In this CIAV Newsletter the last of the year, you will find the CIAV Annual Report, made by our President Marc de Caraffe. This is a very important document for all members, as it includes the activities the Committee or some of their members were involved in this year.

I was also in Russia at the end of September to participate in the conference on wooden architecture, which was extraordinary and very well organized by our colleague Olga Sivan. I want to thank her once more for the opportunity to participate at the conference and see the ancient monuments and places we visited, but most of all for the warm reception she and her Russian colleagues gave us. You will read about this experience and be able to see some photographs.

We enclose the article of our colleague from Cuba, Nelson Melero, about his experience in Cartagena, Colombia.

Our good friend and colleague Christophe Machat, Vice President of the Executive Committee, made a commitment to report on heritage at risk, which will be printed in the next issue of the series.

Samir Abdulac, our other French colleague, sends us news about the work of the Advisory service for Architecture, Planning and Environment (CAUE), which has been going on for more than 30 years.

Gustavo Araoz has transmitted the urgent call for heritage specialists to assist with earthquake damage assessment and repairs following the Christchurch earthquake.

Please remember to send us your photographs, news, articles or anything you would like to publish in our Committee Newsletter.

Valeria Prieto
valeriaprieto@hotmail.com

November 2010
Dear Colleagues,

Unfortunately, I have lost the copy of the annual report that I presented at Konsvinger, in Norway, during our annual meeting. I have prepared this report from memory and it may not be exactly the same as my verbal report. So please forgive the discrepancies.

Advocacy

Finally, our many representations over the last few years to save the historic character of the port of Tomo, in Japan, have resulted in preventing the construction of a bridge which would have affected the historic character of this maritime town. Thanks to the constant efforts of our esteemed colleague, Professor Masaru Maeno, the town of Tomo will preserve its unique maritime character.

Two remarkable villages in South Korea, Yangdong and Hahoe, notable for their historic Confucian traditions and for the superior quality of their vernacular architecture, have been inscribed on the World Heritage List during the last meeting which was held in Brazil. As you know, it is most difficult to apply the concept of Outstanding Universal Value to vernacular architecture. CIAV expertise was solicited during the application process, and I am delighted to see that it was fruitful.

Our colleague, Markku Mattila, has pursued his relentless efforts in documenting vernacular architecture by teaching students from all parts of the world the art of documenting these structures. Participants at the Konsvinger conference were able to see the results of the Vernadoc workshop, and were impressed by the high quality of the drawings presented.

Annual Meetings

Much has been said about the annual meeting in Norway. Everybody was much impressed by the excellent work done by the organizers, Gisle Jakhelln, Kirsti Kovanen and Lena Palmqvist. The venue, the high quality of the scientific papers which reflected a lot of efforts done by the presenters, and the excursions were all extremely interesting. Everybody had a great time and the high level of friendship shared by the participants has already been noted. Despite a global economic crisis which has prevented many participants to join us, the organizers have set up a conference of the highest level. I just want to present you with two personal impressions of this meeting.

The first impression deals with the issue of identity: the Finns who immigrated to that part of Scandinavia were able to maintain and express their identity by keeping their architectural traditions. This is how vernacular architecture can help in understanding this cultural identity. I was also impressed by the high quality of the presentations particularly those made by several members of the younger generation. These young persons interested in vernacular architecture are the future of our professions and I am pleased to see that they will keep alive the field of enquiry into vernacular architecture for many years.
Web site

During the last year, our esteemed colleague, Martin Cernansky, has put up a revamped Web site for CIAV. I want to express my gratitude for Martin’s superb work. The Web site allows us to keep in touch with our work on a constant basis. It needs however input to maintain its reliability as a communication tool. Please forward to Martin or to me any paper that you feel should be posted; it will improve our visibility on the Web.

Membership

Again this year, new members have joined CIAV. Our membership is in constant growth. We have now 108 members from 51 countries.

Next Meetings

We will hold our next annual meeting during the ICOMOS General Assembly which is scheduled to take place during the last week of November and the first week of December in Paris. At this meeting we will hold elections to renew the executive. As stated before, I will not run again as president. So please contact me as soon as possible if you are interested in running.

As for the 2012 meeting, we have accepted Hossam Mahdy’s invitation to convene in Abu Dhabi. The theme of this meeting will focus on earth architecture, a topic that will certainly interest a lot among us.

By Marc de Caraffe
Dear Organizing Committee:

A belated thank you for a wonderful conference and time I spent at the conference and very briefly in Norway.

It is unfortunately that I did not know about the Opera House which I could have seen during the Sunday afternoon I spent in Oslo before catching the train to Kosvinger.

