Continuity and Change: The Curation, Modification and Reuse of the 15th-century Choir Stalls in St Paul's Cathedral, Mdina, Malta (1625 – 1725)

James Anthony Saliba

Dissertation submitted to the Faculty for the Built Environment, University of Malta in part fulfilment of the requirements for the attainment of the degree of Master of Arts in Cultural Heritage Management.

January, 2025

L-Università ta' Malta

FACULTY/INSTITUTE/CENTRE/SCHOOL for the Built Environment

DECLARATIONS BY POSTGRADUATE STUDENTS

(a) Authenticity of Dissertation

I hereby declare that I am the legitimate author of this Dissertation and that it is my original work.

No portion of this work has been submitted in support of an application for another degree or qualification of this or any other university or institution of higher education.

I hold the University of Malta harmless against any third party claims with regard to copyright violation, breach of confidentiality, defamation and any other third party right infringement.

(b) Research Code of Practice and Ethics Review Procedures

I declare that I have abided by the University's Research Ethics Review Procedures. Research Ethics & Data Protection form code BEN–2023–00113.

As a Master's student, as per Regulation 77 of the General Regulations for University Postgraduate Awards 2021, I accept that should my dissertation be awarded a Grade A, it will be made publicly available on the University of Malta Institutional Repository.

Abstract

This dissertation investigates the curation, modification, and reuse of the 15th-century choir stalls at St Paul's Cathedral, Mdina, between 1625 and 1725. The choir was originally completed in 1490 and dismantled in 1876. Less than 10% of the original material of the fragmented stalls survives today, posing significant challenges to scholarly interpretation. Employing an interdisciplinary framework that integrates archival research, material analysis, and visual observation, this study reconstructs the evolution and treatment of the choir during the century under study which was a critical period in the life-history of this artefact.

The research establishes the stalls' completion date. A hypothesis is presented for their initial configuration, and key modifications are identified, including a previously undocumented relocation in 1626 and the addition of kneelers in 1682. Decorative interventions, such as the replacement of inlaid frames in the late 17th century and the introduction of gilding in the early 18th century, are also analysed.

It is argued that the findings reflect evolving liturgical, aesthetic, and functional priorities. These transformations align with broader Counter-Reformation objectives. They also reveal sustained and deliberate efforts to integrate artefacts from the old Cathedral into the newly reconstructed structure, illustrating a nuanced balance between continuity and innovation.

By exploring how successive curation decisions were shaped by the cultural, liturgical, and historical significance of the stalls, this study enriches the discourse on heritage preservation, presenting it as a dynamic negotiation of tangible and intangible values.

Despite challenges posed by the stalls' fragmented state and limited primary sources, this research underscores the efficacy of interdisciplinary approaches in reconstructing fragmented heritage. It recognises the choir stalls as enduring witnesses to Malta's ecclesiastical and artistic evolution, offering a robust framework for future inquiry into their cultural, political, and religious contexts.

Acknowledgements

I would like to express my heartfelt gratitude to everyone who has supported and guided me throughout the process of completing this dissertation.

Firstly, I extend my sincere thanks to my supervisors, Prof. Reuben Grima and Dr Roberta De Angelis, for their expertise, generosity, and unfailing support throughout this project. Their unwavering encouragement and insightful guidance have been a constant source of motivation, strengthening the research at every stage.

I am also profoundly grateful to Mgr. Dr Edgar Vella and Mgr. Prof. Emmanuel Agius for their generous support, which significantly contributed to the development of this work.

A special thanks to the staff at the Cathedral Museum for their assistance and cooperation, as well as to Mr Mario Gauci and the team at the Mdina Cathedral Archives, who provided the essential resources for my archival research. My appreciation also extends to the staff at the University laboratories for their vital support in conducting the material analyses.

I am particularly indebted to conservation architect Mr Bruno Ambrosio, whose meticulous approach ensured the accuracy and reliability of the visual records that formed a crucial part of the study's analytical framework.

