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LA CATEDRAL DE TARRAGONA

IN SEDE, 10 ANYS DEL PLA DIRECTOR DE RESTAURACIÓ

LA CATEDRAL DE TARRAGONA

IN SEDE, 10 ANYS DEL PLA DIRECTOR DE RESTAURACIÓ

**Joan Figuerola Mestre
Joan C. Gavalrà Bordes**

Arquitectes redactors del Pla Director i directors de les obres de restauració de la Catedral de Tarragona

**Josep Maria Macias Solé
Joan J. Menchon Bes
Andreu Muñoz Melgar
Immaculada Teixell Navarro**

ERACT (Equip de Recerques Arqueològiques de la Catedral de Tarragona)
de les obres de restauració de la Catedral de Tarragona

Quim Vendrell Moreno

Fotògraf



Arquebisbat
de Tarragona

AROLA EDITORS

2007

LA CATEDRAL DE TARRAGONA. IN SEDE 10 ANYS DE PLA DIRECTOR DE RESTAURACIÓ

edita

Arola Editors

coedita

Arquebisbat de Tarragona

1a edició

Maig 2007

© textos

Els autors

© fotografies

Els autors

direcció editorial

Alfred Arola

disseny

Felix & Gemma Serra

correcció lingüística / traducció castellana

Roger Roig

english translation

Paul Turner

impressió

Gràfiques Arrels s.l.

dipòsit legal

T-702/2007

i.s.b.n.

978-84-96639-65-2

Amb la col·laboració de:



Col·legi d'Arquitectes
de Catalunya
Demarcació de Tarragona

Autors

Capitals 1, 2, 4: Joan Figuerola Mestre, Joan C. Gavalda i Bordes
Arquitectes redactors del Pla Director i directors de les obres de restauració de la Catedral de Tarragona

Capitol 2: Josep Maria Macias Solé, Joan Menchon i Bes, Andreu Muñoz Melgar, Immaculada Teixell Navaro
Equip de Recerques Arqueològiques de la Catedral de Tarragona [ERACT]

Quim Vendrell Moreno
Fotògraf

Fotografies

Quim Vendrell Moreno.
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TARRAGONA



Col·legi d'Arquitectes
de Catalunya
Demarcació de Tarragona



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Amb la col·laboració

ICAC – Codex Arqueologia i Patrimoni

EXPOSICIÓ

Museu d'Història de Tarragona – Casa Canals
Carrer d'en Granada 11

Del 30 de novembre de 2006 al 9 d'abril de 2007-04-19

Direcció

Lluís Piñol Masgoret (MHT)
Joan Menchon Bes (MHT)

Coordinació

Immaculada Teixell Navarro

Documentació i textos

Joan Figuerola Mestre
Joan C. Gavalda i Bordes
Josep Maria Macias Solé (ERACT-ICAC)
Joan Menchon i Bes (ERACT-MHT)
Susanna Muntané Casanova
Andreu Muñoz Melgar (MBT-ERACT)
Immaculada Teixell Navarro (ERACT-Codex)

Imatges

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Archivo General de Simancas
Arxíu del Capítol de la Catedral de Tarragona
Arxíu Museu Diocesà de Tarragona
Jaume Benages Olivé (del llibre *Les monedes de Tàrraco*, Tarragona 1994).

Biblioteca-Hemeroteca Municipal-Museu d'Història de Tarragona
ERACT

Digitvisión (del llibre *Tàrraco, Guia Arqueològica Visual*, Tarragona 2005).

ICAC

Joan Figuerola Mestre
Th. Hauschild
Joan C. Gavalda i Bordes
François Ligier (del llibre *Voyage pittoresque* d'Alexandre Laborde, 1806).

Juan Fernando Palomino (del llibre *El Atlante Español* de Bernardo Espinalli, 1781).

A. Roig Rodon (del llibre *Historia de Tarragona*, de Bonaventura Hernández Sanahuja, 1892).

Jordi Romera Cid
Quim Vendrell Moreno

Assessorament lingüístic

Mariona Savall

Projecte gràfic i d'espai

ELFO Jobs SL. Serveis generals de disseny

Pintura

SENRA SL

Fusteria

Suc. Joan Salvadó CB

Electricitat

Fausto de la Osa Inglés

Producció Gràfica

Signo

Impremta

Indústries Gràfiques Gabriel Gibert SA

Gestió i administració

Museu d'Història de Tarragona

JORNADES TÉCNICAS

Col·legi d'Arquitectes de Catalunya – demarcació de Tarragona
Del 29 de novembre a l'1 de desembre de 2006

Dircció

Joan Figuerola Mestre
Joan C. Gavalda i Bordes

Coordinació

Jordi Granell i Masquef

Conferencients

Jordi Camps Soria (MNAC)
Carlos Clemente San Román (Revista Ars Sacra – Universidad de Alcalá de Henares)
Jaume Costa i Pallegà (Àrea de Planificació i Acció Territorial de la Direcció General del Patrimoni Cultural)
Joan Figuerola Mestre (Arquitecte Catedral de Tarragona)
Joan C. Gavalda i Bordes (Arquitecte Catedral de Tarragona)
Josep Lluís Guinovart (Arquitecte Catedral de Tortosa)
Josep Maria Macias Solé (ERACT-ICAC)
Josep Martí Aixalà (Director Museu Diocesà de Tarragona)
Jc sep Martí Bonet (Director del Museu Diocesà de Barcelona)
Joan J. Menchon Bes (ERACT-MHT)
Andreu Muñoz Melgar (ERACT-MBT)
Immaculada Teixell Navarro (ERACT-Codex)
Màrius Vendrell Saz (Universitat de Barcelona)

Exposició fotogràfica

Joan Figuerola Mestre
Quim Vendrell Moreno

Assessorament lingüístic

Mariona Savall

Projecte gràfic

ELFO Jobs SL. Serveis generals de disseny

Impremta

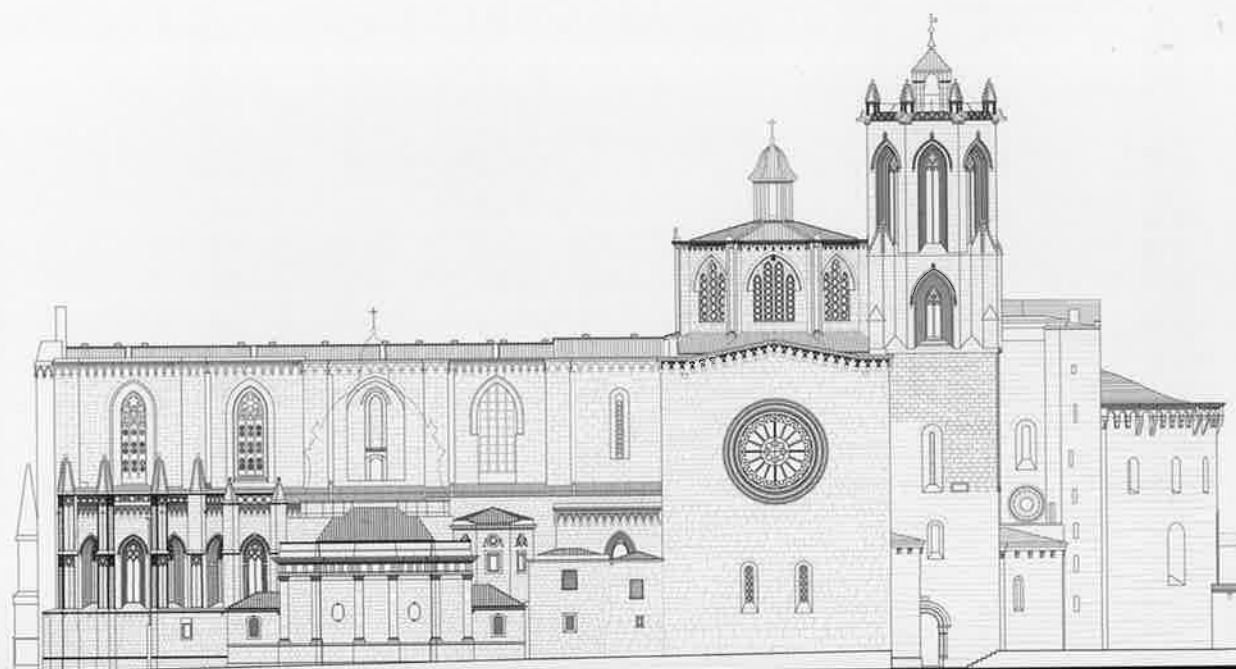
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Agraïments

Aureli Álvarez
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**Traducción Castellano /
English translation**



The stucco on the barrel vaults and transverse ribs, the entablature, capitals and columns of polished stone in the Renaissance chapel of Sant Fructuós had been badly damaged by water leaking in from the roof and the remains of internal organic material. Documental data tells us there was already damage to the stucco caused by leaks from the nucleus of the vault, under the roof. Probes in the vaults showed different layers of stucco laid during the construction of the Roman-style barrel vaults, following the technical requirements set out in the writings on classical architecture, such as those of Vitruvius, Alberti and Serlio, which were well known to the local architects of the day.

The cleaning tests carried out on the polished stone facings of the reinforcing ribs, entablatures, capitals and pilasters showed that it would be possible to undertake restoration work by extracting the salt prior to the cleaning and polishing needed to restore the colour contrast and light demanded by the facture of the Renaissance chapel. The blackening and changes to all these polished stone elements gave rise to a chromatic confusion resulting in the loss of the architectural order with which the chapel had been planned. The restoration of the original colours of the alabaster, plaster and marble used with a clear compositional criterion on the different parts of the large entablature, the capitals, the pilasters, and the plinth of the whole space has restored the elegance and proportion of this classical chapel disfigured by the loss of the original colours on the different types of polished stone used and the fall of the stucco from the surface of the vaults.

THE ARCHAEOLOGY OF TARRAGONA CATHEDRAL

THE MEMORY OF THE STONES

In Memoriam Salvador Ramon Vinyes (1922-2006)

Josep Maria Macias Solé, Joan J. Menchon Bes, Andreu Muñoz Melgar and Immaculada Teixell Navarro

ERACT (Tarragona Cathedral Archaeological Research Team)

INTRODUCTION

If there is one element that defines the horizon of the city of Tarragona, it is the profile of the walls as a backdrop to this Mediterranean scene presided over by a setting sun that is intense and luminous, despite being in the dying stages of the day. And between the walls we glimpse the majestic image of the immense stone nave of the Cathedral, with its bell tower, dome and the unfinished frontispiece on the main façade.

From the sea, Tarragona Cathedral has always been a clear reference point for sailors. Its profile and splendid rose window have been etched into the memory of sailors and have been part of the legends of the people of the sea for many centuries. We are reminded of the beautiful story of Salomonet de les Matines, who, being uplifted during midnight mass, lit up the huge oculus and allowed the lost mariners to find their way into port.

This Cathedral, so full of history, present in the city since the 12th century, occupies a site that already had a very special significance in Roman times. The area of the mediaeval Cathedral is where we believe the Visigothic cathedral of *Terracona* was built in the Late Antiquity, occupying and Christianising the area that since the beginning of the Roman Empire had been dedicated to the cult of the emperor, and was probably the site of the famous temple of Augustus.

We are, therefore, in a very special place for the city of Tarragona – the heart of the mediaeval city, the heart of the Visigothic city, and the heart of the Roman city, with its temple of Augustus, and before that, the Republican period military base, one of the reasons for the founding of the city of Tarraco.

