and trails, making significant configurations, were other purposes for which stone was “handy.”

A cairn, whether a built pillar or two or three stacked stones, is a purposive statement. Upright stones, whether erected, built, stacked or balanced evince a presence quite distinct from the unarticulated prima materia. In Asia—in Tibet, Japan and South Korea, for instance—stones are stacked as the embodiment of a prayer. In Canada and Alaska, stones were, and are still, used to build free-standing dry stone totemic figures, called inukshuk. These serve as surrogate human presences that help to herd reindeer, and as friendly landmarks in a vast, lonely and nearly featureless landscape.

There is no physical evidence that the activity at issue here, defying gravity with delicately balanced assemblages, has a long history, but inherent human creativity and playfulness, and the fascination with which naturally occurring balanced rocks and stones are regarded, argues that it must be so.

above right: At the Tapsa Temple on Korea’s Mt. Maisan, there are some 80 stone towers or pagodas that were erected in the early 1900’s by a hermit-monk named Yi Kap-ryong. He carefully piled hundreds of rocks atop one another as a personal prayer for peace; no mortar was used. Stone by stone, working only at night and without any mechanical help, he spent more than ten years creating these pagoda shaped piles—some as much as 10 meters high!

The stone towers have stood for over 100 years, withstanding the forces of strong wind, rain and typhoons that have uprooted trees in the area.

Yi’s daughter-in-law maintained that he could never have completed such a feat without the help of a heavenly spirit who descended to Earth each night to help him build the towers. The pagodas are said to be an extension of salvation for mankind to strengthen the spirit. Each tower was built of stones selected and carried from one of several mountains and rivers throughout Korea.

Yi died at the age of 94; the stone towers endure as a mountainside testament of manifest spiritual devotion.
A small but spirited and wide-ranging societal subset with a shared interest in this activity has come into existence. Stone balancing is becoming established as a category of creative activity, like music, painting or sculpture. There is, as with those activities, a wide range of involvement, from mere dabbling—stacks of stone in the front yard—to “High Art”—art gallery and museum exhibits and coffee-table books.

The transition from archetypal activity to a contemporaneous popular art form has resulted in what might be called the ‘Modern Era’ of stone balancing, a phenomenon that can be said to have begun late in the last century. It was, evidently, a popular pastime at Rainbow Gatherings in the 70’s. A photograph in an article in a 1984 issue of the National Geographic magazine showed a gentleman quietly stacking black stone “Buddha spires” in a creek somewhere in Big Sur, California.

Yes, in a creek. Water is the great quarrier and the banks and beds of creeks and rivers, lake shores and rocky sea coasts with the abundance of stone exposed were, and are, potential theatres of operation for a growing number of stone balancers.

Stone balancing is done for various motives, as a meditation, as art, as recreation, as an occupation or an avocation, as creative play or exhibitionism. It is performed in public by some and done privately by others. The former often accept, and sometimes solicit, money in appreciation for their feats of balance. The latter often do theirs in unpeopled places and then photograph them a la Goldsworthy before leaving them to their inevitable collapse. (Though some, acting on personal principle, return each stone to its original resting place.)

DANCES WITH STONES

THE HUNDREDTH MONKEY THEORY

The Japanese monkey, Macaca fuscata, had been observed in the wild for a period of over 30 years. In 1952, on the island of Koshima, scientists were providing monkeys with sweet potatoes dropped in the sand. The monkeys liked the taste of the raw sweet potatoes, but found the dirt unpleasant. An 18 month old female named Imo found she could solve the problem by washing the potatoes in the salty ocean water, improving the taste of the potatoes. She taught this trick to her mother. Her playmates learned this trick and taught their mothers too. This cultural innovation was gradually picked up by numerous monkeys in the troop and observed by the scientists.

Between 1952 and 1958, all the young monkeys learned to wash the sandy sweet potatoes and make them more palatable. Only the adults who imitated their children learned this cultural improvement. Other adult monkeys kept eating the dirty sweet potatoes. In autumn of 1958, something startling took place. A certain number of Koshima monkeys were already washing their sweet potatoes, the exact number is not known. The hypothetical number given was 99. Then it happened. The hundredth monkey learned to wash the sweet potatoes. The added energy of that hundredth monkey somehow created an ideological breakthrough. Almost everyone in the tribe was washing their potatoes before eating them, but a surprising occurrence was observed by these scientists. The habit of washing the sweet potato had jumped overseas. Colonies of monkeys on other islands and the mainland troop at Takaskiya began washing their sweet potatoes.