I also wish to thank Ms Mireia Peris Vicent, researcher in the field of historiographical sciences and techniques at the Complutense University of Madrid (UCM), for her invaluable expertise and assistance in transcribing the 15th-century manuscript of the contract of works for the choir.

All photographs included in this dissertation were taken by me, unless otherwise stated, and all translations are my own.

Lastly, I take full responsibility for any shortcomings in this dissertation.

Table of Contents

List of Tables

List of Timelines

List of Figures

Glossary

Canna	Unit of length. One canna is composed of eight palmi. One Maltese canna during the Knights' period (1530-1798) is equivalent to 2.09004m (Gyllenbok, 2018).
Cathedra	From the Latin *cathedra* ("chair" or "seat"), the bishop's ceremonial chair or throne symbolizing his teaching, governing, and sanctifying authority within the diocese. Its presence designates a church as a cathedral. Architecturally, the cathedra is often placed within the apse or choir and may be integrated among the choir stalls or set apart as a distinct liturgical focus. The cathedra thus functions as both a symbolic and spatial manifestation of episcopal authority (Chia,2024; Hackett,2025). In the context of this dissertation, the term *cathedra* specifically refers to the Bishop's stall within the choir stalls.
Coronetta	A crowning decorative feature or finial forming the uppermost element of a canopy or choir stall structure. Originating from the Italian *corona* (crown), the *coronetta* serves as both an ornamental and symbolic termination of the canopy, visually uniting the choir-stall ensemble. In Renaissance contracts, it is often cited alongside the *guardapolvere* as part of the stall's upper assembly, emphasizing craftsmanship and hierarchical ornamentation (Allen, 2022; Glover, 2016).
Guarda polvere	Literally "dust guard." A projecting canopy or overhanging upper cornice above choir stalls, designed to protect the woodwork and seated clergy from dust and debris. The *guardapolvere* also serves an aesthetic role, forming the visual and structural boundary of the choir canopy, often elaborated with decorative carving and crowned by the *coronetta* (Allen, 2022).
Inlay	A decorative technique involving the forming of decorative patterns composed by encasing a material into a matrix of another material. Wood inlay is generally subdivided into intarsia, which adopts thick sections of wood (generally 3-6mm), and marquetry which adopts the use of thinner wood veneer. Both techniques subdivide further into other more specialised techniques (Joyce, 1970).
Misericord	A *misericord* (also called *miserere* or *mercy-seat*) is a small ledge or shelf on the underside of a hinged medieval choir-stall seat that becomes visible when the seat is folded up, providing a discreet support on which clergy could lean during prolonged standing portions of services (Curl & Wilson, 2015).

Mitre joint	A type of joining method used in woodworking, where two separate pieces of wood are joined together to form a corner, typically at a 45-degree angle. Mitre joints are commonly used in frame construction to avoid the visibility of end-grain, creating an uninterrupted edge when pieces are joined (Joyce, 1970).
Mortice and tenon joint	A joining system for two separate pieces of timber consisting of a cavity carved into one of the members (mortice) so it can receive a projection of the other wood member (tenon). This type of joint is generally further secured by the addition of dowels securing the tenon from sliding out of the mortice (Joyce, 1970).
Palmo	1 palmo is equivalent to 261.255mm (Gyllenbok, 2018). 8 palmi constitute 1 canna.
Parquetry	A decorative inlay technique that employs the precise arrangement of contrasting wood veneers to create geometric patterns, often featuring motifs such as diamonds, lozenges, or squares. Used extensively in both furniture and flooring, parquetry represents a synthesis of geometry, craftsmanship, and material contrast within the decorative arts tradition (von Falke, 2023; Campbell, 2006; Edwards, 2012).
Presbytery	The *presbytery* (Latin *presbyterium*) is the area within a church that is reserved for the clergy and immediately surrounds the high altar. In the Roman Catholic tradition, it forms the liturgical heart of the building and is distinct from the choir and nave, often separated by rails or a screen. Historically, this space accommodated the priests and bishop during the celebration of the Mass, serving as both the locus of sacramental action and a visible expression of ecclesiastical hierarchy (Curl & Wilson, 2015).
Mechanized Frame Saw	— A pre-industrial woodworking machine operating through a controlled reciprocating motion powered by external energy sources, typically a waterwheel. The saw's up-and-down movement was achieved by converting rotary motion into linear reciprocation through cams or cranks. This process produced *regular and parallel saw marks* distinct from the irregular kerfs of hand-sawn timber, signaling the mechanization of timber production in early modern Europe (Long & Morall, 2019; Bealer, 2013; Hanlon, 2017).
Return seatings (return stalls)	Architectural components within a choir stall arrangement, positioned at right or obtuse angles to the main stall rows. Functioning as transitional elements between side walls and longitudinal rows, return stalls serve structural, aesthetic, and hierarchical purposes, visually enclosing the choir space and reinforcing the ordered arrangement of liturgical participants (Glover, 2016; Villaseñor Sebastián, Teijeira Pablos, Muller, & Billiet, 2015).