These historical and archaeological precedents of our Cathedral, present in equal measure in the Upper Part of Tarragona, give it a special character, a *kerigma* that makes it special and unique, not only for the people of Tarragona, but also for the history of our land. For this reason, and others, the Cathedral is the most important historical, archaeological and architectural complex in the city of Tarragona. Moreover, it still serves the purpose for which it was built – to be a reference point and spiritual centre for the city and the see of the metropolitan and primate archbishopric. And it goes without saying that its historical and architectural characteristics and its special location over the remains of the *area sacra* of Roman Tarraco's emperor worship complex make it a unique site for understanding the urban, archaeological and architectural evolution of the city from the Antiquity to the present day.

It would therefore appear obvious to state the importance of the metropolitan see as a living monument to a long historical tradition, and it could not by any means be underestimated within the framework of the Tarragona Cathedral Master Plan. To intervene in a monument such as our Cathedral, without understanding the why, how and when of its evolution is inconceivable in an action of this type. For this reason, it has been clearly understood right from the beginning that we needed to obtain a profound knowledge of the monument, while at the same time planning the archaeological work.

The archaeological coverage of the works provided for in the Master Plan has taken on an increasingly natural role, even more so since it is compulsory in interventions on historical monuments. It is not in vain that Tarragona Cathedral is categorised as a Historical Artistic Monument (RO 3 April 1985, *Gaceta de Madrid* 12 April 1905), and that the city of Tarragona has been a Historical Artistic Complex since 1966 (Decree 652/1966 10 March, BOE 22 March 1966). In addition, the Roman remains are part of the Worship Area of the *Concilium Provinciae* of the ancient capital of *Hispania Tarraconensis*, which in turn is included in the Tarraco archaeological complex, recognised as a World Heritage site by UNESCO in the year 2000.

In this way, the importance of the archaeological actions has increased inexorably, almost imperceptibly at first, but at the same time implacably. It has gone from being just another part of the whole project to being an area of major

importance, both in terms of financial resources and investment in resources, as well as in the results obtained, whether they be in the historical or archaeological area or in the monumental field, with the recovery of areas that have been buried for centuries.

The clearest example of this process is the excavation on the northern side of the cloister, just below the Cases dels Canonges that face the Pla de Palau, where some 45 metres of the *temenos* wall of the Roman temple area was uncovered, as well as various structures from the Visigothic, mediaeval and modern periods, all of considerable interest as they add to our knowledge of the history of Tarragona, and of course, its Cathedral.

The work was carried out between 2000 and 2003 with the authorisation of the Catalan Autonomous Regional Government Department of Culture and it was coordinated, in an area of great complexity, with the different phases of the project. Work recommenced in 2004 with the excavation in the northeastern wing of the cloister (Diocesan Museum), which we hope will soon be continued.¹ There have also been interventions in other parts of the complex, including the bell tower, the sacristy roofs, the chapter house and chapel of Corpus Christi, the apse and the nave, the chapel of Sant Ramon, the exterior of the chapel of Corpus Christi, and the sacristy of the chapel of the Presentació.

The results of the archaeology carried out between 2000-2003 are being carefully studied to ascertain their significance for the Roman period and the Late Antiquity. With this in mind, the Archbishopric of Tarragona and the Catalan Institute of Classical Archaeology (ICAC) signed a co-operation agreement for the completion of the scientific analysis of the archaeological work already undertaken. This study will allow us to carry on with the research begun by Monsignor Serra Vilaró and subsequently continued by Sánchez Real and Theodor Hauschild.

THE ARCHAEOLOGY OF TARRAGONA CATHEDRAL

The architecture of the 21st century is revolutionary compared with that built since the Antiquity. The use of cement, iron, glass, plastic, and other elements has put us light years ahead of the way buildings were constructed until recent times. Modern constructions use spectacular and very powerful mechanical means such as cranes, cement mixers, and excavators that allow the movement of massive amounts of earth, which would otherwise be extremely expensive and very slow.

This new concept of construction is diametrically opposed to the ancient or traditional way, where the technological limitations and the desire to save on resources, which were always limited, although it may not appear so to us today, led to rationalisation to a point that would seem absurd today. Thus, until not very long ago, recycling, or taking advantage of building materials of buildings no

longer in use, went together with the reuse of part or all of the standing constructional elements standing, as well as their foundations and other parts, that were duly processed and reused. Another factor to take into account is that the debris and earth from building sites were treated with the maximum efficiency; in other words, it was more usual for it to be scattered in or near the site and have it paved over, than to have it taken to a dump outside the town, using slow and costly means of transport.

Tarragona Cathedral and the buildings that surround it are an example of the posthumous influence of Imperial Roman architecture. Every wall that could be reused was left where it was; everything that was dispensable and didn't get in the way remained hidden below the new buildings, and everything it was possible to recycle was used to build them.

Now, at the beginning of the 21st century, we use our archaeological knowledge and methodology to reconstruct this long and fascinating construction process and the life of a very special place for Tarragona, its Cathedral.

Archaeology is a historical discipline that investigates the characteristics and evolution of a process, an event, or a historical element, based on the material evidence and using a combination of techniques, methodologies and other disciplines. Thus, archaeology, through the study of the subsoil and buildings (in one piece or not), can for example recover, identify and understand the architectural vestiges, or the layers of earth –strata– that have built up over time and have survived the passing of the centuries and the changes made by man.

The excavation of the Cathedral's subsoil allows us to recover or visualise the vestiges hidden below its buildings. In this way, the excavations in the Cases dels Canonges have uncovered an important section of the wall that surrounded the area of the Imperial Cult Temple (what the archaeologists call the imperial worship area or *temenos*), the arcades of an old section of the mediaeval canonate, and the exterior walls of the chapel of Sant Salvador, among other things. This is the most spectacular part of the research. On the other hand, what you don't see after an excavation is the most difficult, but rewarding part of an archaeological intervention. The excavation and the methodical analysis of the layers of earth and the finds are the scientific basis on which the subsequent historical discourse is based. In this way we can establish chronologies, study the market economy (using pottery or coins), reconstruct the palaeoenvironment (using plant sediments), study the society (using epigraphical data) and the iconography and religiosity (through the architectural decoration of the temples), as well as many other aspects using elements that the archaeologist patiently excavates and studies with the help of the new technologies.

However, the archaeological study of Tarragona Cathedral is not a recent activity. There is a rich historical tradition of previous studies. For example, during the 16th century, the Renaissance scholar Lluís Pons d'Icart was already writing about the Roman walls in the cloister, even describing some of the windows. For him, these enclosing walls of the *temenos*, formed part of the city's *arx*. He

¹ The team was made up of Josep Maria Macias, Joan Menchon, Andreu Muñoz and Immaculada Teixell; the last three all directed the excavations at various times. We also had the invaluable assistance of Francesc Bosch, Pilar Bravo and the artists Rosa Palau and Carolina Escoda. We are also grateful for the consistent support of the City Councillor for Historical and Artistic Heritage from 1999 to 2007, Maria Mercè Martorell Comas.

hesitatingly placed the temple of Augustus behind the Cathedral apse (he also saw it in the Colonial Forum), known to have existed thanks to the Latin written sources.

Much later, Enrique Flórez dedicated a volume of his great work *España Sagrada* to the "Tarraconense Antiquities" (1759), in which he published illustrations of two pieces of marble decorated with garlands, bucranea and priestly attributes, still preserved in the cloister walls (where they have been since 1802), that he related to the altar of Augustus. These, and a third one, are also cited by Alexandre de Laborde in his *Voyage Pittoresque*, from the beginning of the 19th century, although he thought, in defence of the theory put forward by the Tarragonan artist and antiquarian, Vicenç Roig, that they were part of the temple of Augustus.

What is certain is that those 19th and 20th century scholars and experts could not agree on what was the true origin of those magnificent walls, half hidden in the Cathedral cloister and the surrounding streets. Theories included the *arx*, the altar and temple of Augustus, the temple of Jupiter (based on the finds of pieces of *phaleræ* with the effigy of Jupiter Amon during the building of the Seminary), but it was never very clear, and perhaps it still isn't!

For example, Francesc Albiñana and Andreu de Bofarull (1849) closely followed the ideas of Pons d'Icart and Flórez and thought that the marble fragments with bucranea in the cloister were part of the Augustan altar. Some time later, Bonaventura Hernández Sanahuja, defended the existence of an *arx* in the area of the Cathedral, where the temple of Jupiter would also have been, decorated with the *clipei* depicting that divinity, such as those found during the construction of the Pontifical Seminary. On the other hand, the temple of Augustus was, in his opinion, in the area of La Peixateria, between the modern Plaça del Fòrum and Santes Creus Street.

Emili Morera, who posthumously published the *Historia de Tarragona* by Hernández (1892), agreed with his topographical proposal, as did Agustí Gibert in his *Temples pagans de la Tarragona romana* (1916), and Josep Puig i Cadafalch, Antoni de Falguera and J. Goday (1909), who proposed a hypothetical reconstruction of the temple of Augustus based on the study of the preserved pieces of marble and the Roman coins with the *imago* of Tarraco's Augustan temple.

Monsignor Sanç Capdevila also followed the postulates of Hernández (1929) and placed the temple of Augustus in the Peixateries Velles, and that of Jupiter with the Augustan altar in the Cathedral. Adolf Schulten, a German archaeologist of great prestige during the first half of the 20th century, argued that the Cathedral area had been the location of the *Legio VII* encampment, based on the Roman walls in the cloister; the temple of Jupiter would be found below the nave and that of Augustus would be in the Plaça de les Peixateries Velles (1921).

However, it was not until Serra Vilaró came along that we could talk of true archaeology. In 1960 he published his book *Santa Tecla la Vieja, la primitiva Catedral de Tarragona*, in which he defended the theory based on his 1933 archaeological excavations that the city's early Visigothic

cathedral was in the area between the chapel of Santa Tecla la Vella and a Roman wall perpendicular to the *temenos* enclosure (the large imperial-period hall on the symmetrical axis of the Roman worship complex), to which a floor of marble plaques must be associated.

Apart from these excavations, Serra Vilaró also recorded a structure made of Roman ashlar in the sacristy, which he related to a similar wall found behind the chapel of Sant Oleguer.

In 1955 Sánchez Real took advantage of the work being carried out by the architect Francesc Monravà in the cloister to open a series of test trenches. Thanks to these he discovered a Roman channel that ran parallel to the north-eastern and northwestern walls of the cloister, which are from the imperial period. The find led him to open other test trenches and he was able to study the archaeological stratigraphy, the most important aspects of which were a 5th century urban rubbish dump and a cut in the rock. This cut was reinterpreted some time later as evidence of an early building project in the imperial-period Worship Area in the Upper Part.

However, despite these archaeological interventions in the mid-1960s, no one had come up with a satisfactory explanation for the topography of the Upper Part of Tarragona in Roman times, as Josep Maria Recasens stated clearly in his book *La ciutat de Tarragona* (vol. I, 1966): "*For now, therefore, it is not possible to determine the exact or approximate location of the Tarragona temples that are most representative of the official religion. We accept, although without being able to demonstrate it as we would like, that they were built on the upper of the three terraces into which the upper part of the city was divided; however, what connection did these temples have with those large walls, related to each other, described by Pons d'Icart, part of which Serra i Vilaró was able to study, with the conclusion that they formed part of a lavish building, renovated well into the 1st century or in the first decades of the 2nd, precisely in a period in which the temples of Jupiter and Augustus must have been treated with more care than ever? We have here a problem to solve.*"

This situation began to change substantially thanks to the work of Professor Theodor Hauschild, when he began his studies of the walls and buildings of the Upper Part. The new proposals allowed him to define an urban layout of three large terraces or levels. Later excavations and studies led him to hypothesise a large porticoed plaza drained by the channels discovered by Sánchez Real, and to defend an unsuccessful initial constructional hypothesis based on a U-shaped trench cut into the rock.