Although the exact number may vary, this Hundredth Monkey Phenomenon means that when only a limited number of individuals knows a ‘new way’, it remains the conscious property of those individuals. However, when one more individual manifests this new awareness, the field is strengthened, a critical mass is reached, and the awareness becomes the conscious property of all. This new awareness is communicated mind to mind.

by Ken Keyes Jr.

Something similar seems to have happened world-wide with with stone balancing.

left: Elizabeth Foley balancing, Seattle, Washington. photo: Jeff Leck

above: Deva Manfredo balancing, Mt. Labbro, Tuscany, Italy

Darryl Maddaus balancing, Toronto, Canada

photo: Elson T. Elizaga

Bill Dan balancing, San Francisco, California

photo: Frederic Neema

THE HUNDREDTH MONKEY THEORY
“Everything, rocks and other solid objects or anything else, have their inua (inner person). Anything that is made or created has an inua.”

Hubert Amarualik, Inuit elder
above: Island of Hydra, Greece  stones/photos: Tom S. Thomas
Capilano River, British Columbia, Canada  stones/photos: Zach Pine, Muir Beach, California
The “Western North Carolina Rockstackers,” a group of friends and neighbors, have embraced the activity of stone balancing in a way unique to them.

Individually, they enhance their properties with “yard art,” stacks of stones that, in a few cases, number between fifty and a hundred.

Collectively, they occasionally gather for convivial group “stackathons,” friendly creek-side affairs with food and drink that result in the creation of a menagerie of stone “critters.”
THE STORY OF HOW I GOT STARTED

In this rock thing goes like this: in the process of collecting stones for a flower bed in our front yard, I noticed that the stones were killing patches of grass. It occurred to me one day that if I stacked them on top of one another, I would make fewer brown spots on the yard. So I did.

Soon I began making all kinds of stacks. I began to thrive on that moment when nothing else in the whole world mattered except for making Stone C on Stone B, which in turn, stood on Stone A.

A year earlier I had quit drinking and found that I had neither hands and a desire to create things. The flowerbed became a terraced rock-n-sedum affair with tons of collected rocks — arches, stacks, walls and some collectibles and sentimental favorites. Stacking became my passion.

I like to stack things in somewhat busy places and listen to the comments of passersby, or visit places I have stacked to find that visitors have left contributions. Doing something I enjoy that brightens others’ day makes for a good past-time, I think.

I progressed from Stone C on B on A to what I call “dependent balances,” in which Stone B would not stand on Stone A without the weight of Stone C on it. Arches came next and remain a favorite construction.

More and more I see myself chasing those intense magic moments of precarious balance at some risk to my personal safety. I have left contributions. Doing something I enjoy that brightens others’ day makes for a good past-time, I think.

I progressed from Stone C on B on A to what I call “dependent balances,” in which Stone B would not stand on Stone A without the weight of Stone C on it. Arches came next and remain a favorite construction.

The most unexpected alliances have been achieved, and as you gently move the stone on top you somehow sense whether the two can make a happy alliance. You try one way, then another, you feel it might just be possible, then the most tiny of adjustments and it suddenly locks into place. You begin to set fresh challenges for yourself, and look for bigger and more improbable stones to try and balance on top of others.

The whole thing is so ephemeral, and yet it has an appearance of permanence. Sometimes the equilibrium is so fine that if it has been achieved when one of the stones has still been wet from the stream, it can be lost as the sun dries out the stone, and you hear one that ten minutes ago was standing quite firm suddenly tumble into the water again.

The only thing for certain is that this unique display is transitory. The wind and the water will soon take away all this work. A salute, therefor, to all those who-unthinkfully and anonymously have given their time and the creative effort into creating a park of spontaneous free-standing sculpture in this secret place that will pass, with summer, into only a fond memory.

A mysterious phenomenon has come this summer to one small stream in the Garfagnana, Italy - stone balancing.

Strange figure-like constructions stand guard, immobile, along a rushing stream near the Tuscan hill-top town of Barga. Some appear to be in an almost human form, others are like birds. What makes them unusual is that nothing holds these towers of stones together except gravity. No cement. No glue. Not even a small pile of sand comes between the naked stones; one piled upon another. Improbable feats of balance, one long pearl-shaped stone stands - upside down as it were - on another. Three on top of each other here. Four there. Five. All suspended, as if for eternity. But the reality is much more fragile: the most minuscule change can send them all toppling back into the stream. A strong breeze, the merest touch, a failed attempt to add another to the already unlikely construction and the work is destroyed.