The conference and site visits were fantastic and congratulations to all the committee members for its pre-planning and organization. (I know how much effort and time goes into before such an event for a seminar to seemingly run so smoothly having just been in that role organizing the Australia ICOMOS 2010 ‘Outback & Beyond – future of historic towns, industrial heritage and pastoralism’ conference in Broken Hill).

ALSO many many thanks for locating the bus driver and retrieving those wonderful booklets I absent-mindedly left on the bus.

For your information, I wrote a few paragraphs for the Australia ICOMOS e-news (see item 8 below). I recall that CIAV has a regular e-newsletter and if it may assist I would be willing to write a brief article about being a delegate to the Norway seminar and Australian rural vernacular, as I am sure would Louise too.

Warm regards and again thank you
Sue Jackson-Stepowski

Report from Sue Jackson-Stepowski on her recent ISC activities

What a fantastically informative, and exceedingly friendly, gathering was the 2010 CIAV annual meeting and seminar. I would urge all ICOMOS members to try to attend such get-togethers whenever you can.

Themed “vernacular crossing borders“, it was jointly organized by ICOMOS Norway, Sweden and Finland as well as the ISC for vernacular structures. The focus of superb site visits was the Finnskogen area that straddles the Norway-Sweden border. Delegates were housed together near the historic Konsvinger Fort and its ‘classified’ garrison settlement, which is arranged as a series of farm yard complexes.

Several papers detailed how the Fins transplanted their building technologies from one place into other, adjusting locally available materials, refining processes and techniques suitable for a new environment and set of circumstances. Several of the excellent site visits and paper examples are contemporaneous with Australian vernacular places, and yet unlike here, Scandinavian ‘vernacular’ are valued as structures and within the wider cultural landscape. Much was learnt about ‘smoke cabins’, including from Helsinki University of Technology architecture students who were recording and reinstating one. Treasured souvenirs are two beautiful, hand-drawn booklets.
Delegates came from Thailand, Abu Dhabi, Mexico, Egypt, Canada as well as Europe. “The manufactured ephemera of the Australian landscape”, presented by fellow Australia ICOMOS member Louise Honman, generating considerable discussion and awareness-raising about ‘vernacular’ in non-Europe circumstances.

My impetus to attend this seminar arose from three aspects. Firstly, work related, which largely deals with vernacular places, and especially timber structures. Second, my involvement with ICOMOS Shared Built Heritage (SBH) International Scientific Committee, being its Vice President (Asia Pacific), and where the SBH Bureau has worked hard since the Quebec GA to widen an understanding of its goals and activities. Also relevant is a Scientific Council goal to encourage greater co-operation between ISCs and national committees.

I feel strongly that not enough attention or value is given to our distinctly Australian ‘vernacular’. This is especially for places having rural origins, use timber, and some of which is now being engulfed by suburbia. This is the quintessential expression of our cultural heritage and history that is fast disappearing, and due to lost skills, technologies and seeming modesty, will be gone forever. But whenever one travels outside our mega-cities and urbanized coastal strips, it is this largely timber vernacular that defines local identities and is illustrated on tourist and promotional materials.

Following the seminar I attended the meeting of the SBH Bureau, held near Frankfurt, Germany. In October 2010 SBH will host a seminar on plantation architecture and settlements in Suriname – a former Dutch colony on northern tip of South America, which today has a complex population mix, including many from the Indian sub-continent brought in as indentured labor.

Images from 2010 CIAV meeting
Sue Jackson-Stepowski, M.ICOMOS
ISC Member: Shared Built Heritage and Historic Towns & Villages
September 25 – 28 2010

The conference took place at the Rostov Kremlin Museum in Russian Federation. Rostov the Great lies 210 Km northeast of Moscow, on the side of the Lake Nero and the Monastery are remarkable for his ancient architecture. The town has preserved the traditional wooden architecture in many of their houses.

There were several institutions who participate at the organization of the conference: Ministry of Cultures of Russian Federation; Russian Institute of Cultural Research; Russian Foundation for Basic Research; Russian Committee for Village and Small Towns (ECOVAST); ICOMOS and Rostov the Great State Museum “Rostov Kremlin”.

During the Opening of the conference the representative of the Ministry of Culture declared: “Wood in Russia is a very ancient heritage and we have the duty to preserve it”.

Our colleague Olga Sivan, also the main organizer of the conference, presented the paper: “Modernization does not mean unification of environment (monuments and regional features of construction in Russia)”.

Besides the enthusiastic participation of the Russian delegation, there were also participants from many other countries like Turkey, Japan, Italy, Rumania, China, Poland, Finland, Germany and Mexico.

Many were the themes of discussion and papers presentation but many of them enclosed the maintenance not only of wooden constructions but also the preservation of landscape.