According to Hauschild, who based his theory on Rüger's studies of the pottery found in Sánchez Real's excavations, the complex was an Augustan project carried out between the pontificates of Tiberius and Vespasian.

In those years, G. Alföldy was studying the epigraphy of Tarraco and the provincial *flamens* (the priests in charge of the Imperial cult), which allowed him to define the central square of complex proposed by Hauschild as the Provincial Forum. It is thought that it began to function around 70 AD, based on the dating of the first inscriptions from

the area, and continued in use until the end of the 3rd century AD. It would have been a judicial area independent of the city, controlled by the *Concilium Provinciae Hispaniae Citerioris*.

Subsequent excavations have added to our knowledge of the area in the Classical Period and the Late Antiquity. These include the interventions of M. Ferrer in 1977, continued during the 1980s by X. Aquilué and the Archaeology School Workshop (TED'A) at the headquarters of the Official Association of Architects of Catalonia, the work of Cortés and Gabriel and their proposed topographical reconstruction of the Upper Part, and those that would later be published by X. Dupré and the TED'A that defined the complex as a Flavian-period project.

Years later we have to take into account the studies published under the coordination of R. Mar, with a proposed location for the imperial temple in the axial hall on the upper terrace, those of P. Pensabene on the elements of decorative architecture, and the latest reinterpretations of both that propose an initial urban project with a large temple dedicated to Augustus in the centre of the plaza.

Neither can we forget the contributions of an excellent group of professionals who, thanks to their research, have continued the work in the area: A. Bermúdez, M. Díaz, M. García Noguera, P. Gebellí, E. Koppel, I. Peña, Ll. Piñol, C. Pociña, etc.

THE ROMAN PERIOD: FROM A MILITARY BASE TO AN IMPERIAL WORSHIP AREA

Tarragona Cathedral is located on the highest part of the coastal hill chosen by the Romans on which to establish a military garrison during the Second Punic War (218-201 BC). The military installation coexisted with an Iberian citadel that had been there since at least the 5th century BC, which was located at the foot of the hill near the natural port. It was probably called either *Tarrakon* or *Kesse*.

Today we know nothing about that first encampment or *praesidium*, which was probably protected by an artificial embankment surrounded by a moat and a wooden fence. The oldest Roman archaeological evidence we have in the Upper Part of Tarragona is the so-called first phase of the walls, of which some segments are preserved, as well as the Minerva, Cabiscol and Arquebisbe towers. A hypothetical tower below the Fortí Negre (Black Fort) would indicate an initial military settlement with an size similar to that of the later Imperial Worship Area. This fortification is dated to around 200 BC.

Between 150 and 100 BC the perimeter of the wall was extended (second phase) and the route and appearance we can still see in certain places in the Upper Part was defined. Similarly, this new wall, which preserved at least part of the old one, reached the area of the present-day port and we assume that the area of the Upper Part continued with its military function until the time of Emperor Augustus.

However, let's move on to discuss the results provided by the excavations carried out under the Master Plan. These paid particular attention to the northwestern side of the cloister, on the outside of the western enclosure wall of

the *temenos*, in contact with those the German Archaeological Institute carried out in the Diocesan Museum and the Cloister chapel. It is at this point that the *temenos* wall is best preserved. It is precisely this that led to the unusual position of the cloister to the north, between the chancel and the transept, whereas these areas would normally be on the southern side, facing the sun, between the transept and the nave.

The archaeological excavation allowed us to reveal 45 linear metres of the *temenos* wall, and a total of five *fenestrae*, and we were able to study a stratigraphic sequence up to nine metres deep, which we can date between the 1st and the 20th centuries.

What are these buildings? What was their purpose? When were they built?

Professor Alföldy's epigraphical studies defend the theory that in the period of the Roman Empire the Upper Part of Tarragona was a large monumental, political and religious complex that we know as the *Concilium Provinciae Hispaniae Citerioris* (CPHC, as it is called in the inscriptions) that occupied an extensive area of some eight hectares. Its functions were the official religion, representation, and the provincial administration.

It is supposed, based on what the city decree from Mytilene tells us, that around 26 BC Tarraco decided it needed a place to worship Augustus. Quintilius tells us in an anecdote that a delegation of *Tarraconenses* explained to Augustus that in their city a palm tree had miraculously grown on the altar dedicated to him. The *princeps* ironically reproached them saying that if a plant had grown on the altar, it must mean that they didn't offer many sacrifices in his name. Archaeology has not been able to localise these worship areas, but the mentions in the historical sources are enough to show that the Tarraco elite had the incipient desire, while Augustus was still alive, of developing a cult to their emperor, within the social context of political reaffirmation, both in Hispania and Rome.

Later, Tacitus tells us that in 15 AD, following the death of Augustus, a delegation from the colony of Tarraco asked Tiberius for permission to build a temple in his memory, as an example to all the provinces. As in the previous cases, archaeology has been looking for the site of the temple dedicated to Augustus. Previously we mentioned that various sites have been suggested for the different temples dedicated to the god Jupiter and the emperor Augustus, as well as the altar. Traditionally, researchers have leaned towards the area of the present-day Cathedral as the site of the temple of Augustus. In the 1980s another location was suggested, given the chronological incompatibility between the historical information and the dating of the *Concilium* structures to the Flavian period. The alternative was to place this temple in the area of the Colonial Forum, in the lower part of the city. However, the latest topographical studies and archaeological research carried out on the *forum coloniae* show that the impossibility of having a temple dedicated to Augustus there, as we know that a Republican Capitoline temple was built in that area and there would not have been room for another building of those characteristics.

So where should we place the temple Tacitus describes and that is shown idealised on coins minted in Tarraco during the time of Tiberius? To date, we do not have any firm evidence as to its location, but it is well worth considering the fact that it might be below Tarragona Cathedral.

Studies of the urban layout of the city of Tarraco have begun to bring results in recent years and thanks to them we have reasonable reconstructions of the urban network of the ancient city. For example, we can speak of two topographical axes. The oldest is related to the second phase of the Republican wall, with the construction of the *forum coloniae*, and the development of the lower part of the city, with housing blocks (*insulae*) of 35 x 70 metres (1 x 2 *actus*) and streets with a width of 5.90 metres (20 feet). The *kardines* we have identified have an orientation of 31 degrees east of geographical north, exactly the same as the section of wall on the Passeig de Sant Antoni, the Capitolium, part of the port suburb, and other, later buildings, such as the forum basilica or some warehouses in the Roman port (*horrea*). This orientation continues in the pottery factory (*figlina*) from the second decade of the 1st century AD, discovered below the arena of the Roman circus.

A second urban axis, orientated at 35 degrees to geographical north, corresponds to the structures of the *Concilium Provinciae Hispaniae Citerioris* and other earlier constructions, such as the ditch cut into the rock that continues to be documented in the Worship Area of the *Concilium Provinciae*.

This ditch predates the Worship Area and has been found in different parts of the Cathedral and the Tarragonès County Council building. P. Pensabene and R. Mar have interpreted it as the foundations for an early Roman sacred area or *temenos* that was never built, but it can also be hypothetically related to the building of the temple of Augustus. Among the buildings that predate the construction of the Praetorium and the Circus, a building with an *opus caementicium* vault with six rooms and a possible second *caementicium* vault stands out. Perhaps there could be another building symmetrical to this one in the area of Ferrers Street, where there is a similar large vault. In any case, it can be seen how the disposition of the Circus vaults and its drains was adapted to these earlier structures.

What can these remains tell us? What can we learn from the unfinished foundations of an early *temenos* and a large building or two made of *opus caementicium*, all following the same urban axes that do not coincide with the layout of the Republican city? Possibly what we have are the remains of an early urban development programme for the old military encampment in the Upper Part of the city, prior to that we know of as the seat of the *Concilium Provinciae Hispaniae Citerioris*. On a lower level, where the Circus would later be built, there was a pottery factory (*figlina*) that was operating between the second decade and the middle of the 1st century AD. This industrial area still followed the same orientation as the Republican street layout.

We believe that the construction of a large public building, of which we have at least partial remains below the Praetorium and the Plaça del Rei, was begun on the platform of

the area that would later become the Circus. This building possibly delimited part of a large plaza or open area that was bordered on the side nearest the sea by a large ashlar structure with stonemasons' marks that Ll. Piñol dated to around 39 AD. On the upper level a sacred area began to be laid out, with the first enclosing wall of a worship area dedicated to Augustus, presided over by his temple.

This hypothesis is as attractive as it is risky, but the signs are there. And if it is true, was this first grand urban project actually built? Are there more parts to it? Perhaps the answer is yes and the ashlar galleries or cryptoporticos with a lintel roof on heel mouldings that we know of in Civaderia Street, and probably also in Merceria Street, could be part of the first complex. Not only that, but the vault in Civaderia Street had an internal access to the upper plaza that appears to be incompatible with the communications system with the monumental stairway that was built for the grand *Concilium* project.

The evidence of these elements leads us to believe that between the time of Tiberius and the mid-1st century AD a first urban development program was initiated in the Upper Part of Tarragona. We have to remember that we can date other large Hispanic buildings to this period, such as the forums and *forum adjectum* or *Augusteum* in Merida, and the *forum adjectum* in Cordoba. If Tacitus says that the construction of the temple of Augustus in Tarraco in 15 AD was an example for all the provinces, it is logical to think that an initial project may have been begun in the period of Tiberius, and it has to be assumed that it was one of the oldest projects, if not the oldest.

However, this initial project for an imperial sacred area in the Upper Part did not prosper. We don't know if it was abandoned and then, after a hiatus, restarted, or if the whole project was rethought and enlarged for reasons we are currently unaware of.

What we can be sure of is that the new project kept to the orientation and urban axes of the previous one, although at a different time to that of the Republican-period city. This was due to the need to fit buildings from different projects into an area with an irregular shape and orography, as well as one confined by the city walls. One effect of this squeezing is that the Circus (built in the time of Domitian) had an anomalistic ground plan if we compare it to others: it is squashed in between the city walls at each end and is right on the edge of the buildings of the next terrace, in other words, adapted to the pre-existing axes. When the Circus was built it absorbed or modified the earlier structures in the area of Pilate's Tower and Ferrers Street. We believe these may have belonged to a large public agricultural warehouse area (*horreum*), similar to one we know of in *Narbo Martius* (Narbonne). What is certain is that in the design of Hispanic and Gallic forums it is not unusual to find underground or semi-underground constructions known as cryptoporticos, such as those in Empúries, Sagunt, Bilbilis, Bavay, Rheims, etc.

The demilitarisation of the Upper Part of Tarragona with the coming of the *Pax Augusta* would have freed up a large area that was then used for the new political and propaganda needs of the recently inaugurated empire, and more

so if we remember that Tarraco had been a *colonia* since the time of Julius Caesar, i.e. a large political, administrative and representational area presided over by the temple of Augustus.

During an excavation in the Plaça del Fòrum in 1996 archaeologists found two fragments of marble frieze, one with garlands dated to the Flavian period, and the other with *ro-leus* dated to the Julio-Claudian period. P. Pensabene and R. Mar think that, like another segment preserved in the National Archaeological Museum of Tarragona, they would have been part of the temple of Augustus that could be under the Cathedral. Based on the size of the piece, they believe the building was some 30 metres wide.

It is interesting to note that the height of this Julio-Claudian frieze is the same as that of the garlands and bucrania (90 cm = 3 feet) that R. Mar considers to be part of the decoration of the temple that would have been in the large axial hall of the Tarragona sacred area. Do we then have two temples? One Julio-Claudian (credibly that of Augustus) in the centre of the Roman *area sacra*, on the site of the Cathedral, and another behind it in the large axial hall and from the Flavian period, as Mar and Pensabene propose?