One large slab of rock has several egg-shaped stones of various sizes all precariously perched along its ridge - and some others cling to one of its sides, which looks easier to achieve - until you try to add to it yourself. Long hours of rock balanced on a tip have had smaller rounder stones balanced on their tops, giving them almost the appearance of human figures. In places three or four are clustered together in small family groups. You are irresistibly reminded of the stone heads of Easter Island, or the creations of Brancusi, or Epstein or Barbara Hepworth or Henry Moore - isolated, impenetrable, silent.

Even the inevitable attempts at representations of these parts of the human anatomy generally kept decently covered have a kind of primilive charm, and no little skill in the realisation.

And who is doing all this work? No one knows.

It appears it was started some weeks ago by someone who lives nearby, but then others who have happened upon this somewhat remote spot have continued the installation, and now dozens of these staturer-like constructions stand along a hundred-metre stretch of the stream. Almost everyone who comes seems to want to add to this exhibition, with however small a contribution.

One of those who has added to the creation of this free art gallery talked about the experience:

“It is almost mystical,” he said, “to feel a sudden realisation of an improbable equilibrium. The most unexpected alliances can be achieved, and as you gently move the stone on top you somehow sense whether the two can make a happy alliance. You try one way, then another, you feel it might just be possible, then the most tiny of adjustments and it suddenly locks into place. You begin to set fresh challenges for yourself, and look for bigger and more improbable stones to try and balance on top of others.”

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Dave Russell

THE STANDING STONES OF BARGA

by a barganews.com reporter, 27th August 2001

A mysterious phenomenon has come this summer to one small stream in the Garfagnana, Italy - stone balancing.

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One large slab of rock has several egg-shaped stones of various sizes all precariously perched along its ridge - and some others cling to one of its sides, which looks easier to achieve - until you try to add to it yourself. Long hours of rock balanced on a tip have had smaller rounder stones balanced on their tops, giving them almost the appearance of human figures. In places three or four are clustered together in small family groups. You are irresistibly reminded of the stone heads of Easter Island, or the creations of Brancusi, or Epstein or Barbara Hepworth or Henry Moore - isolated, impenetrable, silent.

Even the inevitable attempts at representations of these parts of the human anatomy generally kept decently covered have a kind of primilive charm, and no little skill in the realisation.

And who is doing all this work? No one knows.
For whatever ostensible reason people balance stones, there are three essential aspects that draw them to it: (1) the collaboration with nature, the intersection of the life of stone and the life of man; (2) the creative challenge and the satisfaction of meeting it; and (3) what might be called The Moment, the aforementioned ‘existential’ state of being, the concentrated attention required to achieve balance. (You must be present to win.)

The people who do this, the lithic equilibrists, let’s call them, are as interesting as what they do. A sampling would include artists who have found another medium in which to work, poets, several photographers, software designers, doctors, a nurse, a newspaper editor, a private detective, construction workers and, of course, stonemasons. Profiles, even simple character sketches of the individuals responsible for the examples shown on these pages, would make for interesting reading, but, unfortunately, would require more space than is available here; a book could be written about them—and IT.

Public awareness of stone balancing has been broadened by the Internet. Many practitioners have web sites where they can be visited—by each other as well as a curious public. And, there is www.rock-on-rock-on.com. Daliel Leite, a San Francisco Bay Arean, was so impressed by watching Bill Dan, a virtuoso balancer whose base of operations is near the Golden Gate Bridge, that he was inspired to begin balancing himself. His enthusiasm for the activity later led him to set up the website. Initially it show-cased Bill’s work, but gradually evolved into a celebration of the activity of stone or rock balancing and a nexus for a growing community of stone balancers. It is a survey of contemporary stone balancing and a repository of images and personal reflections on the nature of the act by individual stone balancers. Most of the balancers represented in this article are members of the rock-on-rock-on.com community and more images and information about them, and others, can be seen there.

Part of the appeal of stone balancing is that no training or tools are required and the material is abundant and free. If you feel compelled to practice this ‘art’ remember, stones can bite! Be careful.

Some discretion is advised as to where and how one might choose to balance stones. In parks and wilderness areas where folks go to appreciate nature, balanced stones might seem out-of-place and cause offense. Arcadia National Park in Maine, for instance, implores hikers to please NOT build cairns. “LEAVE THE MOUNTAIN AND ROCKS AS YOU FIND THEM” says the signage. Be sensitive.