Angus Fowler from ECOVAST said that this organization is focus in the preservation of small villages and towns of vernacular architecture that it is so much under trait. Today in Germany he explained they are trying to find new alternative uses for wooden buildings.
In other presentations there was the misunderstood of modernization of wooden villages that are been destroyed. But by other side tourism it is a very important factor to rebuild and preserve the wooden monuments and villages. The traditional houses could be used as vacation cabins, hostels and other tourism services. Our colleague from Finland presented these recommendations:

Preservation in towns is based in town planning, scale of construction and size of public spaces. Urban planning is a very important instrument to preserve wooden constructions. The new wooden constructions not must be more expensive than others made in other kind of materials.

As it happens in many examples of traditional and vernacular architecture here also, the participants explained, that people ashamed of ancient wooden architecture.

We visited very interesting and beautiful sites like all the monuments inside the Rostov Kremlin and another ancient churches and monasteries. At the end of the conference we were invited to enjoy a very beautiful guitar concert played by a great artist: Dmitry Murin. The concert took place in an ancient mansion in Rostov.
I hope you enjoy the pictures below.

One example of the wooden churches

The traditional wooden houses in Rostov have graceful windows with frames carved like lace to embellish the façade.

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Some of the participants in the Conference
The October 29, 2009 I arrived to the city of Cartagena de Indias invited by the Director of the Plan of Revitalization of the Historical Center, Arch. Alberto Samudio Trallero to take part like adviser, of a in charge equipment to carried on this project.

Cartagena de Indias is a city of the North zone of the Colombian Caribbean coast that counts at present on a population of around 900,000 inhabitants.

The Historical Center, territory on that the proposals of action of the Plan of Revitalization focus, has an area of 4.7 km$^2$ contained within the walled defensive belt of an extension of around 4,250 meters linear, one of the major and more complete constructed during the Spanish colonial period that are conserved in America; and a population of around 13,400 inhabitants.

Their history and the values of their cultural heritage, took it to be declared Historical Heritage of the Humanity in 1984.

The Plan of Revitalization is a program of the Greater Mayor ship of Cartagena than it must like objective make of the Historical Center a place of harmonic coexistence for the inhabitants and visitors of the city, in an atmosphere of great quality, where they are continued developing functions of all order: institutional, commercial, political-administrative, cultural, artistic, recreational, religious, educative, of permanent and tourist house.
The Historical Center is a site that must offer opportunities for all, where the order prevails, the cleaning, the security, the respect by the right of the others, the exercise of the citizen culture; where the urban norms are accepted; of easy accessibility and mobility, with free sidewalks for the use of the pedestrian, without architectonic barriers for the displacement of the disabled ones; the scope where the inhabitants of all the neighborhoods and the visitors can interact in such a way that they consider the Historical Center like something own, to give it felt to the fact of being universal heritage. That the Historical Center becomes, in short, in a scene that will include everybody and a motor of the development of Cartagena that contributes to the reduction of the indices of poverty of the city.

It corresponds to the Plan of Revitalization of the Historical Center of Cartagena (PRHCC), like an instrument of application of the policy of conservation of the heritage of the Distrital Government, the execution of the specific projects proposed by the antecedent studies, directed to obtain an improvement of the physical frame constructed of the center historical and its periphery, accompanied by directed actions the social recovery, the quality of the life and the level of the supplies that this one can offer, as much for the inhabitants as for they visit which it, directing to the investments of his resources in action of governmental function of great meaning and relevance for the development future and the international projection that is conceived of the city.
For that reason the Plan includes a work set of urban and architectural character that includes recovery of the public space (crossed places, parks, pedestrian strolls, mobility, signaling, increase of the green area, solution to the tides and floods), as well as programs of social and cultural order directed to the recognition of the patrimonial values, the use and the appropriation of the spaces public, qualification in citizen culture and the handling of small companies.

A part of works framed in the Plan of Revitalization will have to be finished for November of 2011, for the commemoration of the bicentennial of the independence of the city, although this project must have a continuity, like instrument that guarantees the maintenance and the conservation of its cultural heritage and the patrimonial condition of world-wide.

MSc. Arch. Nelson Melero Cuba
Member of the International Committee of Vernacular Architecture ICOMOS (CIAV)
Cartagena de Indias. Colombia.
August of 2010
In last August we had the pleasure to receive at the Mexican ICOMOS to our colleague from Israel Arie Sivan which presented a very interesting conference about the vernacular architecture in Jerusalem. Arie explained how the idiosyncratic architecture Jude and Arab appeared in Jerusalem.

Here are some pictures of the conference.
To the Presidents of the ICOMOS National Committees and International Committees (ISCs)

Dear Colleagues,

The tradition of compiling annual reports for Heritage at Risk should be kept up as a permanent activity of ICOMOS. In 2009, I accepted the Executive Committee’s proposal that I look after the H@R publication series. In this context, I am very pleased to inform you that at rather short notice and in spite of budgetary constraints ICOMOS Germany will once again be able to provide funds for printing a H@R 2008/2009/2010 volume.