Structural anima	The substructural framework or internal support system that confers stability and coherence to an architectural or sculptural composition. Beyond its physical aspect, the term evokes the *animating principle* of structure—the underlying order that sustains form and meaning. It encompasses both tangible elements (e.g., frameworks, armatures) and conceptual structures reflecting the metaphysical "soul" of architecture (Hendrix, 2011; Long, 2005)
Toppo marquetry	A historical variant of marquetry in which narrow strips of wood are cut, assembled, and glued together to form a *block* containing a repeating geometric or patterned design. Once the block is assembled, thin slices are cut from it to produce multiple matching patterned veneers for decorative surfaces. This block-marquetry technique allowed woodworkers to create complex banding and patterned inlays more efficiently and was used particularly in Italian Renaissance and later cabinetry and furniture decoration. (Ramond et al., 1989)
Tribune	In ecclesiastical architecture, a *tribune* (Latin *tribuna*) refers to a raised, semicircular, or apsidal area located at the eastern end of a church, often roofed by a dome or semi-dome. In early Christian and Romanesque basilicas, the tribune formed part of the sanctuary and could house the bishop's throne (*cathedra*) or, in later cathedral layouts such as St Paul's, the principal altar. The term thus denotes both a liturgical and architectural space of high importance, emphasizing the hierarchical and spatial focus of the church interior *(Tribune (architecture), 2021)*.

Abbreviations and Acronymns

ACM.	Archivum Cathedralis Melitensis
DAR.	Dominican Archives Rabat
MCM.	Mdina Cathedral Museum
Misc.	Miscellanea

1. INTRODUCTION

This dissertation explores the curation, modification, and redeployment of the 15th-century choir stalls at St Paul's Cathedral, Mdina, Malta, with a particular emphasis on the period between 1625 and 1725. In addition, it addresses aspects of the stalls' original form, about which different interpretations have been proposed. Prior to the present work, this subject had not been systematically examined. The present work empirically examines the evidence for the original form of the choir, to provide a baseline reference point for analyzing the subsequent curation practices and transformations of the artefact, revealing possible influencing factors and opening new avenues for future research.

Terminology notes (curation).

In this dissertation, *curation* is used as an analytical term to describe the intentional management of the choir stalls as a functioning liturgical ensemble—encompassing decisions of siting, retention, maintenance, repair, selective reuse, and spatial reconfiguration within an evolving architectural setting. The term is not intended to imply a modern legal or museological regime of heritage protection. Nevertheless, within the Roman sphere, early-eighteenth-century initiatives to regulate the treatment and export of antiquities — associated with Albani and later formalised through measures such as the Edict Albani (1726; 1733) (Emiliani, 1978; Mannoni, 2021) during the pontificate of Clement XII (1730 – 1740) — form part of the longer genealogy through which "cultural patrimony" and cultural patronage became more explicitly articulated, particularly from the nineteenth century onward (Mannoni, 2022).