The more precarious the balance, the more remarkable—and satisfying—the result. To achieve balance in this way, if only briefly, is to feel balanced in one’s self, if only briefly. As Bill Dan says, “Be Balance.”
THE ART OF STONE BALANCING:

BALancers:
Jean Felix Ceprano  www.jfceprano.com
Bill Dan, www.rock-on-rock-on.com
Elizabeth Foley/Len Othick, www.artoflivingrocks.com
Jonas Jongblut, www.rockbalance.blogspot.com
David Lisle, www.rock-on-rock-on.com
Deva Manfredo, www.devamanfredo-stoneart.com
Jim Needham, www.rockstacker.com
Zach Prie, www.naturesculpture.com
Peter Riedel, www.petrienedelphotography.com
Dave Russell, www.myavantgarden.squarespace.com

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David Gentleman

A Cross for Queen Eleanor

The story of the building of the mediaeval Charing Cross, the subject of the decorations on the Northern Line platforms of the new Charing Cross Underground Station

Printed to mark the occasion of the opening of the Jubilee Line on 30 April 1979 by HIS ROYAL HIGHNESS THE PRINCE OF WALES.

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Author’s note

When London Transport commissioned me to design the mural decorations for the Northern Line platforms at Charing Cross station, I chose as the subject the building almost seven hundred years ago of the original Charing Cross in what was then the village of Charing. In the course of the task I had to find out about the methods and organization of the craftsmen who built the Eleanor Crosses, and also discovered their significance in the architecture of their time. This book is the fruit of that research.

It is not a scholarly treatise. It attempts, like the decorations, to give the interested Londoner (and visitor) some idea of the working lives and the skills of the craftsmen of an earlier time and, in a way, to acknowledge our debt to them.

The illustrations are enlarged from prints from wood engravings which were made on boxwood blocks. For the station decorations, similar prints were further enlarged and screenprinted with great skill and care by Perstorp Waterite Limited on to the wall panels which run from end to end of the platforms.

I would also like to record my debt to the many medieval illustrators and to the historians and scholars whose works made my task possible, some of whom are mentioned in the bibliography; and to thank Herbert Spencer for his invaluable help in designing this book.

Charing Cross to most Londoners means only a hazily-defined area somewhere between Trafalgar Square and the Thames, with a hotel, a hospital (now moved to Hammersmith) and a number of stations with, until recently, a confusing variety of names. But long ago it meant something much more tangible and precise. For three and a half centuries, a real solid Charing Cross stood where the statue of Charles I stands now, one of the great sights of London, as familiar in its time as the nearby Nelson’s Column is in ours: the tall and splendid monument which had been built in Charing village to remind Londoners of their resourceful and faithful Queen, Eleanor of Castile.

Eleanor was the beloved wife of King Edward I. She married him at Burgos in Spain in 1254 when both of them were very young; she accompanied and sustained him on his Crusade; it was said that when he was wounded by an assassin, she saved his life by sucking the poison from the wound; she traveled with him on his perilous expeditions to Wales; and during their thirty-six years of marriage she bore him fifteen children. It was written of her that ‘to our nation she was a loving mother and the column and pillar as it were of the whole realm.’ During these years her husband became not only an energetic and powerful warrior king but also a remarkable builder; the Tower of London and eight great castles in North Wales stand as his own most solid and striking memorial. Eleanor the Faithful died at Harby in Nottinghamshire in 1290. Her body was taken to nearby Lincoln where her heart and entrails are buried; then the body was embalmed and, accompanied by the King and his court, was taken in a great funeral cortege to Westminster. At each of the twelve stopping-places on the road the King selected a place to build a monumental cross to her memory; they came to be called the Eleanor Crosses. Three of them still survive, at Geddington in Northamptonshire, at Northampton and at Waltham Cross in Hertfordshire. Her body lay at last in Westminster Abbey, under the bronze effigy which suggests to us, as vividly now as it did almost seven hundred years ago, a graceful and serene woman. The stone tomb encasing it was made by the King’s mason, Richard of Crundale, and he it was who, at the King’s mews in the nearby village of Charing, built the last and most splendid Eleanor Cross of all: Charing Cross.
No one knows exactly what it looked like. The Puritans pulled it down in 1647 and used the stones to pave the ground outside White Hall, and the few surviving drawings of it tell us very little. It seems probable that, like the eight-sided Northampton cross, it was a tall polygonal structure carrying six or eight statues of the Queen, that it stood on a stepped plinth, and that a large cross stood on top of its spire. The Victorian ‘Charing Cross’ in the Strand outside the Southern Region Station is not a restoration or even an accurate reconstruction but a Gothic Revival work of the imagination, built in 1865 by the railway company; of the genuine crosses, Waltham Cross has been much too thoroughly, even disastrously, restored to retain any feel of the original. But by looking at the beautiful crosses at Northampton and Geddington we can guess at the elegance of Charing Cross itself. The time was ripe for building it; indeed, at about this time, 1290-94, the most active developments in Gothic architecture were no longer taking place in France (its original source) but had shifted to England; building here over the following twenty or thirty years reached a peak of invention and achievement whose influence was to spread through Europe.