Therefore, we look forward to receiving as many reports as possible from the ICOMOS National and International Committees. However, as this publication has to be “on the market” by the end of this year, we ask for your understanding that we would need your report(s) by September 20, 2010. In addition, some reports and newspaper articles have already been collected by ICOMOS Germany in Munich.

Please send your report (text and pictures) to my address (cmachat@netcologne.de) as well as to John Ziesemer at ICOMOS Germany (john.ziesemer@icomos.de). Please do not hesitate to contact us if you have any questions. The publication guidelines (as approved in Dubrovnik in October 2001) are available on the internet under: http://www.international.icomos.org/risk/2001/guidelines.htm

Furthermore, if you want to get an idea of the contents of the previous Heritage at Risk volumes, you can look them up under: http://www.international.icomos.org/risk/.

The new volume of Heritage at Risk wishes to focus, among other issues, on the impact of the earthquakes in Haiti, Chile, China, Italy, and other countries. However, should you want to identify another type of heritage particularly at threat in your country, this is of course welcomed.

Here is what your report could comprise:

- A short report with threats to heritage in your country or special area of concern;
- Case studies focusing on special problems (possibly also with references to recent successful developments);
- Photographs to illustrate the dangers and problems described in your report, preferably if or jpg files with at least 300 dpi.

Your reports for Heritage at Risk can also be regarded in connection with the President’s initiative to establish an ICOMOS World Heritage Global Monitoring Network which he considers to be “the logical outgrowth of our Heritage @ Risk program” (see his e-mail of June 8, 2010).

With my best regards,
Christoph Machat
Member of the Executive Committee
The vernacular architecture in the inner regions of Spain (Aragon district) is the result of agricultural and above all it’s due to transhumant economy, according to local resources. The research presented is about traditional wooden juniper shelters (called chozones) with a typical dense and compact juniper branches roofs and wooden pillars structures, with high loading resistance (Juniperus Thuirifera).

In this case the features of the chozones can be resumed according to some details:

The surroundings of the hut: it’s possible to see free standing huts or some shelters that are close to dividing dried stone walls or enclosures; some shelters are also in series.

1) The plant of the hut: it’s common to find a lot of variants, but in general the plants can be circular, rectangular, squared.

2) The cross section of the hut: general the sections can be marked by the juniper pillars (central or aligned).

3) The vault of the hut: it’s usual to see cone, or combined solutions for the roof, looking like a corbelling dome.

Some more details, like coatings, finishing solutions, wooden carpentry... and so on, can give a complete idea about the clever, functional and brilliant solutions adopted in this vernacular wooden architecture.
1. Presentation

“The cedar and the juniperus trees possess the same qualities as the two last names (note: referring to pines); but as the cypress and pine yield a resin, so the cedar tree yields an oil called cedrarium, with which, whatsoever it is rubbed with, such as books, for instance, will be preserved from the worm. The leaves of this tree resemble those of the cypress, and its fibres are very straight. The statue of the goodness, and also the ceiling roof of the temple of Diana at Ephesians, are made of it, and it is used in many other celebrated temples, on account of its great durability.”

We must point out that, in the old Greek construction tradition, the name of aromatic timber with straight and thin fibres was Kedrós, both for Juniperus, Cedrus, Tetraclinis. For this reason there’s a bit of confusion, in the terms, passing through the Roman construction traditions.

At that time, if we review the names of the timber along Iberian Peninsula, we can find some curious references like: Spanish cedrus, juniperus (Northern-Central districts of Spain), sabina albar or albarra, roma, tejo (or white juniperus in the Central-Eastern districts of Spain), intzentzu – mitiera or intzentzu Sabina (in the North-Eastern district of Spain).

Outside of the Iberian Peninsula the presence of these woods, called sabineros, are quite scarce; yet it’s possible to find translations of the name of the tree, as in France (vier de l’encens), or in England (Spanish juniperus), or in Portugal (sabina turifera) or Italy (ginepro turifero). Our work started with the identification of the type of tree, the features and the classification of the species. For this reason we can lay out an evolution of the history of the classification of the species; Linnaeus (1707-1778) was one of the first that defined the juniperus thurifera, followed by Lamarck (1744-1829) and Miller (1691-1771), who called the species as juniperus hispanicus; later with S. L. Endlincher (1804-1849) the tree was classified as juniperus sabinoide, and with Antoine F. (1815-1886) again as juniperus thurifera. From this short botanical history we can appreciate the bond between the name of the juniperus and the Spanish geography. The Latin name, thurifera, can also be useful to understand one of the most significant features of the timber –i.e. the resin that the wood contains; juniperus comes from Latin “ieniperus”, which means juniper, while thurifera comes from “thuris” = incense and “fer” = to carry; in other words the name of the tree can sound like “juniper that carries incense”.