Context

The surviving fragments of the 15th-century choir stalls are a rare element from the Medieval Cathedral, offering valuable insights into Malta's liturgical practices and artistic culture prior to the Baroque transformations of St Paul's Cathedral. This study investigates the life-history of the choir stalls, focusing on their curation, alteration, and reuse during a period marked by significant changes, including the enlargement of the presbytery area (1679 – 1682), the 1693 earthquake, and the subsequent rebuilding of the Cathedral (1693 – 1703) (Buhagiar & Fiorini, 1996; Thake, 1994; Thake, 2018).

Previous studies have not thoroughly documented the original form of the choir stalls, resulting in a limited understanding of their historical significance. Furthermore, curation practices over time introduced notable changes that may have altered both the aesthetic and functional aspects of the stalls, influencing subsequent decisions regarding their preservation and presentation. Much of the existing literature relies on Pullicino's (1877) account, which, without sufficient research, has led to a fragmented and sometimes contradictory narrative.

The archival work conducted during the present research has uncovered evidence of a previously forgotten relocation of the choir stalls, adding a new dimension to their historical narrative.

1.1. Research Question

The aim of this research is to trace the history of the curation, preservation, and reuse of the 15th-century choir stalls, with a focus on their creation, and the major modifications and relocations that took place within St Paul's Cathedral between 1625 and 1725 – a period of far-reaching changes in the life-history of the choir.

Through this investigation, the study seeks to deepen our understanding of the stalls' evolution by exploring how key historical events influenced their form, function and meaning.

Specifically, this research addresses the following questions:

> How closely can we reconstruct the original form of the choir stalls?
>
> In what ways were the choir stalls curated, modified, and redeployed between 1625 and 1725?
>
> To what extent were the original 15th-century elements preserved or altered during the Baroque period, particularly in the context of the reconstruction of St Paul's Cathedral?
>
> How do these changes reflect broader values and attitudes toward heritage, preservation, and reuse in 17th- and early 18th-century Malta?

1.2. Rationale

As integral elements of ecclesiastical furniture, choir stalls are deeply connected to the evolving ritual, performative meanings, and spatial dynamics of the sacred environments they inhabit. The alterations and adaptations these artefacts undergo often leave discernible traces that, when analysed, may provide insights into their historical contexts and, possibly, the intentions of those who shaped them.

Examining the surviving fragments and analysing their original manufacturing techniques provide a clearer understanding of the choir stalls' initial form, establishing a baseline for further exploration. By identifying and documenting the modifications made over time, this study aims to shed more light on the motivations and external influences behind these changes, ultimately contributing to a more nuanced understanding of the artefact's history and cultural significance.

1.3. Positionality of Researcher

The present researcher has a background in wood and furniture conservation, which has fostered a professional understanding of how successive interventions affect objects over time. Between 2014 and 2018, the researcher had the opportunity to study these fragments closely while serving as head conservator on a project to reconstruct a segment of the choir stalls. The experience prompted reflections on how the functional and aesthetic aspects of the choir stalls had evolved, raising questions about the circumstances behind the alterations.

During this period, it became apparent that the choir stalls' history had not been fully explored, and that the decisions made in the later stages of their life-history may have been influenced by earlier interventions. This realisation raised questions about the nature of and motivation for these changes: When did these changes happen, and what led to them? What were the cultural, religious, or practical considerations behind these alterations, and what was their impact on the artefact's evolution?

1.4. Dissertation Structure

This dissertation is organized into eight chapters, each building upon the previous one to examine the curation, history and transformation of the 15th-century choir stalls at St Paul's Cathedral, between 1625 and 1725.

Chapter 2 – Literature Review:

This chapter reviews existing scholarship on the choir stalls, summarizing current understandings of the artefact's historical and cultural significance. It identifies gaps in the literature, laying the groundwork for this investigation and highlighting the potential contributions of this study to the understanding of the choir stalls.

Chapter 3. Methodology:

This chapter details the research methodology, including the archival research process, material analysis techniques, and other methods used to gather and interpret data on the choir stalls. Each approach is explained in the context of its relevance to the understanding of both the physical characteristics and the historical context of the artefact.