Self-confidence and stability under King Edward played a part in this architectural upsurge, but the underlying reasons for it stretch back to the Normans, whose determination and efficient organisation had transformed English building. Norman vigour and enterprise had flourished in an increasingly, if only relatively, stable and prosperous country. To establish their supremacy and prestige here, the newcomers had had to build castles, monasteries, and great churches; they had organised adequate and reliable supplies of stone, first from Normandy and then from newly-developed English quarries; and having at first brought over their own Norman masons, they had then set in train enough work to call forth great numbers of skilled English carpenters and masons. As these skills developed, there grew an astonishing mastery of construction, in which clever and complex ideas were closely matched by skilled and developing craftsmanship, for in Gothic architecture idea and execution were inseparable. Buildings were designed not by architects who had been sheltered by education and upbringing from practical building work, but by highly skilled masons, with great breadth of experience; the same men knew how to design and erect castles, houses, churches, to build, in short, for kings and cut-throats. There was no practical reason for them to specialize, and masons’ guilds had not yet invented one by dividing the craft into strictly demarcated functions. Master masons were concerned not with any aesthetic style as such, nor with following any classical model, but only with building as practically and efficiently as they knew how. And since the skills of artist, craftsman and technologist, which we now generally assume to be separate and distinct, were only just beginning to be differentiated at all, a mason was, as has been well said, at the same time composer, conductor and member of the orchestra.
DELOS

The Cyclades are a cluster of more than 200 islands in the Aegean Sea to the southeast of the Greek mainland. Cyclades (circling) refers to way the islands are disposed around Delos, at one time the spiritual as well as commercial and cultural center of the archipelago.

Diminutive Delos, only a kilometer and half wide and six kilometers long, exerted power and radiated influence throughout the Aegean. It was the birthplace, not only of the Greek gods Apollo and his sister, Artemis (Diana), but of the Delian League, the political alliance that ruled the Aegean from Athens. It was the League’s home port and the site of its treasury. Its harbour, though, does not give the impression that a great sea power operated from here. Neither does the island seem able to accommodate a population of 25,000 persons (not counting slaves) as it is said to have done.

Temples were built not only to Apollo and Artemis, but to many other deities, major and minor, Greek, Roman and Egyptian. There was a major synagogue there.

Under Roman rule Delos was made a free-port and became a favoured destination for Rome’s affluent class, much as neighboring Mikonos is for Europe’s jet set today.

Circa 426 BC the bones of all who were buried on Delos were disinterred and removed to Rhenia, a nearby island, and it was decreed that those about to die and women who were about to give birth were to be taken off the island. In effect, no one was allowed to be born or die there.

But die there they did, and in great numbers when, early in the 1st Century BC, the Mithridatic War made a sudden and brutal visit to Delos. Mithridates, the emperor of the kingdom of the Black Sea was at war with Rome, and Delos was very important to Rome. In 88 BC the island was sacked and its inhabitants, thousands of them, were slaughtered, the mansions and temples desecrated and demolished. Twenty years later it was raided again and ransacked by pirates who took into slavery all those they did not kill.

Given the emergence of other important ports in the Mediterranean, the second assault caused the island to recede into obscurity. The Greek emperor even put the place up for sale in the 1st century AD. Nobody would buy it. At times it was a base for pirates. The Turks owned it for a while. For centuries Delos has been used as a marble quarry; the temples, monuments and mansions were stripped by generations of scavengers. The vestiges of its glory that remain, however, and the absent world they intimate, still evoke a sense of wonder.

The French School of Archaeology began excavations in 1872, resumed them between 1904 and 1914, then again between 1958 and 1975. Many public buildings and private houses were uncovered and some were partly reconstructed. Work is still in progress.