At the same time, according to the definition of BOWELS (1789) “... In all Aragon (inner region of Spain) we can see woods completely occupied by junipers, and some of them are quite thick and stable with 4 feet of diameter, and the woods are incredibly fragrant, above all in the area of the Tajo’s spring...” Meanwhile SANDALIO DE ALAS, commenting on ALONSO DE HERRERA’s thoughts (XVI C.), said: “We can meet broad and extensive woods of junipers, in the species of Thurifero o Linneus, also called the junipers with incense, from Teruel province down to Alpuente region, where the livestock can be feed by the junipers berries and leaves during the long winters...”

![Fig.1. Details of cup, wood, trunk, branches and leaves of juniperus thurifera (Ruiz - Cristini)](image-url)
The juniper tree has an incredibly slow growth and the trunk can reach also 20 m high but, of course, it’s not so common as we usually find examples of “just” 4 or 8 m high. The slow process (the trunk only increases 1-3 mm diameter each year...) can guarantee an incredible density to the timber, above all in some oldest special trunks of 1 or 2 m diameter. The oldest examples of juniper were found in Morocco with a 5m-diameter and a 16m-perimeter. (“fig.1”).

The trunk is featured by a grey bark, which is scarcely scored by waved grooves, along the whole tree, looking like the common juniper species. Analyzing the tree we can discover a conic, irregular trunk, brown ash-coloured, fibrous and with deep cracks that break off into splinters; also the base of the trunk has an aged and scored roots system, due to the slow growth process. The *Juniperus thurifera* has also shoots broken into enlarged galls. The main branches are really thick and developed. The top is more or less conic, above all during the first stage of the tree’s life. The adult examples have a more defined top, due to the natural growth or maybe to the cutting down of some branches (in Spanish the process of cutting down these lowest branches is called *ramoneo*). This technique is employed by shepherds, avoiding the lowest and sourest branches to feed their livestock. The best branches for the livestock forage are the highest ones, with leaves or 1 or 2 mm, scaled dark green coloured, alternatively disposed around the stalk. In the best examples the disposition of the leaves is organized into four rows overlapped and scaled with a raised apex’s point. The berry, called in Spanish *gálula*, is quite spherical, around 7-8 mm diameter, which takes 2 years to grow ripe. The color of the berry can change from a wax-like colour when young (in summer) to a darker ripe fruit (in autumn). Within it there are three or four seeds that bloom in spring, developing the berries, which are ripe only 2 years later! The *Juniperus thurifera* has female and male examples (*dioicus species*); during the first days of spring the male tree expands the pollen into the air, without the aid of insects, in a process that’s like a mist, through which it can fertilize the female species.

2. Distribution in Mediterranean Area of Junipers woods:

The woods of *Juniperus thurifera*, called in Spanish *sabineros*, are distributed all along the Iberian Peninsula, from the province of León to those of Zaragoza, Murcia or Segovia. Also if we consider the altitude variation factor, we can appreciate how the junipers can grow at 140 m on Sierra de Monegros-Zaragoza or at 1800m on Sierra de Albarracín-Teruel and at 3000m on the Morocco mountain system.

The insulation variation that influences the growth of the tree has also a wide range, from -25 Cº to +40 Cº, adapting the development of the woods from the south-south east of France, to Spain, and north of Morocco.”(“fig.2”).This case study, focalised on the features of the species in the Iberian Peninsula, can show how the tree can grow on the high plateaus or on the moors such as those in the provinces of Soria, Burgos, Palencia, Guadalajara, Segovia, Valencia (north), León (north), Albacete, Zaragoza or Cuenca. On the other hand, trying to describe a statistic distribution of the woods, we have discovered how the percentage of these woods can represent around 1% of the forests visible in the Spanish territory (around 125.000ha). These junipers can spread as in lime stones poor soil, with low hydro capacity (inner Spanish regions) as in granite or gneiss conformations of Morocco’s Mountains. This case study, of junipers’ shelters, is concerted in Alto Tajo Regional Natural Park, where the distribution of the junipers, in cretaceous lime stones soil, of around 23.000 ha, in the North-eastern interior part of Spain.