Chapters 4, 5, & 6 – Results

The results of archival research (chapter 4), material observations (5) and stratigraphic analysis (6) are presented here, offering key insights into the original design of the choir stalls and documenting their subsequent alterations during the period under study. These chapters establish a foundational understanding of the stalls' physical evolution, providing evidence that is essential to understand their evolution through successive transformations.

Chapter 7 – Discussion and Conclusion:

This chapter synthesizes the findings, addressing the research questions and reflecting on the wider implications of the results. Building on the acquired results, it locates the functional and decorative alterations of the stalls within the broader cultural and ecclesiastical contexts of the period under study (1625 – 1725), illuminating the motives and influences behind these changes. It furthermore proposes hypothetical reconstructions of the choir stalls' arrangement and examines their spatial relationship within the Cathedral. The concluding section summarises the main findings and outlines areas for future research, underscoring the importance of this artefact in advancing our understanding of Malta's cultural and ecclesiastical heritage.

Each chapter thus contributes to a comprehensive exploration of the artefact, from its origins and physical evolution to its cultural and historical significance, to shed light on the successive decisions that were taken about its stewardship during the century under study.

2. LITERATURE REVIEW

2.1. Introduction

2.1.1. Re-use, recycling and re-deployment

The reuse and recycling of objects and materials have been extensively explored in the archaeological, anthropological and sociological fields. Since prehistoric times, objects have been repaired, reused, repurposed and redeployed, with their fate shaped by the values assigned to them at specific moments in time. The attribution of historical and socio-cultural significance to certain objects has often led to their redeployment, allowing them to serve as statements of authority or as symbols of historical legacies and connections to the past.

The repurposing and transformations of objects may take different forms. Items may be repaired, repurposed for new functions, or passed to new owners (Sands,2022). Arjun Appadurai (1986) offers a different perspective on the circulation of commodities. Instead of focusing solely on the act of exchange, he emphasizes the objects themselves, suggesting that the relationship between exchange and value is socially and culturally mediated (Appadurai,1986). Resource management and economic exchange are not the only driving forces behind these changes, as objects do not necessarily need to be altered or exchanged to gain new meanings. Despite their static appearance, objects continually evolve, accumulating new significance over time. (Gosden & Marshall,1999).

Within contemporary material culture studies, analysis has expanded beyond concerns with dating, style, or function to include the dynamic relations formed between humans and objects. Such interactions may generate multiple narratives, best understood through an object-biographical approach (Appadurai, 1986). Unlike linear, function-based models of object use, which tend to frame objects as passively altered through time, this approach understands objects as dynamic entities actively embedded within social practice Objects are therefore not viewed merely as elements within a setting where social activity occurs, but as integral components of that activity. This perspective acknowledges the evolving meanings of objects, and accomodates changing relationships between people, objects, and material contexts (Tringham, 1995; Gosden & Marshall, 1999; Sands, 2022).

The practices of reuse and redeployment of building materials and furnishings are also evident in the Baroque period, when despite the distinct manner and worldview of that era, the adaptation of artefacts from the past remained common practice (Perusini, 1989, p.23). One notable example is Francesco Borromini's adaptation of the Domitian period bronze doors, removed in the mid-17th century from the Curia Julia, the Roman senate house, construction of which was commenced by Julius Caeser in 44 BC and completed by Augustus in 29 BC. These doors were modified and enlarged to serve as the main portal at the

Archbasilica of San Giovanni in Laterano, which houses the cathedra of the Bishop of Rome, and therefore ranks among the most significant churches of the Catholic world. The alteration also included the addition of the eight-pointed star, the heraldic symbol of the Chigi family and Pope Alexander VII, who commissioned the works (Vlad Borrelli et al, 2010, p.121).