I regret that my photographs of the famous lions of Delos and the cisterns—beneath the floor of a theatre supported by a series of arches—have dematerialized. A return there may be in order.
This method of bonding stonework is so prevalent in Scotland and Ireland it has been referred to in some journals as ‘Celtic Bond’. Amongst the French speakers in Canada it is known as ‘travail écossais’.

Whatever it’s called, this is a method of building an incredibly strong masonry wall with differently sized, (and even very loosely squared), stones, in either ashlar or rubble work, with a pattern that is both handsome and, at the higher levels of workmanship, artistic.

The principal characteristic of snecked work is the keying together of parallel courses of stone. This is achieved by interrupting the level height of a horizontal course by placing a taller stone that reaches up into the next course. This vertical interlacing gives a wall a tensile strength that enhances its compressive strength.

When I served my apprenticeship we were never provided with a set of instructions to build snecked work; it was picked up directly on the job. When I started teaching stonemasonry to brick and blocklayers at Durham College in Ontario, I learned the value of putting the basic tenets on paper for the students to take with them.

SNECKED MASONRY involves three kinds of stones:

RISERS—Or JUMPERS, these are the stones extend up through the horizontal beds. They can be square, or almost square, or up to three times as long as they are high.

LEVELLERS—These form the bulk of the wall. They are usually at least twice as long and up to five times as long as they are high.

SNECKS—These are the smaller pieces that enable the mason to make up the differential in height between the top surfaces of the levelers and the risers.

The easiest way to build snecked masonry is to work with uniform material such as that provided by free-stone suppliers, like Indiana Limestone, who saw the stone into standard bed heights that enable us to conveniently build snecked work with a minimum of bother. The visible faces of such stones are usually pitched. But beware; some suppliers, either ignorant or unprincipled, provide stone in this category that is face-bedded, that is to say with the bedding plane of the stone running vertical, parallel to the surface plane of the wall. For shame! This stone will, in time, defoliate.
ISLANDS ARE FASCINATING.

Often remote from the mainland, they foster unique lifestyles which stimulate the outsider’s imagination to picture an alluring utopia of harmony and cooperation. The hard, cold facts of island life, however, seldom live up to such idealistic yearnings. The story of life on the islands of St. Kilda is a case in point.

St. Kilda is a small archipelago 40 miles west of the Hebridean island of North Uist. It is one of Scotland’s most remote island groups and, except for the remote uninhabited crag called Rockall, the furthest west. The archipelago consists of the main island of Hirta, the smaller islands of Soay, Dun and Boreray, the magnificent sea stacs of Stac an Armin (644 feet high) and Stac Lee (564 feet) and the smaller islands of Soay, Dun and Boreray, the magnificent sea stacs of the other islands in the group.

Evidently there never was a saint named Kilda; the word is said to derive from a Gaelic or Old Norse word for a well. Such a watering place would be important to the sea-going Norsemen.

The earliest written reference to Hirta is in a charter dated 1346 granting ownership to Clan Ranald. Since then written works about St Kilda have increased exponentially. New books are still being published and archeologists are uncovering more evidence of past ages and adding to the knowledge gleaned from 400 years’ worth of contemporary writings. This reflects how this remote place continues to attract the interest of mainland folk. The Victorians were especially enthralled with the idea that Gaelic-speaking British citizens lived on a distant speck of land in stone beehive structures, eating puffins boiled in their porridge and holding a “parliament” every morning to allocate their work. These islanders’ lives were as exotic to these mainlanders as any to be found in the far-off mystic Orient.

The native population was evacuated in August, 1930. Today, most of the people on Hirta are seasonal conservation workers and scientists, apart from a skeleton staff who look after the radar station, more of which later. There is no record of a permanent settlement ever having been on any of the other islands in the group.

In their pursuit of the birds and their eggs, St. Kildans demonstrated remarkable agility on the cliffs and sea stacs; there were deaths, certainly, but bearing in mind the risks taken, comparatively few. At a rocky promontory called “The Lovers’ Stone,” young men could prove their skill and impress the girls by balancing on one foot at the end of a rock hundreds of feet above the sea. Custom demanded placing one foot in front of the other, then bending over and holding both clenched fists in front of the forward foot.

The islanders ate mutton, beef, grain and dairy products, all local. Sheep milk was used to make cheese. They attempted, with varying success over the years, to grow potatoes, cabbages and turnips to supplement their diet. The islanders did fish for a living, partly because the island did not have a proper pier until 1901.

The St. Kildans demonstrated remarkable survival skills in a world unto itself.
west of St Kilda catch seabirds to supplement their diet and men from the Isle of Lewis in the Scottish Outer Hebrides sail some 40 miles to Sula Sgeir in the open Atlantic to harvest young gannets.