![Fig. 2. On the left distribution of juniperus thurifera in Spain, detail of the area of the case of study. On the right distribution of juniperus thurifera (dark green) and juniperus comunis (light green), in Mediterranean areas.](image-url)
The use of *juniperus thurifera* timber is related with the survival economy, seasonal migration of the livestock and the employment of immediate natural resources. For this reason juniper timbers and resins (all the species, from *thurifera* to *communes*) are witness to the methodical use in construction and craftsmanship. In *ibiza* and *Formentera* Islands (East of Spain), there’s a systematic tradition of using juniper in beams and flat-terrace structural floors (MARI). Especially in the *Essaouira* area (Morocco) we can find the tradition of using the authoctous dark timber of *juniperus phoenicea*, both in cabinetmaking and in construction.

A part of Morocco woods, one of the great junipers wood in Iberian Peninsula is close to *Soria*, on the inner plateaus, in a village called *Calatañazor*. Here can find a great extension of *juniperus thurifera*, with trunks like “pitchforks” (as vertical supports) and with a sort of natural arcades morphology; for this reason the area is the one that presents a most intensive use of this timber in constructions techniques. There are also important traces of the use of *juniperus thurifera* timber in beams, joists, logs, boards in the *Rincón de Ademuz* area (Valencia), as in the northern area of the province of *Cuenca*. In this last case the timber is seen above all in the arcades structure of Beteta village, or in yards covered with thatched roofs, up to structural floors or up to lintels of ovine shelters, with great example of boards 1or 2 m long.

3. **The case of study of junipers shepherds shelters**

We have witnessed the use of the juniper wood since the times of Celtiberian constructions (BERLAGA SANTAMARIA), and this is construction’s knowledge has survived until today, across the centuries, in traces of shepherds’ wisdom, visible in the outskirts of *Molina de Aragón* (in the province of Guadalajara); below we will explain the features of some of these shepherds’ shelters, called *chozones*, made with *juniperus thurifera* timber, as an authentic and one-thousand-year-old example of vernacular architecture. Some authors have carried out a careful study of these shelters from an ethnographic-geographical point of view (NUÑEZ MARTÍ- RODRIGUEZ); These are really interesting aspects that, on the other hand, need also some more technical contributions, which is the purpose of the this research.

There are some factors that can be useful to classify the *chozones*; some are more obvious, like the analysis of type of plant, or the shape of the section, and some others are more related to metrical, constructive, finishing features.

These shelters have a great spontaneous variation in their plant, according to “circular” structure with radial roof, or oval-oblong plant, with a pitched – false pitched roof; the section, consequently, changes from a triangular one, towards a trapezium one. (“fig.3”).

As we said before, there’s an incredible variation of types, a variety of heterogeneous combinations of resources, yards and grouping of these constructions.

The structure of these shelters is based on a *juniperus thurifera* timber structure, in a hierarchical system organized by pillars, beams, purlins, rafters and branches. These are supported by a dried lime stone perimeter walls, thick and dense, as the thatched roof, only interrupted by the entrance, with a simple junipers timber door, the natural light that can enter the shelter and can give light to the livestock;

Our attention, in this case, focuses on the specific structural study of juniper, and for this reason we have given special attention to the bonds between the structure and their behavior.
Fig. 3. Different types of chozones, oblong-oval-circular-grouping...and the roof performing (Ruiz - Cristini).

3.1. “Pitchfork” structure

The vertical structures can be logs (between 18-22 cm diameter and 230-250 cm high) or still alive trunks (with 3 m diameter or 3-3.5 m high). In the first case the supports form an arcade or a porch; while in the second case, the central body supports a circular roof, around the central post. We have also seen some hybrid structures, with a rectangular arcade chamber followed by an assembled space, with a central trunk.

Generally the base of the logs is some flat lime stones, like the ones that the shepherds employed in the dried stones walls; this layer is important against dampness, or sometimes, also against the instability of the pillars, and the acid excrement of the livestock.

The defections of the sheep are responsible of the drying of the still alive central trunk, as it is at the beginning of the shelter construction. The pavement of chozones has not a finishing coat, for this reason the features of junipers timber, resistant against putrefaction, can give support to the durability of the structure.

The upper part of the supports, as in the case explained before about the basis, can be divided into two different solutions: on the one hand we have the logs, with an upper pitchfork structure, and on the other we consider the still alive trunks supports, with the natural crown of branches of the tree. So we can appreciate the absence of tenons or pegs, as usually we can discover in more developed timber constructions. The analysis of the “capitals” of the pillars can show a simply pruned and stripped timber works, always with the guarantee of a “U” or “V” supports of the beams. This solution, if well made perpendicular, can improve the stability and regulation of the structural system. (“fig.4”) (“fig.5”).