We also know of a marble pilaster Corinthian capital dated between the years 10 and 30 AD. However, its size means that it cannot be part of the frontispiece of the Julio-Claudian temple that Mar and Pensabene place below the Cathedral. It could be part of the secondary decoration of this building, or of another.

Just to make things even more complicated, we know of elements from one or more large buildings that have been found in the area of the Cathedral. For example, in the old cemetery of the See there is a column tambour and a fragment of pilaster, both of local *lumaquel·la* stone, which can be associated with a building with columns of approximately one metre in diameter. The excavations carried out under the Master Plan in 2003 found another fragment. And finally, in the Plaça Rovellat there is a large Corinthian capital of local stone, reused from a Visigothic-period building that has been dated to between the Julio-Claudian and Flavian periods. We also know of other fragments found during the construction of the old Mercat del Fòrum. On the parapet of the section of city wall near L'Escorxador there is a pilaster capital carved out of local stone, similar to the previous one.

In one of the refectory walls there is an ashlar of El Mèdol stone with part of an inscription with letters about twenty centimetres high. We can read CAESAR or CAESARI. The text reminds us, although we are aware that it requires a more in-depth study, of the famous epigraph on the temple of *Mars Ultor* in Rome or of the reconstructed inscription from the Moreria Street temple in Cordoba. In the Music Conservatoire (Casa Montoliu) there is part of a *lumaquel·la* stone cornice with a visible height of almost half a metre. Neither can we forget another block of local stone with a frieze of garlands that dates from the Augustan period that can be seen, reused, in the Audiència Tower.

Therefore, in the Upper Part of Tarragona we have a series of architectural, decorative and structural elements that would have been part of one or more Julio-Claudian period buildings, and one from the Augustan period.

With the data we have at our disposal, it is still risky to state that these Julio-Claudian elements were part of the temple dedicated to the *Divo Augusto*, possibly located under the Cathedral. We also have to take into account the ashlar structures that Serra Vilaró found behind the apse of Sant Oleguer and the Cathedral sacristy, which were rediscovered in the 1980s by Professor Hauschild.

There is another element that should perhaps be studied and evaluated: the large cistern located in the southeastern corner of the cloister. Despite the fact that it has been identified as a mediaeval structure, we believe it could be Roman, more so since it is in the peribolos of the first sacred area project. If this were the case, then it could have been part of a pond or nymphaeum similar to those we know of in other religious areas, such as that of Merida.

There are other elements that allow us to establish a working hypothesis. If we consider an octastyle temple, such as the one depicted on the coins, and we use as a constructional module the El Mèdol stone tambour from the Cathedral cemetery (97 cm in diameter), we can picture columns of between 3 1/3 or 3 1/2 feet, in the *imoscapo*, which could correspond to a temple with a frontispiece of between 14 and 16 metres. In other words, the same width as the central nave of the Cathedral. The ashlar wall referred to by Serra Vilaró may have been the rear of the Roman temple or the support for the portico colonnade of the first *temenos*. There is another interesting aspect: the Cathedral's drainage system does not pass through the central nave, instead it runs through the side naves. Is it possible that the mediaeval church took advantage of the Roman infrastructure? Or could this deviation of the drains be due to the fact that in this way they pass alongside the remains of the podium of the presumed temple of Augustus?

The possibility is more than interesting but unfortunately we do not have enough data to be able to confirm the hypothesis. In any case, we find it difficult to consider a Julio-Claudian temple of Augustus built of marble; it is more likely to have been built completely or partially of local stone, as we can see in Merida in the case of the so-called temple of Diana, or, closer to home, in the Tarraco theatre. Neither can we forget that the temple Tiberius authorised the building of could be more a local than a provincial initiative. This would suggest the use of local stone, as opposed to the buildings promoted by the state, which were built with marble from imperial quarries outside Hispania.

THE GRAND IMPERIAL WORSHIP AREA

Based on his epigraphical studies, Alföldy defends the theory that the provincial worship area was already in use in 70 AD. Comparing this data with that obtained from the archaeological excavations leads us to believe that although it was in use, the building work, which had of course started much earlier, had not been completed.

Thus, for example, the studies carried out on the fragments of monumental craters and the *clipei* or medallions of Jupiter Amon excavated in the Upper Part indicate that the former are from the Julio-Claudian period and the latter from the same period and later.

The excavations in the Cases dels Canonges have given us very little archaeological material that would allow us to date the construction of the imperial *temenos* wall, as was also the case with the excavations on the site of the present-day headquarters of the Architects Association (1977). Sánchez Real's excavations in the cloister (1955) allowed us to define two archaeological levels that, once interpreted, could indicate an initial levelling of the area and construction, followed by its surfacing. The continuation of the excavations in the Architects Association building (1984-1987) uncovered archaeological strata from the Flavian period, which we should not relate to the construction of the complex, but to the surfacing of the exterior of the area.

Thus, we find ourselves with a seemingly complicated puzzle: decorative elements, such as the Jupiter Amon *clippae* and crater fragments dating from the Julio-Claudian period, decorative elements, including other *clippae*, and epigraphy from the Flavian period, constructional stratigraphy from the mid-1st century AD, and others from the Flavian period.

How can put the pieces of this puzzle together? We believe that in the mid-1st century AD the Julio-Claudian project we referred to earlier, possibly a local initiative, was replaced, re-thought, or enlarged by another, this time of a provincial nature, which we have agreed to call the *Concilium Provinciae Hispaniae Citerioris*. Work on this new urban development began in the mid-1st century AD and entered into use around 70 AD, although it was not completed until around 100 AD, when the Circus was built. We find ourselves, therefore, with a similar, if not contemporary, urban process to that of other Hispanic capitals - Merida, with its Marble Forum or *augusteum*, dated to the mid-1st century, the so-called Provincial Forum in Cordoba, that also has parts similar to those of Tarraco, etc.

Thanks to the *Archaeological Planimetry of Tarraco* GIS project (the Catalan Institute of Classical Archaeology and the Tarragona Museum of History) we have been able to situate with great accuracy the walls that made up the Upper Terrace of the Imperial Worship Area in the Upper Part, thanks to GPS technology. In this way, we have been able to see how this plaza, which has interior measurements of 132.92 metres by 152.19 metres (450 x 514 Roman feet). The axial hall that crowns the area would have been 27.60 metres wide (93 feet).

The excavations carried out in the Cathedral since the year 2000 have made it possible to study a broad and complex stratigraphic sequence that we have to place between imperial period and the present day.

We have detected something particularly interesting on the northwestern corner of the area: some impressive levelling of hills more than ten metres high. Not only did they cut the rock down until they reached the level they wanted for the large plaza, but they also left an eleven-metre-wide empty space behind the *temenos* wall! From the excava-

tions we were able to see that this rear passage was not paved and was probably used as a service access and to drain off the rainwater. For that reason the Romans cut a number of drainage channels there to channel the water to the base of the *temenos* wall, many of which were excavated by Th. Hauschild. There, the excavators discovered an accumulation of large stone blocks from the lowering of the hill (megaliths similar to those documented at other places in the Upper Part), combined with ashlar and mouldings that had been dumped. All these elements were mixed up with artificial ballast and cover two strata, one with the remains of stone from the final trimming of the ashlar, and another with splinters of marble from the final adjustments made to the marble decoration of the plaza. It is also interesting to link this drainage system to the large sewers that run transversally across the Circus.

We should also mention the excavations carried out at the headquarters of the Tarragonès County Council (by the private archaeological firm Codex in 2002) and the conversion of the Casa dels Concilis into the Tarraconense Biblical Museum, as these allowed us to document walls that could be interpreted as a rectangular exedra on the transversal axis of the Worship Area plaza. Unfortunately, the work carried out under the Master Plan has not allowed us to document its symmetry because the place where the renovation of the Cases dels Canonges should have been greatly affected the imperial structures. Having said that, we were able to document here a Late Antiquity cistern annexed to the *temenos* wall and possibly to the exedra.

The new exedras would have been 7.7 metres (25 Roman feet) wide on the inside, a measurement that coincided with those Hauschild recorded in the corners of the area, specifically in the Diocesan Museum (where the large lowered arch is preserved) and at Casa Elias (No. 1 Les Coques Street) where the foundations of the apsidal bowl were discovered).

THE ARCHITECTURAL DECORATION OF THE WORSHIP AREA

In 1993 P. Pensabene and R. Mar each published papers on the architectural decoration of the *Concilium Provinciae*, and an initial proposal for the reconstruction of the decorative programme of the Tarraco Worship Area. This marked a turning point in our understanding of the architecture in this area. The catalogue of materials was by no means small, but it suffered from an unsolvable problem - the majority of the pieces were found out of their archaeological context, with the places where they were found spread over a wide area. For example, in the 18th century fragments of bucranea and garland frieze were found in the Cathedral and in the 1930s part of a huge column; in the 1970s and 1990s elements of both types were found in the Plaça del Fòrum area.

This situation has made us extremely cautious when it comes to establishing work hypotheses. Is the dispersion of the pieces the result of their reuse and recycling in the Late Antiquity, Middle Ages and Modern Period? Do they tell us, for example, of the places where they were carved or where they were to be cooked to make lime? What we

can say for certain is that we currently do not have enough architectural elements to situate either them or the temples (the foundation of a portico, of a podium, etc.), with the exception of a wall found by Serra Vilaró behind the apse of Sant Oleguer and the sacristy.

To further complicate the situation, if there was a temple of Augustus built of local stone in the centre of the Worship Area plaza, to which buildings do these marble elements belong? And if the temple really was made of marble, from which buildings did the local stone come? Pensabene suggests there may have been a temple outside the *area sacra*, to the north of the Plaça del Fòrum, thus reinstating the location of the temple of Augustus the historiography gives us.

However, the archaeological evidence is fickle. This is the case of the two fragments of frieze of the same height, some 90 cm (3 feet), found in a house on the Plaça del Fòrum in 1996. However, on one the plant motif decoration is Julio-Claudian, while the other has part of a garland and a *patera* and is Flavian. Sheer chance? Two buildings of the same size, as suggested by R. Mar, one in the centre of the plaza (the temple of Augustus) and the other in the axial hall (the Imperial cult temple)? Decorations from the same building that took a long time to finish and had its iconographic programme changed? What is clear is that the decorative reality of this area of Roman Tarragona is becoming ever more rich and complex.

Luckily, the excavations carried out under the Cathedral Master Plan have provided us with elements of the decorative and iconographic programme of the Upper Terrace, that stratigraphically come from precisely this area, and not from other parts of the city, as could happen in other cases. Not only do the finds from the mediaeval and modern levels indicate their origin simply through their proximity, but this is also confirmed by the location of others, even in the process of being made, in the 6th century demolition strata and the 1st century AD construction strata!

For example, we found a huge number of marble floor slabs and plaques that decorated the walls of the *temenos*. In addition, we catalogued more than 180 decorative elements, 30 of which were rejected carvings discarded by the builders, and which were thrown as rubble into the construction level of the *temenos* wall.

What can we say about the preliminary study of this marble? In the first place, we have to be prudent as we have only found a small amount compared to what would have been needed in a two-hectare plaza. Secondly, there is an overwhelming presence of white marble, mainly from the imperial quarries of Luni-Carrara that, judging from their thickness and the way they have been cut, were used for *opus sectile* floors and wall plaques. Some pieces seem to be related to the lining of parapets and window and door stanchions. The presence of clamp holes on the preserved interior wall facings of the *temenos* (refectory hall, axial hall, and the Tarraconense Biblical Museum), the major presence of fine marble plaques, and a significant presence of adjoining decorative elements allow us to understand its marble covering.