During the same period, contemporary authors such as Baldinucci criticised certain modifications to artefacts (Perusini, 1989). In his 17th-century work 'Vocabolario Toscano dell'Arte del Disegno' (1681), Baldinucci distinguishes three approaches to object repair: 'accomodare' (p.2), for minor repairs; 'ristaurare' (p.134), for more substantial restoration; and 'rifiorire' (p.135), for repainting or embellishment. Each reflects historical practices of care and intervention that anticipate modern conservation concepts. Under 'rifiorire', Baldinucci particularly condemns unskilled repainting, which compromises both aesthetic and historical integrity. His definitions reveal an early awareness of the risks associated with the improper physical treatment of artefacts and the potential negative impact on objects of artistic and cultural value.

At times, redeployment also led to the preservation of significant architectural elements. Such is the case of two arched Renaissance-style doorways which originally formed part of the transepts of the Żurrieq Parish Church. The transepts and their doorways were constructed between 1575 and 1585. When in the early 17th-century, the Parish Church was being rebuilt, these two doorways were redeployed as main portals for two adjoining chapels at Ħal Millieri, dedicated to St John and St Michael respectively (Mangion, 1978, p.223). The portal of the Chapel of St Michael, which was deconsecrated and closed in 1667, was eventually repurposed a second time as the entrance gateway to the Annunciation Cemetery, where it still stands today (Mangion, 1976, p.136).

The redeployment and relocation of immovable or fitted furnishings, specifically designed and crafted to fit specific spaces, often involved physical modifications, which frequently left discernible traces (Harris, 2007). Nevertheless, the alteration of objects does not always require relocation, and can occur within the same space due to changes in context or usage. Throughout their existence, church interiors have continuously evolved, in response to shifts in aesthetic taste, representational needs, as well as changes in liturgical practices (Gromotka, 2015).

2.1.2. The evolution of St Paul's Cathedral, Mdina, Malta

St Paul's Cathedral in Mdina (Figs.1 and 2), seat of the Bishop of Malta and fulcrum of ecclesiastical activity in Malta during the pre-Knights' period, has a long history of expansions, reconstructions, and embellishments, during which several cases of reuse and redeployment of architectural elements and furnishings are known to have occurred.

Despite textual references to a bishopric in Malta dating back to the 6th century AD, and the presumed existence of a Cathedral building during the Byzantine period (536-870 AD), no

Fig. 1. St Paul's Cathedral, Mdina. (James Saliba, 2024)

archaeological or material evidence of such structures has been uncovered. Scholars believe that the early Cathedral was destroyed in the chaos that followed the Aghlabid invasion of Mdina, in August 870 AD (Buhagiar & Fiorini, 1996, pp.127-128; Mercieca, 2010). After the conquest, marble and architectural elements were reportedly taken to Sousse, as a war trophy with a clear political message (Mercieca, 2010, p.97). Chronicler Ibn al-Jazzâr (895-979 AD) mentions an inscription on a tower at Qasr Habashi in Sousse, stating that the fort included elements taken from the Church of Malta (Buhagiar & Fiorini, 1996, p.128). A more detailed account by Al-Himyari describes how Suwaada Ibn Muhammad, the conqueror of Malta, carried architectural elements from the churches of Malta as war booty, which he used to build his castle in Sousse by the sea, and the path leading to it on an arched bridge (Wettinger,

2014). It is possible that among these there were architectural elements from the Byzantine Cathedral structure (Buhagiar & Fiorini, 1996, p.128).

Following the definitive conquest of Malta by the Norman Kingdom of Sicily in 1127, Christianity was gradually re-established, with a strong influence from the Greek rite (Buhagiar, 2004). It is believed that a Cathedral in Mdina was reconstructed during this period, possibly on the site of a former Muslim Mosque. Two Siculo-Norman marble capitals, dating from between 1127 and 1282, are thought to be linked to the nave arcade of this Cathedral building. One capital is currently located in Howard Gardens, outside Mdina's main gate, while the other is conserved at the National Museum of Archaeology, Valletta (Vella, 2010, p.456). However, definitive evidence of this structure and its furnishings have yet to be discovered. Similarly, evidence from the Swabian and Angevin periods is scarce, with the first recorded mention of the Cathedral dating to February 1299, shortly after the Aragonese conquest of 1282 (Vella, 2013, p.113).