3.2. Basis of the rafters on the wall

These sloping elements can guarantee the inclination of the thatched roof, and they usually are made of logs or half logs (lumber), coming from a great example of *Juniperus thurifera* ancient big tree, cut into some more boards. The feature of the main rafters is that they’re imbued into the dried lime stones walls, with a progressive process made during the same construction of the surrounding wall (around 30-40 m high from the soil). They're well joined with the wall, and so the system can bear the horizontal force coming from the sloping roof. The slope of these elements is variable, conditioned by the soil level, the variability of the shape of the rafters, the type of the vertical supports... and so on. In some cases the *chozones* are close to some natural rocks shelters, or mountain covers, so that it’s not necessary to use a complete surrounding wall, but rather just half of it. For this reason the rafters are supported by the same projecting of the rocks.

These elements, always made by *Juniperus thurifera* timber conform the secondary order of sloping elements of the thatched roof; they’re usually logs, with a reduced diameter with respect to the main rafters (around 15-17 cm diameter) and, in spite of rafters they’re supported in the wall of the *chozones*, not imbued in it; their function is to improve the thickness of the roof structure, supplying the density necessary for the thatched roof.

3.3 Bond between support and beam and roof

The “pitchfork” structure is a crucial point in the structure, resolved with a solution that can guarantee the resistance of horizontal displacement of the beams received. In the case of still alive trunk we have seen how this point of contact is resolved with the use of the natural ramification of the tree.

The thatched roof, between 70-80 cm thickness, is made of the rejects of the pruning of the *Juniperus thurifera* trees, cut by the same shepherds for the forage of the livestock. The maintenance of the roof, necessary each year, above all in the top of the pitched roof, is a traditional ritual that nowadays is quite forgotten by local masons; the craft of covering a roof with dry vegetation, like branches, consists of layering the vegetation so as to shed water away from the inner roof.
(there are other example of thatched roofs, with a “wet” solution, in this case with moss or grass, like turf or sod roof techniques).

Before all the shepherds collect rushes and branches in the surrounding of the chozones and they order and combine the raw material into homogeneous strips (“fig.6”); later they start to organize the branches into layers, from the bottom towards the top of the roof, the sorest part of the cover, stripped and replaced each year by a new layer. The resistance of the timber, due to its density and thickness guarantees a great loading performance and the roof at the end is really watertight also due to the presence of abundant and water repulsive resin. The waterproof shelter, during the winter, protects the livestock from rain, epidemics and insects.

Fig. 6. Different stages of the thatching of the roof by juniperus thurifera branches in shepherds shelters (Ruiz – Cristini).

4. Final reflexion

Ancient masons, shepherds or peasants, of the most retired areas of Spain knew the Juniperus thurifera and its features, as opposed to today, when this type of wood is the source of ingratitude and anecdotes about botanical proprieties. The current lack of interest is due to its neglect in timber construction (it’s a protected species) and it’s also caused by the scarcity of this timber-raw material in the territory.

In conclusion, we have to underline the technical-mechanical properties that the Juniperus thurifera timber has, as some destructive and non-destructive tests, carried out by the authors, confirm.

Of course we have to recognize an incredible relation existing between the man and the territory, forged and condensed in the use of Juniperus thurifera in constructions. The activity bonded with livestock, all throughout the ages, has guaranteed the maintenance of junipers woods (.... collecting branches and berries for forage for the sheep...). At the same time the shepherds’ shelters would not be the same and they would not resist in the same way with pine timber. The features of this wood would not allow the direct long exposition to the atmospheric agents. Other materials, like oak, holm, ilex wood, available in the territory would not resist the attacks of excrement of livestock, and dampness. The shepherds’ shelters, the chozones, are the “easy and complex” reflection of the capability of wise men to use the resources of the territory, in a perfect thousand-year-old balance, between technique and respect for the environment.
Fig. 7. Chozones, as a great and wise example of shepherds shelters. (Ruiz Checa – Cristini).

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Credits

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Samir ABDULAC
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Membre du CIAV

About a CAUE in France

I had the wonderful opportunity to manage an Advisory service for Architecture, Planning and Environment (CAUE) for more than 30 years. The web site of the CAUE d’Eure-et-Loir is a testimony to the advisory, information, inventory and research activities undertaken at the scale of French “Département“. You may visit it, download files and watch videos at www.caue28.org

Samir ABDULAC
Vice-president of ICOMOS France
CIAV Member
1. Urgent call for heritage specialists to assist with earthquake damage assessment and repairs following Christchurch earthquake.

Dear heritage community of Australia,

The earthquake that hit the Canterbury Region, South Island, NZ, on Saturday 4 September (and subsequent aftershocks) has had a severe impact on the historic heritage of the region. Thankfully and amazingly, no human lives have been lost.

The New Zealand Historic Places Trust and the Christchurch City Council Heritage Team have been working with the Civil Defense Emergency Response Team since early Saturday morning. From the beginning, we have aimed to ensure the provision of heritage advice and assistance to the Civil Defense authorities in relation to the guidelines for Building Safety Evaluation procedures during a declared State of Emergency.