On the other hand, the rear part of the portico wall has bossaged ashlars, and therefore, no marble lining. Of all this plaque material, approximately 3% is polychromatic, the cut and polish of which tells us of its use as *opera sectilia*.

We have also been able to document the presence of pottery *tegulae* that could well have been part of the portico roof. We can state that in the 2003 intervention a very significant amount of this material was found. On the other hand, we haven't found any evidence of fragments of *opus caementicium* or stucco, which leads us to reject any idea of a vault ceilings lined with these materials. It is more likely to have been wooden scaffolding, *in ligneis* with a single slope or gable roof, fixed to the *temenos* wall by means of large heel mouldings made of local stone. The excavation of the building and demolition levels has provided us with interesting examples of this moulding in the process of being made or having fallen from the wall. There is even one piece with a large fitting for a wooden beam. At the bottom this piece has the same thickness as the *temenos* wall.

For the time being we don't know if this proposed roof was supported by one or two rows of columns. The first hypothesis gives us a portico eleven metres wide that may have had a roof of imported wood (cedar, for example) or of a gabled scaffolding structure. The second possibility, however, has two problems: the interior colonnade would block the view of the large exedras at the ends of the longest sides of the plaza, and we to date we have no archaeological evidence that it ever existed.

The double row of columns would definitely have provided greater structural stability to the building. We have to bear in mind that the width of the portico gave a span of some eleven metres and the enclosing wall on which the roof support system had to rest is only 80 cm (90 cm if we add the plaques, in other words 3 feet). On the other hand, close observation of the current land division in the Upper Part shows us how, for example, there are the supporting and party walls of a lot of buildings where this second line of columns might have been, and we can even see that they coincide with the podium or the northern and western galleries of the mediaeval Cathedral. Pure chance? Coincidence?

To further muddy the waters of this complicated subject, the excavations carried out under the Master Plan allowed us to document five groups of columns (based on their diameter) of Roman imperial chronology:

- 1st group: an example of Luni-Carrara marble with a diameter of 33 cm, the approximate equivalent to a Roman foot.
- 2nd group: two examples of Luni-Carrara marble with respective diameters of 56, 40 and 58 cm, equivalent to some two Roman feet.
- 3rd group: three examples of Luni-Carrara marble, two with a diameter of 75 cm, with solid or filet fluting or decorated with egg and dart motifs, equivalent to some two and a half Roman feet, and another with a diameter of 79.40 cm, with arrises.

- 4th group: an example of a *lumaquel-la* stone base from which we deduce a column of some 86.80 cm, equivalent to approximately three Roman feet.

- 5th group: two examples of Luni-Carrara marble of 92.40 cm, equivalent to approximately three Roman feet.

- 6th group: a 111 cm example of Luni-Carrara marble, equivalent to approximately 3 3/4 Roman feet.

In 1993, R. Mar proposed the reconstruction of the portico following the composite order, based on the modules suggested by the lowered arches of the upper corners of the portico that gave him a height for the ambulatory roof of approximately 5 metres. This roof would have been supported by the architraves of the colonnade. The capitals would have been a little less than a metre high, and would have been of the composite type found in many different excavations over time. Our excavations have documented a fragment of volute from a capital that typologically and typometrically fits in with Mar's proposal and Pensabene's research. At the same time, and in the construction levels, we found the eye of a volute marked with five circular incisions that correspond to some examples of composite order capitals studied by Pensabene. This type of capital coincides with two fragments from the third group of columns with a diameter of 75 cm that could be those of the *area sacra* portico. Based on the diameter, the column would indeed have been some 6 metres high (21 feet).

The find of two elements of marble pilaster on the construction levels, of two more in the Late Roman demolition levels, and one example in the contemporary levels leads us to believe that on the interior face of the *temenos* wall there may have been a rhythmic sequence of adjoining pillars aligned with the portico columns.

The line of the colonnade on the façade would have supported the structure of an architrave, friezes and cornices. The central frieze central would have had a succession of *clipei* with the figure of Jupiter Amon. During our intervention we found a total of nine fragments of *clipeae* or *phalerae*, of which two depict the face of the god and the other seven fragments of orlas. In addition, one of the fragments has allowed us to document a new type of orla for Tarragona. As far as the chronology of these examples is concerned, we refer to Dr Koppel's study in which she defends the Julio-Claudian dating of a first group of examples, and we note that one of the fragments found in the excavation does in fact come from the construction levels. What does this mean? That the decoration was made up as they went along with the construction of such a magnificent building, and that the chronology of at least certain sections of the construction and decoration could be the same - Julio-Claudian, in accordance with the stylistic criteria?

Up to now it had been thought that the Jupiter Amon *clipei* had been separated by plaques decorated with plant motif candelabra. Having said that, it was surprising that in other similar complexes the *clipei* were separated by caryatids, but not here. However, during the excavations carried out under the Master Plan we found a fragment of sculpture that corresponds to the pleats of a woman's item of clothing, which can be associated with the caryatids. A second fragment, with a less certain affiliation, shows us another

pleat tightening at the waist that is also similar to the dress style on certain caryatids, including those of Merida.

These two elements place us on alert and lead us to believe that perhaps between each *clipeus* we have caryatids and not candelabra. In that case, where do the candelabra go? Perhaps in the decoration of the portico wall, in the hypothetical intermediate colonnade or inside the portico façade.

Based on these, we can theorise that the exterior façade of the sacred area portico had the following decorative and architectural programme:

1. The architrave would have been supported by the line of composite order columns.
2. Above the architrave, a Lesbian cyma.
3. Above the cyma there would have been a large frieze with alternating *clipei* with the face of Jupiter Amon and caryatids or plant-motif candelabra. Above the large *clipei* frieze there would have been a cornice with an Ionic cyma.
4. At top there would have been the supporting elements for the scaffolding.

We believe the interior of the portico wall was as follows:

1. The whole of the wall, as well as the ground, would have been covered with marble plaques.
2. Adjoining pillars would have supported an architrave.
3. Above this architrave there would have been a cyma and a continuous frieze, and above that, a cyma to support the framework of beams. If we accept that there were caryatids on the portico façade, then it is possible that this frieze would have had plant-motif candelabra.
4. At the top would have been the supporting elements for the scaffolding.

The exterior of the portico wall was not decorated, but was an imposing structure of splendid embossed *lumaquel-la* stone ashlar. It would have been crowned by a heel moulding on which the roof would have sat.

The archaeological excavations have also produced other elements, such as small friezes decorated with Lesbian cymas, frets, tongues, etc. that right now we are unable to place in a specific location, but could well be related to door or window frames, walls, decorative strips, etc.

The quality of the finds is certainly exceptional and they have to be associated with the imperial workshops of Rome and the great capitals of the Empire.

However, as well as furnishing us with this rich array of decorative architecture, the excavation has given us surprises. For example, from the construction levels we have a fragment of a big toe from a colossal statue of between five and six metres high, which could have been in one of the exedras or in the *cella* of the temple itself. It is made of Tassos marble and was part of the spoil!

We also have a fragment of the edge of a monumental crater of 46.70 cm in diameter, which could have been one of the liturgical items used in the complex. Finally, the fragment of a lion's head we found could have been part of the crown of the portico or a temple.

The splendid collection of excavated marble is complemented by the no less spectacular presence of the *temenos* wall. The archaeological excavation and study of its facings and stratigraphy has allowed us to ascertain that the Roman work teams moved a huge amount of earth to the north and west of the area, in order to create the large service area we mentioned previously. The hard calcareous rock of the hill still has the marks of the tools (punches) used in this task. In contrast, on the southern side the orography of the terrain meant that the foundations had to be raised in order to reach the required level.

The excavation in the Cases dels Canonges showed that the foundations of the *temenos* wall consist of two courses of large *lumaquel·la* stone ashlar laid out diagonally on the perfectly levelled rock, without any kind of bonding mortar. The wall was built using the *opus quadratum* technique, with large three by two feet bossaged ashlar laid out in a broken formation. In this part of the work, no mortar was used as bonding, although we assume they used clamps, judging by the marks of the crown moulds found in the demolition levels and the reused ashlar in the mediaeval buildings.

The quality of work on the ashlar is exceptional, both in their preparation and in how they were laid in the building work, with extremely narrow and well-fitted joints and very stable dimensions, even in the *anathyrosis*. This skill is particularly evident in the work of the *fenestrae*, where we can observe an elaborate load-bearing system made up of a flat arch, a lintel and a load-bearing arch, with superbly fitted pieces. In these apertures, which are two metres high and have a distance of 7.4 metres between axes, we can see the fittings of its wooded enclosure described by Hauschild, which shows us that, unlike in Merida, they were not used to hold statues. They did in fact have a twin purpose – to reinforce the wall, as they were built with a complex load-bearing system (we believe they were some 80 cm thick), and they alleviated the sensation of architectural mass and the stark horizontality of the complex, and they created a system of lighting for a particularly wide portico.

THE TRANSFORMATION OF THE UPPER PART IMPERIAL WORSHIP AREA TO THE METROPOLITAN EPISCOPAL IN THE LATE ANTIQUITY

There can be no doubt that the site of Tarragona Cathedral was not chosen at random. From the outset the ecclesiastical restoration of the archiepiscopal see of Tarragona had a clear ideological purpose – to restore the see that had lain vacant since the Arab-Muslim invasion, with the aim of achieving ecclesiastical independence for the county of Barcelona, which until then had come under Narbonne. This obviously required a physical expression – the restoration of the area of the old metropolitan episcopate of *Terracona*. This Late Antiquity ecclesiastical area occupied part or all of the ancient *area sacra* of the seat of the *Concilium Provinciae Hispaniae Citerioris*.

What happened in the Imperial Worship Area between the Late Antiquity and the Islamic conquest? This rather direct

question has a complex and incomplete answer, if it has one at all.

In 313 AD in Milan Constantine enacted an edict of tolerance towards Christianity and other unofficial religions. Some time later, in 380, Theodosius made Christianity the official religion of the Roman state. From that time on, a large number of edicts were issued ordering temples and places of pagan worship to be demolished to make way for Christian places of worship.

It appears that the imperial worship area had entered into decline sometime before that. For example, Alföldy notes that after the second half of the 3rd century there is no epigraphical evidence of the provincial *Concilium* provincial. This shows us that the complex was not fully functional, probably due, among other reasons, to the changes of the Late Antiquity and the new administrative boundaries brought into effect by Diocletian (284-305 AD), which led to the loss of the political and propagandistic significance of such areas. Having said that, an inscription from 468/472 dedicated to the emperors Leo I and Anthemius perhaps is a sign that the Upper Part still maintained, at least in part, its political function.

The introduction of Christianity had clear repercussions on urban planning during the time of Theodosius, as far as permission to demolish the pagan temples was concerned, but in the seat of the *Concilium* the changes did not become evident until the second quarter of the 5th century AD.

In the archaeological excavations in the cloister garden and the Tarragonès County Council building (the former hospital of Santa Tecla) two debris dumps from the second quarter of the 5th century were found. The existence of these two rubble disposal sites probably means that the paving of the portico and the plaza was taken up. And we cannot avoid the obvious thought – that these dumps, and others there may have been, are evidence that the waste management system of the Roman city no longer worked and that the *area sacra* or places nearby were occupied by dwellings. However, we have to bear in mind that the presence of dumps does not necessarily confirm that major changes had been made to the imperial buildings. On the other hand, various archaeological excavations carried out on the Plaza of Representation indicate that there were already houses on the site in the first half of the 5th century. Perhaps the large plaza of the upper area continued to maintain its official character, which would have been logical due to its pre-eminent topography and architecture.