In 1877, the Victorians began to operate steamer cruises to St Kilda from Glasgow. Naturalists and tourists were keen to see this unique island and its people. The islanders now had the opportunity to increase their income by selling knitting, tweed and souvenirs and demonstrating their prowess on the cliffs. One islander set up a mail order service for egg collectors. Every tourist was anxious to visit the St Kilda Post Office to buy and send postcards with the local postmark on the postage stamps.

The flood of visitors in the summer months must have reduced the independence of the islanders, disrupted their work and emphasised their remoteness during the long stormy winters.

Many island communities develop stonework unique to their locality. The ‘beehive’ structures, for example, on Inishmurray and Skellig Michael off the Irish coast confirm man’s stubborn persistence to create habitation in an inhospitable environment.

For the visitor, the most striking feature when approaching Village Bay, apart from the relatively modern army buildings, is the row of sixteen cottages, the long drystone wall ‘consumed’ much of the stone from the land in the foreground, making it viable for agriculture. The background is full of stone structures from different eras.

The best maintained cleits are around the Village Bay area. These are the larger of the type, up to 20 feet long, 4 feet wide and 6 feet high. Some have doors on the side, but most have doors on the uphill end away from the prevailing winds. Cleits beyond the village area are usually smaller, two or three feet wide, the same height and 10 feet long, probably used only for storage of turf for the fire and seabirds or eggs. Door openings invariably point uphill. There is evidence of attachments for wooden doors or slabs of rock nearby which could be used to block the entrance. Many cleits in the outer corners of Hirta are numerous—almost beyond repair.

One large cleit is known as ‘Lady Grange’s cleit.’ The husband of the lady in question, a Scottish politician, organized her imprisonment on Hirta from 1734 to 1742. She had threatened to reveal his anti-govern-ment activities during the 1715 Jacobite uprising and he could no longer put up with her violent temper. Her presence on Hirta is established fact, but it is unlikely she inhabited the cleit.

In 1697, Martin Martin, an educated man with first hand knowledge of the Scottish Hebridean islands, said of Hirta, “The whole island is one hard rock.” In actuality, the Village Bay area consists of two rock types, dolerite to the west and granite to the east. When the village is viewed from a distance, the variation in rock type is evidenced by the lighter shade of the structures on the east side of the village area. There is an interesting curved effect in the middle where the structures consist of both types of rock.

This fulmar chick looks cute but he will protect himself by spitting strong smelling oil from his stomatch.
An opening in a wall blocked up with stonework: a common practice in the Hebrides. The entrance may no longer be required or the stonework is in lieu of a gate, wood being scarce.

The corbelled interior of a cleit showing roof construction with rocks used to their full advantage. The corbeling allows smaller rock to be used in the closing off of the roof.

The corbelled interior of a cleit showing roof construction with rocks used to their full advantage. The corbeling allows smaller rock to be used in the closing off of the roof.

The construction may look less than stable but this building has stood the test of time and survived many storms. The thatched roof is no longer but the stone walls remain.

This cleit is unique; the smaller structure to the left is accessed through a passage at the back of the larger one.

The interior of a cleit, looking towards the entrance: the roof shows the large stone lintels, a building style developed to take full advantage of available materials.

The interior of a cleit, looking towards the entrance: the roof shows the large stone lintels, a building style developed to take full advantage of available materials.

One of the larger cleits, typical in its wet environment and wild iris. The turf roof has luxuriant growth which is often grazed by the Soay sheep.
fluctuated with disease, immigration and emigration but seldom exceeded 100 persons. When the inhabitants were evacuated in 1930, there were only 36 inhabitants remaining.

Small remote island populations are vulnerable to infection from outside. Whenever visitors came ashore, there was every chance that they would bring the common cold, which could easily infect a population with reduced immunity. Throughout the world, this has various names but is often called ‘the boat cold’ for obvious reasons. Over the years, whooping cough, measles and typhus had a greater effect on the islanders than the mainlanders because of their isolation. In 1727, St Kilda’s population was reduced to 30 by a smallpox epidemic when the clothes of a native, who had died of that disease on the mainland, were returned home. The owners of the island quickly boosted the population by encouraging immigration from other islands, perhaps with the offer of reasonable rents and, by the standards of the day, a decent living.