List of heritage specialists who can assist

We will be moving into the reconstruction and recovery phase. For this purpose, I am compiling a list of heritage specialists who may be available to assist with earthquake damage assessment and repairs.

The most needed heritage specialists are conservation architects, structural engineers, craftspeople such as stained glass repairers, stone masons, etc.

The New Zealand Historic Places Trust (NZHPT) will make this list available to local authorities, insurance companies, owners of heritage buildings, churches, wider public, etc.

If you are potentially available to assist, please email me your contact details including:

- Name
- Address
- Phone number
- Cell phone number
- Email address
- Website address
- Specialist area (i.e. stone masonry)
Thank you,
Robert McClean (Member, New Zealand Planning Institute)
Senior Heritage Policy Adviser
Kaiwhakatakoto Kaupapa
National Office
New Zealand Historic Places Trust
Pouhere Taonga Antrim House
63 Boulcott Street
PO Box 2629
Wellington, New Zealand
Phone 04 472 4341
Phone (DDI) 04 470 8053
Cell 027 684 0833

Further information about the earthquake is available by clicking on the links below:
- http://www.stuff.co.nz/national/4096832/Quake-devastates-Christchurchs-heritage
EARTHQUAKE PRESS RELEASE
“Engineering precautions have worked” says heritage group

A national historic heritage group urges the Christchurch City Council to take particular care in assessing damage to its heritage buildings, following Saturday’s devastating earthquake. ICOMOS New Zealand says “following the Gisborne earthquake of 2007, some damaged heritage buildings there were demolished, when expert advice could have saved them”. “Engineering advice that is sympathetic to heritage values is important,” says the group. The top-ranked heritage buildings that have come through the quake with only moderate damage are testaments to good engineering interventions of the last decade or so.

Dr. Ian Lochhead, a board member of ICOMOS and Associate Professor of architectural history at the University of Canterbury urges the earthquake cleanup authorities to seek advice before making decisions on the fates of buildings. “Many buildings that look in a grim state can, in fact, be saved. There should be no precipitous clearing or removal of heritage buildings or structures, and priority should be given to stabilization, repair, and reconstruction.”

Dr Lochhead notes “Christchurch has a rich stock of architecturally significant buildings. The city’s built heritage is an important part of the city’s identity and attraction, and ICOMOS urges owners of heritage places that have been damaged to undertake appropriate action and seek appropriate advice.”

ICOMOS is reassured by statements from the Christchurch City Council policy and approval manager, Steve McCarthy who said “We don’t want anyone taking any pre-emptive action because they think a building is unsafe. What we want to do is protect those buildings as much as we can.” ICOMOS confirms this approach should be followed throughout the affected region. ICOMOS considers undue haste to get back to normal should not be allowed to compromise the long-term objectives of repair and reconstruction of heritage. “Material that has fallen from buildings should also be carefully assessed because what initially appears to be rubble can contain valuable, reusable material that, when reinstated, will help to preserve the heritage value of damaged buildings”, Dr. Lochhead said.

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The University of Massachusetts Amherst Center for Heritage and Society is pleased to announce a FIRST CALL FOR ABSTRACTS
For an International Conference
To be held May 4-7, 2011 at the UMass Amherst Campus

WHY DOES THE PAST MATTER?
Changing Visions, Media, and Rationales
in the 21st Century

The goal of this conference is to bring together a wide range of academics, public officials, planners, educators, heritage professionals, and community leaders to examine the practical value of the past—through a serious humanities and social science reexamination through five distinct thematic lenses that assess contemporary social impacts of heritage administration and commemoration throughout the world.

A special feature of this year's conference will be the recognition of the achievements of three outstanding heritage professionals for their contributions to a more inclusive, more sustainable. In addition to presenting thematic plenary addresses, they will be honored at a special evening event:

- Henry Cleere -- For his worldwide activities in support of, and furtherance of, the UNESCO World Heritage Convention and his mentoring of countless heritage professionals throughout the world
- Barbara Little -- For her tireless professional activities and influential publications emphasizing the public value and importance of heritage in general and public archaeology in particular
- David Lowenthal -- For his path-breaking theoretical and philosophical work, which has transformed the contemporary understanding of heritage and its enormous impact on contemporary society.

For more information, and to submit abstracts for posters, research papers, and organized sessions, please visit: http://www.whydoesthepastmatter.org
For questions or requests for additional information, please contact the Program Coordinator, Heidi Bauer-Clapp (hbauercl@anthro.umass.edu), or visit our website: http://www.umass.edu/chs

We hope you will find this conference to be of interest. Details for conference registration and accommodations will be announced soon.

Please feel free to distribute this call to all interested colleagues and students-- and we look forward to seeing you in Amherst next May.