By the 6th century major changes are already obvious. In 476 the Visigoth, Euric, invaded the *Tarraconesa*, which then became part of the kingdom of Toulouse, and ancient Tarraco, now *Terracona*, was no longer part of an empire that in fact no longer existed. In that same year Romulus Augustulus was deposed. The *area sacra* no longer had any meaning as a place of representation for Rome. Moreover, another city had taken over from it in political terms. Once the *parva urbs*, the ancient *Colonia Iulia Augusta Paterna Faventia Barcino* had taken the place of ancient Tarraco.

However, let's return to the archaeological remains. The finds, often by chance, of carved Visigothic decorative elements, together with the documentation of burials such as those found by Th. Hauschild in the cloister (one of which had a liturgical jar with incense, indicating that it was probably of a cleric or prelate), or of other elements such as arch voussoirs made of ironwork, lead us to believe that the area clearly had a Christian religious significance. The Imperial Worship Area had now become an area of Christian worship and of the new political class of the Visigothic period.

The archaeological excavations carried out under the Master Plan have brought to light two very interesting facts, which probably have to be dated to the beginning of the 6th century. Firstly, we can see that the *temenos* wall has been preserved, not only in the area of the cloister, but also in the headquarters of the Architects Association. Moreover, it sustains substantial buildings. We were also able to study a wall of recycled imperial ashlar and a large cistern (some 150 cubic metres) located below the Cases dels Canonges. They are contemporary structures with the building (divided into halls or rooms) and with another cistern in the headquarters of the Architects Association. Both constructions are outside the *temenos* wall and lead us to believe that the area underwent major changes, probably linked to the introduction of the Visigothic episcopal see.

While all this was going on, work began on dismantling and recycling the *area sacra* portico, including the marble plaques on the *temenos* wall. We know this because above the construction levels excavated in the Cases dels Canonges we were able to document others that can be dated from the 6th century pottery, in which a large amount of fragments of marble and even crown mouldings from the *temenos* wall were found. However, to the plundering of quality material, we have to add another element – its recycling. Thus, for example, we have found practically no fragments of capitals or large pieces of column shafts. We did however find many striated pieces, no doubt what was left of tambours that were re-cut to use in new public buildings.

It is plausible to think therefore that already during the 6th century the *area sacra* and its immediate surroundings were transformed in favour of a new architecture representing the power, basically religious, that we venture to relate to the episcopate of the metropolitan bishop. It is also quite believable, despite the lack of archaeological confirmation, that the ancient temple of Augustus, right in the middle of the plaza, could have been converted into the Mother church of *Terracona*, the *Sancta Iherusalem* of the Visigothic Prayer Book of Verona.

However, Tarraco had been an episcopal see at least since the time of St Fructuosus (martyred in 259), and we know the names of several bishops from the 4th and 5th centuries. Where would the first one have been? In our opinion, the first Cathedral of Tarragona is none other than the Francolí basilica dedicated to the martyrs, with its episcopate.

AN OBSCURE PERIOD: THE ISLAMIC IMPASSE

Between 713 and 714, shortly after having entered Hispania, the Arab-Berber armies found themselves at the gates of ancient *Terracona*. The city had long since lost the political importance it had enjoyed in times past, with the power having passed to *Barcinona*. However, its urban life revolved around the metropolitan see.

The city layout had changed greatly from its period of maximum splendour (1st and 2nd centuries). The Late Antiquity city had remained polarized, as in the Republican period and later from the Middle Ages to the 19th century, in two different areas: the Upper Part and the port area, a quarter with enough vitality to survive the first years of the Arab-Berber invasion.

The Islamic chronicles tell us of the city's destruction, an event that we could associate with the flight of the metropolitan, which left it politically and religiously decapitated. The idea that the invaders razed *Terracona* to the ground appears to be more a claim for prestige than a reality. It would be more impressive to be seen to have destroyed a famous capital, rather than having taken it over through a pact or following its capitulation, or not even that.

What is certain, archaeologically speaking at least, is that neither in the Upper Part of Tarragona, nor in the port zone, do we have any evidence of destruction levels that would indicate that the Visigothic city came to a violent end. On the other hand, the archaeological levels dated by pottery to the 7th century, could also fit chronologically into first decades of the 8th century. It is also certain, however, that to date we have not identified, or have not known how to identify, either levels or archaeological material that would allow us to speak of a *Tarraquna Andalusí*.

The shrinking of the city in the first years of the Islamic conquest does not appear to fit in with one particular fact – the flight of Bishop Pròsper and his deacons to Italy, traditionally taken as a result of the arrival of the Arab-Berber invaders. Perhaps that wasn't quite the way it happened.

In the first years of the Islamic domination there were insurrections along the frontier, such as that of *Munnuz* in La Cerdanya. This led, among other things, to the execution of Bishop Nambad of Llívia by the rebels, who allied themselves with Duke Eudes, lord of the lands of Aquitanians. This event had been interpreted as a consequence of religious repression, but this argument is more difficult to sustain when you consider the fact that the Aquitanians had taken part. It is more likely to have been the prelate's political stance, rather than his faith, that led to his death. Perhaps this still confusing and complex context of actions and reactions and repression by the Islamic powers of revolts along the frontier were what caused Bishop Pròsper and his deacons to flee, rather than the invasion itself. This would explain why the city was not destroyed, which could also be explained by the fact that the bishop left the city before the invaders arrived, which would imply the lack of a visible leader with whom to negotiate the capitulation of the city.

Whatever the case, it seems clear that *Tarracona* was soon marginalized in the new socio-political situation on the Iberian Peninsula. When Bishop Pròsper went into exile, the reason for the city's existence, the episcopal pontificate, was without a head. The change in trade routes, in both Spain and the Mediterranean, and the marginalized position of the city on the new geopolitical map, bipolarised between the Andalusians and the Carolingians, left *Tarraquna* sidelined and disarticulated as an *urbs*, which does not mean however that it was largely depopulated.

What happened to the city and the territory between the 8th and the 11th centuries? Was it uninhabited or was it structured around an urban centre? We don't yet have a satisfactory reply to these questions, although perhaps we should consider the existence of a specific population, which we cannot, or don't know how to, define archaeologically. In fact, the Arab chronicles tell us that in the *Camp* of Tarragona there were mills, irrigated farmland and castles, and also that *Tarraquna* was a ghost town suitable for ambushes, or a small village (*balda*). It is difficult to imagine that a fertile plain such as the *Camp*, near the Prades mountains, with the ancient Via Augusta (the highway of the *Banu Darrag*, the Berber tribe settled in the *Camp*), would have remained completely unpopulated.

A review of the toponymy, the frontier fortifications traditionally held to be Christian, and the burial sites around the territory tells us the opposite. The *Camp* would have been an area occupied and organised under the Andalusí domination, and could have formed part of the frontier districts.

However, we mustn't think that *Tarraquna* was a bustling *madina* like *Turtusha* or *Larida*; the archaeology stubbornly tells us the opposite. To date we have no evidence either of its destruction, or of its continuance beyond the first decades of the 8th century, and the few Islamic materials documented, such as the fragment of a 5th century Kufic inscription found out of context (in the Casa Canals excavations), are prior to the feudal conquest. Moreover, the so-called *mihrab* in Tarragona Cathedral, a splendid example of the finest Caliphal art, is not a part of the *qibla* from the *Tarraquna* mosque, but war booty brought from the baths of *Gaf'ar* in *Madinat al-Zahra*. Therefore, the main tangible element for believing in a structured Islamic occupation of *Tarraquna* has disappeared into the mist.

Whether we like it or not, it is plausible that *Tarraquna* could have been a ghost town, where it was precisely the strength of the ancient ruins that made it difficult for one side or another to control it. It became a place suitable for ambushes and a hiding place, inhabited by a dislocated population that was far from what could be described as an urban agglomeration.

In 1090 Ramon Berenguer II launched a campaign to retake Tarragona, as a first step to the conquest of Tortosa. A year later, Pope Urban II restored the metropolitan see, which was granted to the bishop of Vic, Berenguer Seniofred de Lluçanès. This transcendental event was the culmination of a series of attempts to take the city stretching back to ancient times, none of which succeeded until the 12th century. The aim of taking Tarragona was not just a step on

the road to conquering the lands under Islamic influence, but also a way of restoring the metropolitan see in order to attain ecclesiastical independence from Narbonne.

Despite everything, the attempt was not successful that time, although the funeral epitaph for Canon Bernat de Torelló, from 1087, is confirmation of an early Christian community shortly before the restoration of the see. Various factors, such as the difficulty of establishing a population, the proximity of the Andalusians, and the Almoravid invasion, paralysed the process until 1118, when the *Tarragona pallium* passed into the hands of the Bishop of Barcelona, Oleguer Bonestruga. In 1129 Oleguer ceded the city, with very wide-ranging prerogatives, to the Norman knight, Robert Bordet or d'Aguiló, who in turn had to encourage the colonisation of the area, a particularly difficult undertaking, despite the offer of *cartes de franchises* (particular rights and concessions awarded to those who took up residence in the area). We have to recognise the difficulty of conquering a ruined city of an extraordinary size for those times. It would have been difficult to control and defend, even more so when you consider that the territory, far from being empty, was still largely under Islamic control, with the disturbing presence of outposts such as Siurana, which was not conquered until 1153-1154.

FROM THE RESTORATION OF THE SEE TO THE CONSTRUCTION OF THE CASES DELS CANONGES

Olderic Vidal, who accompanied Robert d'Aguiló to Tarragona, wrote a phantasmagorical description of the state of the city in the first decades of the 12th century: "*Oak and beech grow in the place of the episcopal basilica, as well as large trees, and also in places inside the city, that they have occupied for a long time; their inhabitants having fled or having been killed by the Saracens.*" The sight of the recently retaken city must no doubt have been a Dantesque spectacle. The imposing Roman structures must have been overwhelming. This omnipresence of the Roman architecture must already have strongly conditioned the Visigothic urban layout, and would profoundly affect the 12th century urban reoccupation.

Moreover, the Islamic pressure had a powerful effect on the colonisation of the *Camp* and the city begun in 1129 by Robert d'Aguiló. It was difficult and heavy going and was sluggish until the middle of the century. At that time, Archbishop Bernat Tort gave it an important boost by setting out the objectives: to colonise ("repopulate" as they called it) and restore the diocese, thanks to the conquest of Tortosa, Lleida, and, shortly afterwards, Siurana. That year Pope Anastasius IV signed a papal bull in which the parishes of the Archbishopric were set out, and the Tarragonan prelate established the canonate of the Cathedral under the rules of St Augustine, following the example of St Ruf near Avignon. A few years later, in 1167, Pere de Queralt bequeathed a sum of money to build the Tarragona See.

The desire to restore the Visigothic metropolitan see was clearly stated with the reoccupation of the site of the former episcopate. In other words, the former imperial worship *area sacra*, the ancient *augustum* that had be-

come the episcopal metropolitan see, had been returned to its religious, political, and representation of power function. It became the see of the archbishop, of the new lord; once again it became a seat of power, with a special symbolic and political burden.

The Upper Terrace area is a veritable ecclesiastical acropolis, to quote J. M. Recasens. It is plausible to think that the old Visigothic episcopate was used at first, as well as the ruined mother church, perhaps the temple of Augustus, but soon the effort of repairing the remains, together with the political necessity of having a new see, meant that the grand project to build the Cathedral and its canonate was begun. In fact, the ecclesiastical restoration restored the pontificate of St Fructuosus and its metropolitan character, but it did not restore the old Visigothic order. The new Tarragona had nothing in common with the *Terracona* of the 6th and 7th centuries. Its needs were different, and its objectives too. It was neither a "re-conquest" nor a "re-population" in the sense that it recovered what had been lost in 713-714, but rather it was using an important element such as the see to strengthen the flourishing county of Barcelona. In reality, they restored what the pontificate stood for, but not the pontificate itself.