Over the years, many infants died of tetanus when only a few days old. The cause was eventually traced to poor postnatal hygiene and the use of fulmar oil to daub the umbilical cord. By 1891, the resident nurse and the minister managed to improve postnatal care and there were no more deaths but, until then, this one disease had a crippling effect on population growth.

Religion and church officials played a crucial part in St Kildan lives, sometimes for the good, sometimes as a barrier to their improvement. The Rev. MacKay (minister from 1865-1889) had three services every Sunday and other religious meetings throughout the week. The Sunday services would proceed even if an urgent cargo required unloading. On the other hand, a prior minister, the Rev. Neil MacKenzie (minister from 1830-1843) worked hard to improve the lot of his parishioners, urging them to reorganise their agricultural system and improve their housing. He helped build the head wall, which separated the arable ground from the rough hill ground and, most importantly, during the 1830s, he encouraged the islanders to build better houses along the line of the current village ‘street’. These ‘black houses’ as they were known considerably improved living conditions. The older houses were basically a larger version of the cleits but the new type had double stone walls with an earthen core, windows and thatched roofs. An open fire in the middle of the floor provided cooking, heat and some light. Smoke escaped through a hole in the thatch.

As was common at the time, the cows were overwintered at one end of the black house. It is thought that the cow’s urine gave a high ammonia content to the air, which has antiseptic qualities and may have helped sterilise the atmosphere and lower the incidence of tuberculosis in this type of house.

In recorded history, only the Village Bay area of Hirta has been occupied. There are, however, ruined structures near Glen Bay, which suggest there may have been a permanent population there also. One of these is known as the ‘Amazon’s House’ because of the legend of a female warrior (although it is more reasonable to assume they served an agricultural purpose). These drystone corbelled structures and semicircular enclosures were once used as summer shielings, places where the sheep would be separated from their lambs for the night but could be kept close to them. This ensured a good milking in the morning and a minimum of distress for the lambs. These sheep were a type of the Scottish Blackface, completely different from the primitive Soay sheep, which were restricted to the island of Soay until 1932. The sheiling system is common in various forms throughout the world; it takes advantage of summer pastures and turns milk into storable foodstuffs, especially cheese, for the winter months.

In the village Bay area, there is a souterrain, a subterranean structure, stone-lined with a stone lintel roof, about 25 feet long, 4 feet wide and 4 feet high. It is thought to be at least 1,000 years old, making it one of the oldest structures on Hirta.

Calum Mor’s house is another notable structure. Calum was a local strongman who reputedly built it in one day. It is roughly circular, sunk into the ground and built out of large stones, well corbelled. Internally it measures approximately 15 feet x 9 feet. It is probably one of the original house types.

In 1860, a storm blew the roofs off many of the black houses and the opportunity was
tacked to build 16 new houses of stone and lime mortar. They made up the 'street' we see today, in 1830, and the buildings were of the north Scottish style. They may have been more hygienic and brighter with the advantage of two rooms and fireplaces built in the 1820s. The walls and roofs were thinner than the drystone black houses, which made them draughtily and more difficult to heat.

Until the 1860s, the islanders lived in single drystone houses but several other buildings were an important part of the community. In the early 1860s, a two-storey barn was built for storage of the wool, rearing the sheep and building the walls and roofs were thinner than the drystone black houses, which made them draughtily and more difficult to heat.

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Naturalist Richard Kearton and his photographer brother, Cherry visited St Kilda in June 1868 and published a pictorial account of what life on St Kilda was like. Their book, ‘With Nature and a Camera’ (1897), included chapters on St Kilda as well as other on poaching, duck decoying and photographic methods of the day. During World War One and Two, St Kilda was visited by professional photographers like Nick Aspell. St Kilda was visited by many more photographers, even cinematographers, but the Keartons were the first to provide an accurate pictorial account of what life on St Kilda was like. Their achievement is all the more remarkable because their camera was fickle and bulky compared to equipment of our own era.

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Communication between the island and the mainland was always difficult. Frequent attempts were made to organise a regular postal service but this came to naught. The St Kildans had their own boats but they were not always well maintained, and a trip of 65 miles of open sea to the nearest port, Lochmaddy on North Uist, was a hazardous undertaking.

In the event of emergencies, communication by the Factor’s house was added to it. In the late 1860s, the Factor’s house was built. The was where the Factor, the owner’s agent, would live during his annual visit to check on the condition of the buildings, collect the rent and take away produce.

These buildings were constructed of stone and lime mortar with slate roofs, a vast improvement on the islanders’ houses. We must note that these buildings were for trade and religious purposes, built by those who wished to influence the islanders in one way or another.

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