In this cause, the old religious sites of the Visigothic city were reoccupied by new churches with new devotions: Santa Maria del Miracle, built over the basilica in the Amphitheatre, the Francolí basilicas (the traces of which have been lost) with Santa Magdalena de Bell-lloc, and the funerary area of Mas Rimbaud-Mas Mallol with Sant Pere Sescelades.

The archbishop set up his castle in an ancient Roman tower between the upper and middle provincial council terraces. This would later become known as the Castell del Patriarca (Patriarch's Castle). At the foot of the building there is an area under ecclesiastical jurisdiction, the Vila de Pallars. In the area of the present-day Escorxador there is an agricultural warehouse area (Puig d'en Sitges and Puig d'en Pallas) and another large silo site, perhaps in the same place as a Late Roman one, which would have been on the site of the modern Seminary and the Lestonnac school. Perhaps it was part of a large ecclesiastical sanctuary linked to the Cathedral. The new see was articulated around the large plaza of the Roman *area sacra*. Thus, along the southern layout of the *temenos* wall we can see how over time the different clerical facilities were built, including the Patriarch's Castle, the ecclesiastical offices, the episcopal hospital, the Sant Llorenç archdeacon's house and its church, etc.

The new Cathedral was located on the symmetrical axis of the ancient *Concilium*. This coincidence probably did not come about by chance. It was probably designed to take advantage of its central urban and scenographic position and, possibly, to reoccupy the area of the Visigothic see, that could well have been the temple of Augustus in the heart of the square. The northwestern corner of the *temenos*, with its impressive walls, was used as the interior boundary of the Cathedral cloister, in an atypical position between the chancel and the transept, in the north of the complex. This location is due as much to the reuse of the walls and the area they make up, as to the planning of

the ecclesiastical acropolis. The location of the cloister between the southern transept and the nave would occupy such a large area that it would not leave room for other facilities of the archiepiscopal see, such as the offices of the general vicariate that would have been in this area, the archiepiscopal hospital, the cemetery, etc. This would have curtailed the vitality of the area and even masked the image of a grand Cathedral presiding over the city. On the other hand, this location allows the space between the cloister and the city walls to be occupied by other canonical facilities, such as the infirmary, from which we now have the chapel of Sant Pau, now in the Pontifical Seminar, after the area was redeveloped in the 19th century.

The constitutional document of the canonate is very explicit as far as its facilities are concerned: "And I give to the canons this fortress or facility that I am building here so that they remain and live here in perpetuity, in such a way that they have all they need to confront the Saracen navies/troops, and that here they may have their offices above and below. Below, the cellar and granary, and above the refectory, the dormitory, the kitchen and the chapter, as it has been set out/rearranged. I give this to the said canons, and this lower chapel that adjoins this fortress."

How can we relate these buildings to what we now know as the canonate? It's not easy to match them, or perhaps it is. The description of a fortress, for defence, fits in perfectly with the presence of the Roman structures, but it may also indicate that a castle was being built. However, the definition of the facilities – a cellar, a granary, a dormitory, a refectory, a kitchen, and a chapter house – clearly represent the configuration of a monastery set around a cloister. However, it does not tell us of a sacristy, but it does mention a chapel. Moreover, it tells us of a distribution on two levels, apparently one above the other.

The interpretation of the text has given rise to hypotheses such as the one that suggests the fortress is the chapter house building, which would have been divided internally by a ceiling, but the size and characteristics, together with other factors, make this explanation somewhat implausible. Would a project of the size of the Cathedral have made do with such small facilities as is thought? Is this not a canonate of somewhat ambitious dimensions, which was being built as part of a well-planned project?

Perhaps the division between the lower and upper spaces is not to separate two floors, but rather to mark a position. If we assume that the facilities are those that we have today, then we can see how the refectory, the kitchen, the chapter house and the dormitory are not on an upper floor, but on the highest part of the ecclesiastical acropolis, farther to the north, and perhaps we should look for the storage facilities in an area more to the south or east, on a higher or lower level.

On the northwestern side of the cloister, the excavations carried out under the Master Plan uncovered a series of large diaphragm arches that made up a large rectangular nave framed by the *temenos* wall, as well as the Late Roman cistern and the Roman service passageway cut out of the rock. The northern façade would have had a series of apertures formed by pointed arches that remind us of

the structure of the monks' dormitory in the monastery of Santes Creus. The room would have had gable roof with tiles supported by rafters and the floor would have been very simple, of earth and lime. As an entrance we have documented part of the parapet of a window and the re-use of one of the *fenestrae* of the *temenos* wall, suitably raised and lowered to facilitate access to the area of the cloister via a stone stairway, of which we found the imprints of the steps.

The pointed arches were built of Roman ashlar that had been carefully cut down to size, on which we can see the stonemason's marks. The foundations went down to the rock. The northeastern enclosing wall is an impressive abobe structure that is still standing and frames the stairs that lead from the cloister to the Pla de Palau.

This large hall, the use of which we still have to define, would have been one of the first sectors built during the 12th century. In fact, when the roof was placed over the cloister gallery, the *fenestra* converted into a door was reinforced with a section of mediaeval ashlar, as the *temenos* wall was not thick enough to support the pressure of the gallery cross ribs.

The construction of the refectory completes the northwestern side of the cloister. A large number of Roman ashlar were reused here, as can be seen by some fragments of monumental inscriptions. The northern flank used the *temenos* wall as an enclosure and took advantage of a *fenestra* as an entrance. Divided in 1580, when the Santíssim chapel was built, it still has the stone benches where the community must have sat to take their meals.

Communicating with the refectory, there was a kitchen area, now below the storage area of the Cathedral shop, which took advantage of the Late Roman cistern. The excavation showed how the cistern's *signinum* pavement was affected by a series of large perforations. These are laid out in a regular pattern and could easily have been the bases of the kitchen workbenches, which communicated with the refectory via a serving hatch and an *arcosolio* open in the *temenos* wall.

The excavations at the foot of the stairs that go from the cloister to the Pla de Palau and the Diocesan Museum (begun in 2003) allowed us to document a powerful wall with a masonry base bonded with mortar and a second body blocking it that leads us to believe that another building of some considerable size occupied the northwestern corner of the *temenos* wall service passageway.

Moreover, in the excavations on the area of the Diocesan Museum we found new elements that can be related to the canonate complex. First of all we were able to see how the two imposing pointed arches in the hall of the Diocesan Museum had been moved when the building was refurbished at the beginning of the 20th century. Elies Rogent and Augustus Font's plans of the initial state of the project prove that these arches were not there, but farther to the east in the area of the chapels of Sant Ramon and Santa Magdalena.

The work on the new Diocesan Museum has allowed us to reveal a magnificent pointed arch of ashlar with joints

marked with red ochre pigment that would have functioned with another, now lost, series of arches, of which we can see their fittings open in the *temenos* wall. This find tells us that in the northeastern wing of the cloister there would have been another large area made up of diaphragm arches of a similar size to that on northwestern side and even of the refectory. What was their purpose? By removing the modern plaster from the *temenos* wall and observing the cloister wall in this wing we were able to locate two small mediaeval windows walled up some time ago. These apertures are very similar to the battery of small pointed windows found in the monks' dormitory in the monastery of Poblet. It is plausible that the canons' dormitory was in this part of the cloister and that it was later affected by the opening up and construction of the chapels of Sant Ramon and Santa Magdalena. Its position is logical, near the chapter house and the sacristy, which would mark an itinerary consistent with the use of the canonical area, as we can see in many monastic buildings. We repeat that the structure of the canonate is monastic in nature.

In the Diocesan Museum excavations we also found a cistern cut into the rock and the foundations of a mediaeval building that are supported on the cut in the hill that faces Sant Pau Street. This new building, which has still to be correctly defined, clearly indicates that the canonate also occupied the area between the cloister and the city wall. We have to remember that the chapel of Sant Pau is part of the canons' infirmary. The redevelopment of this area due to the construction of the Pontifical Seminar (begun in 1883) resulted in the disappearance of an area that in the Middle Ages must have been part of the canonate.

The work on the restoration of the sacristy and the chapter house also allowed us to observe the original roofing system of the two buildings, which consists of simple lime mortar coverings that we have also been able to document in tests carried out on the Cathedral roofs and on the Romanesque level of the bell tower. On the other hand, the main apse presents a much richer and complex structure. The progressive raising of the heights of the different roofs over time allows us to document the existence of an initial roof of stone slabs. This was soon hidden by a new roof built at the same time as the barbicans that give the apse the fortification-like appearance we can see today.

In the bell tower our intervention was based on following up the work of extracting the old paving, with which we were able to document a variety of holes in the floor, through which the old bell ropes must have passed through.

From the 14th century on, major alterations were made to the cloister that affected part of the 12th century canonate and can be seen in the construction of chapels such as those of La Mare de Déu de la Guia and La de la Mare de Déu del Cloister (which initially took advantage of the chapel of Sant Climent and was then enlarged between 1676 and 1680, although we believe it was previously dedicated to St Mary and St Simon and was built between 1295 and 1309).

In 1317 work began on the construction of the chapel of La Mare de Déu de les Neus, in the place where one of the Roman *fenestrae* had been. This is a Gothic chapel with a polygonal ground plan, built with ashlar of El Loreto stone with an exterior decoration of red ochre ribbons, and a roof covered with lime mortar plaster. It was built in the area of the large hall of diaphragm arches on the northern side of the cloister, which leads us to believe that it underwent major alterations during the late Middle Ages or was no longer in use, and may even have lost its roof (the chapel terrace comes from here). Next to it the so-called chapel of Els Montoliu was built, that, thanks to a bequest by Albanells (1553), was extended to make what we now know as the chapel of Sant Salvador. It has a rectangular ground plan and a semicircular vault roof with coffers. The excavation of the exterior revealed an interesting layout of ashlar with many stonemason's marks and a moulded cornice. As in the case of the chapel of Les Neus, the roof is a flat terrace of lime mortar plaster.

The construction of the chapel affected one of the diaphragm arches still standing from the 12th century, which meant that it had to be rebuilt, albeit with an inferior technical quality. This fact leads us to believe that part of the old mediaeval building was still in use, despite the fact that the space between the chapel of Sant Salvador and the refectory was in the open air, as we shall see later.

The chapel of La Confraria de Santa Tecla was also built at the head of the refectory, occupying part of the old 12th century nave. It is built of masonry walls and takes advantage of the Late Roman cistern wall. It has buttresses on its corners and an attractive ceiling formed by a star-shaped vault. The windows are semicircular and the door is a beautiful ogee arch opened in the *temenos* wall, in the place where there is a *fenestra*. Next to it is another area that can be defined as its sacristy.

The construction of these chapels indicates to us that major alterations were carried out on the northern wing of the cloister, taking advantage of the communal areas of the canonate even before the secularisation of the community (1530). The reuse of part of the large 12th century hall can be seen in the raising of the levels for the movement of people, with landfill and the construction of a containment wall behind the chapels of Sant Salvador and Les Neus, with a drainage paving.

In the eastern wing of the cloister we have a similar process, with the construction of the Renaissance-style chapel of Santa Maria Magdalena, paid for with a donation from the merchant, Arnave Batlle, and the chapel of La Pietat, also known as the chapel of Sant Ramon (1520). Both of these occupy the area of the dormitory nave, and their construction meant the destruction of part of the cloister wall (and the *temenos*) as well as some of the small dormitory windows. We have to remember that during this time there was a lot of building going on, with chapels being built not only in the cloister, but also in other parts of the Cathedral, such as the addition of a Gothic apsidal bowl in the chapter house, known as the chapel of Corpus Christi (1330), and others in the Cathedral nave. During the 13th century a chapel was built on the site of the later chapel of

the Presentació; Archbishop Sescomes (1334-1346) was responsible for the building of the chapel of Santa Úrsula or the Onze Mil Verges (Eleven Thousand Virgins); in the time of Pere Clasquerí (1358-1380) the chapel of Els Sastres (the Tailors) was built in the apse of the side nave of the gospel; in 1362, that of Santa Bàrbara; in 1494, that of the Sant Sepulcre; in 1500, that of Sant Crist de la Salut and those of Sant Tomàs and El Roser; between 1525 and 1530, those of Santa Magdalena and L'Anunciació. In 1580 the Chapter ceded the southern part of the refectory to Archbishop Agustín so that he could convert it into the chapel of El Santíssim; between that year and 1585 the chapel of Sant Francesc was built, and between 1592 and 1610 the twin chapels of Sant Fructuós and Sant Joan. The chapel of Sant Cosme and Sant Damià, and that of the Immaculada Concepció were built between 1673 and 1684. That of Santa Tecla was built between 1760 and 1775.

The secularisation of the community of canons in 1530 brought an end to the communal life and an acceleration of the transformation of the old canonical premises. They were put to new uses, abandoned, recycled, etc., and they were also repartitioned, for example to provide living quarters for the cathedral dignities. In this respect, the plans of the initial state of the restoration project are proof of the complexity of the process.

The two architects also took charge of refurbishing the old dwellings, with the aim of giving them renewed dignity and at the same time reorganising the surroundings of the cathedral complex. Thus, at the end of the 19th century, a long constructional process was initiated that would be clearly seen in the new façades of the houses on Sant Pau, Pla de Palau and Baixada del Claustre Streets, and that would not be completed until the mid-20th century.

These works involved major alterations that also affected the archaeological remains of the area. We have already said, for example, that the Diocesan Museum begun by the prelate López Peláez brought about the dismantling and transfer of some of the mediaeval arches of the dormitory. Projects such as the building of the stairs from the cloister to the Pla de Palau or the living quarters that face onto the Baixada del Claustre also meant the movement of earth (and the destruction of archaeological stratigraphies) and the dismantling of structures, such as part of the *temenos* wall, the Late Roman cistern, used up until then as a small laundry, or the exedra we assume to have been next to it. But it also meant that part of the structures were hidden by earth brought in that covered, for example, a good part of the aforementioned cistern.

We cannot end this description without mentioning the mediaeval and modern archaeological material uncovered in the course of the excavations, in addition to the wealth of Roman marble we have already described.

From the 12th and 13th centuries we have to mention the so-called feudal traditional grey ware, mainly pots with incised decoration, and the first large open receptacles, such as basins or bowls. In the 13th century we documented the percentage increase in glazed pottery, which grew in the following centuries with the documentation of glazed tableware. Then we find white, green and purple ware from

Catalonia, Valencia, and other parts of the Mediterranean. We also found large earthenware jars of honey-glazed, brown or green ware (jars, pots pans, etc.)

From the modern period we have to highlight the presence in the 16th and 17th century levels of the already known golden ware, probably locally made, although there is no shortage of examples from Valencia, and in the following century locally produced and imported blue-decorated and polychrome ware, that link up with the Valencian series and local productions of the 19th century.

FORTHCOMING PROGRAMMED PROJECTS. PREPARING THE FUTURE

Joan Figuerola Mestre and Joan C. Gavalda Bordes

Architect-authors of the Master Plan and directors of the Tarragona Cathedral restoration work

Continuing with the work programmed under the Master Plan, we are beginning different projects within the Cathedral complex, with the financing guaranteed by the institutions and government bodies responsible for the conservation of our country's heritage and involved in the Cathedrals Plan. These projects are either in the process of grant approval, the drawing up of the executive projects, or at the beginning of the work already contracted by the relevant bodies.

In addition these specific actions, we also have to take into account other areas of the Cathedral that are still in need of urgent restoration work to prevent major changes to the stonework, fittings and decorative elements. Given the size of the Cathedral complex, the impossibility of carrying out projects simultaneously, and the lack of economic resources, we must not forget that there are still many programmed mid- and long-term projects that are of vital importance for the conservation of the Cathedral, for example, in the cloister complex and the chapels that have not yet been restored.

The Master Plan indicates the basic criteria under which the work on the Cathedral has to be carried out, two of which we should like to highlight. The first is the need to undertake all the restoration work without rushing and spread over time. This will avoid the risk of a lack of rigour in the taking of technical decisions that could come about when carrying out work with excessive haste and without enough thought. The second is to avoid having two projects underway at the same time in order to prevent them interfering with one another or to risk a lack of control in the monitoring process. This shows that we must continue the work that has continued without stopping for the past ten years – to prepare the future.

THE "CONTAINER" AS A MUSEUM PIECE. THE CASES DELS CANONGES. THE 2006-2010 AGREEMENT

The renewed agreement between the local institutions was signed by the Archbishopric, the City Council, and the Tarragona Provincial Government with the aim of con-

tinuing the work begun under the previous agreement to repair the structure of the ironwork in the area housing the Diocesan Museum, in the north of the cloister, the containment wall drainage, the excavation of earth causing damp in the buildings, and the study of the architectural elements that need to be preserved and have their value recognised.

The project involves the dismantling of interior elements and totally obsolete installations, the general renovation of the structure to adapt it to the new functional requirements, the restoration of the architectural remains of historical value, and the conservation of the compositional unity of the buildings designed by Elies Rogent as a defining element of the southern perimeter of the Cathedral, which gives identity to the area housing the Diocesan Museum.

We also propose to undertake the functional reform of the first stage of the Diocesan Museum, located here since it was founded by Archbishop Antolín López Peláez, at the beginning of the 20th century.

The aim of this work is to convert the old canons' quarters in this sector into future premises for the museum, in accordance with the preliminary plan drawn up in 1966.

THE RENAISSANCE IN A MEDIAEVAL SPACE. THE CHAPEL OF THE SANTÍSSIM. CITIZENS' CONTRIBUTIONS

As a result of the Cathedral Chapter's constant desire to seek private participation in the promotion and financing of specific restoration projects in the Cathedral, in recent years various specific actions have been undertaken with financial contributions from private citizens and institutions. This method has been used to restore various altarpieces, the Cathedral bells, and to refurbish some of the rooms in the Museum and some of the Cathedral sacristies. One of the most important recent projects was the restoration of the large classical altarpiece in the chapel of the Santíssim, which has recently been completed.

The unflinching will of Archbishop Dr. Jaume Pujol to achieve the architectural restoration of this chapel as an emblematic place for religious services in the Cathedral made it possible for work to start in 2006 on a comprehensive restoration project financed with private contributions from all over the diocese. This is of great symbolic value as it means that the ordinary citizen has been able to participate in the restoration of the Cathedral, alongside the major projects financed by the various governmental bodies responsible for the conservation of our architectural heritage.

This has allowed us to evaluate and learn more about the construction skills and artistic sensitivity of Jaume Amigó, with the introduction of the Renaissance into a medieval ambience, transforming the old canons' refectory into the chapel of the sacrament of the Eucharist of the Cathedral, an important part of the Cathedral's spiritual and artistic heritage.

AN IMPORTANT TERRITORIAL IMAGE. THE ROOFS AND FAÇADES OF THE CATHEDRAL. THE THIRD PHASE OF THE MINISTRY OF CULTURE. THE CATHEDRALS PLAN

In March 2001 the Cathedral Chapter applied to Ministry of Development for the funds to begin the third phase of the Cathedral restoration work provided for in the Ministry of Culture's Cathedrals Plan. The executive project was drawn up in 2002 and has followed the corresponding procedures, with the approval of the competent bodies and the contracting of the work provided for in that document at the end of 2006. This important stage of the work is expected to be carried out during 2007 and 2008. It includes the restoration of the roofs of the Cathedral's central and side naves and the restoration of the upper façades, with all the stained-glass windows that give light and colour to the interior.

This work will solve the generalised problem of leaks in the roof, rationalise the general drainage system, provide thermal insulation for the interior, and prevent damp caused by condensation, which will in turn ensure the most stable possible climate inside the Cathedral that will best help conserve its ornamental elements. The analysis of the filling in the roof, the facings, and the sequence of stained-glass windows will also provide us with greater information on the different building phases carried out over the centuries between the 12th century apse chancel and the main door, the large volume of the Cathedral roof and façade, the image of reference for the city in the surrounding *Camp* of Tarragona.

SYMBOL AND FUNCTIONALITY. THE CATHEDRAL NAVES.

Coinciding with the inauguration of the works on the bell tower, on 21 February 2003, Archbishop Dr. Lluís Martínez Sistach applied to the Ministry of Development, for permission to begin the fourth phase of the Cathedral's restoration, with the corresponding preliminary studies and cost evaluation. This project envisages the cleaning and repairing of the parts of the interior vault and wall facings in the nave damaged by damp and the passage of time, the study and conservation of the remains of wall decoration on these facings, and the modernisation of the installations necessary for the efficient operation of the Cathedral. The support archaeological work will allow us to obtain more historical information about the ancient structures and to better understand their composition and function.

The functional adaptation of the Cathedral to the current requirements is an extremely important part of the Master Plan in order to meet the modern needs of a building used by the public. This risky intervention will mean introducing new technical and functional elements necessary for the efficient operation of the Cathedral into the stonework, without affecting or damaging its heritage values.

ART AND MUSIC, OPEN TO THE CATHEDRAL. THE ORGAN. PRIVATE FOUNDATION

We should highlight Tarragona Cathedral's long musical tradition, which includes an important collection of written music in its archives, two organs, and a long list of highly skilled chapelmasters and organists. This tradition is maintained through a permanent and important programme of performances of early and contemporary music organised by the current chapelmaster, Miquel Barbarà Anglès, two organists and the Choir and Orchestra of the Friends of the Cathedral Association, which has more than 100 members.

The Cathedral's superb 16th Renaissance organ needs careful restoration of its mechanism in order for it to give the service required by the permanent musical activity. Although the organ housing is in good condition, the internal mechanism needs a complete restoration for it to be able to work properly. A project for its restoration has been drawn up in recent years and a committee formed in 2006 has already begun to publicise the project and to look for ways of raising money to undertake the artistic restoration of the housing and to return the musical mechanism to its original quality.

Art and music, open the Cathedral to enrich its future religious services and concerts.

THE NEW DIOCESAN MUSEUM

The important documental collection of the Diocesan Museum is a testimony to the long history of the archdiocese of Tarragona and the patrimonial and archaeological value of the "content" of this museum, the old canons' houses in the northern sector of the cloister. This justifies the constant concern of the Archbishop and the Cathedral Chapter to adapt it to the requirements of the 21st century. Together with the organisation of the "Pallium" exhibition in 1992 and the partial renovation of various rooms in the museum in recent years, in 1996 a preliminary comprehensive architectural plan was drawn for the future expansion of the museum in the old Cases dels Canonges, with the façade on Sant Pau Street.

The basic proposals of this study are aimed at obtaining a clear functional relationship between the different zones and accesses from the Cathedral and the exterior, in which the renovated architectural remains would be restored and valued in a comprehensive refurbishment. The functionality and technical requirements of the future museum have to be compatible with the conservation of the heritage values of the existing building known as the Cases dels Canonges (Canons' Houses).

The historical value and diversity of construction phases offered by these remains give added value to the museum and mean that the "museographic content" of the pieces on display, a reflection of the history of the diocese of Tarragona, is elevated by the "historical content" of the building that houses it, the history of the construction of the Cathedral. The aimed-for visual and plastic relationship between the objects displayed in the future museum and the monumental chancel of the Cathedral, distributed around