Indirect evidence suggests the possible presence of a bell tower, or a comparable structure, during the 14th century, inferred from a 1370 commission from Venice of a bell named Petronilla (Buhagiar & Fiorini, 1996, p.151). Although early records of the Cathedral are limited, Abela (1647) notes that the building was enlarged in the early 15th century with the addition of lateral transepts (Vella, 2013, p.142). Abela (1647, p.331) dates this expansion to around 1419, based on a closed oculus near the main altar, and the concession of a north transept chapel with burial rights to the de Vagnoli family. However, a surviving copy of the concession document suggests that the transepts existed before 1419, and the exact date of

Fig. 2. Interior of St Paul's Cathedral, Mdina. (James Saliba, 2024)

this enlargement remains unknown (Buhagiar & Fiorini,1996, p.155). A wall constructed in 1462-1463 above the main altar may have blocked the oculus, contradicting Abela's claim that this occurred in 1419 (Buhagiar & Fiorini,1996, p.155).

Further modifications were made to the Cathedral in the early 16th century. The Mandati documents, which record payment authorisations issued between 1473 and 1539, show extensive activity in the Cathedral between 1515 and 1535 (Fiorini, 1992). The alterations included both structural and decorative changes. The ceiling of the nave was raised to allow for a clerestory, with windows added to brighten the interior (Abela, 1647, p.332). By 8 June 1520, work had begun on a wooden ceiling, elaborately carved, gilded and decorated with scenes from the life of St Paul and episodes from Church history, painted by Syracusan artist Alessandro Patavino (Abela,1647, p.332). A hanging crucifix was installed at the front of the nave, supported by a painted and gilded beam, crafted by Mastro Cola La Puzella and Mastro Cola di Fiderico between 1537 and 1538. In 1535, Cola Curmi was sent to Sicily to purchase an unspecified amount of chestnut wood for the *sancto sanctorum* of the Cathedral, indicating the continued influence of the Greek rite (Buhagiar & Fiorini, 1996, p.153) (see *7.3.1 Before 1625: Original Configuration and Placement of the Choir Stalls*). During this period of redecoration, a new west door, carved in chestnut by Cola Curmi and Johanni Calleja (Fig. 3), was also installed in 1535 (Buhagiar & Fiorini, 1996, pp.184-190).

Nevertheless, the early 16th century was not the only time when the Cathedral's interior was reshaped, nor was it the most dramatic. The most significant event in the Cathedral's history was its reconstruction in the Baroque style between 1679 and 1717, before and after the great earthquake of 1693. These two events are closely related, and it has been frequently narrated that the rebuilding was a response to the severe damage caused by the earthquake. However, research indicates that plans for a complete reconstruction were already being considered before the natural disaster occurred (Thake, 1994). In September 1682, Lorenzo Gafà received 300 scudi for his architectural contributions, which included designing a new Cathedral, supervising the choir's construction, and creating a model of the Cathedral. He was also tasked with assisting in the construction of a new Bishop's palace. A decade later, in May 1692, Gafà's plans and wooden model for the Cathedral were unanimously approved by the Cathedral Chapter (Thake, 1994).

Scholarly research has shown that late Medieval Malta, contrary to common misconceptions, stood comparable both socially and culturally to the city communes of the Kingdom of Sicily, including regions such as Calabria and Salento (Buhagiar, 2018). The absence of artefacts mentioned in deeds, aside from personal adornments, suggests that the main patron of the arts in Malta during this period was the Catholic Church (Fiorini, 1991), with most artefacts being shipped from south-eastern Sicily (Fiorini, 1999).

Some of the fitted timber artefacts from Mdina Cathedral's late-Medieval and early-Modern periods still survive, reflecting their enduring value. The west door (Fig.3), installed in the early 16th century, remains in situ but was repurposed and enlarged to fit the entrance of a new

sacristy (Buhagiar & Fiorini, 1996, p.190). Meanwhile, the early 15th-century polyptych of St Paul, which served as altarpiece until it was replaced by Mattia Preti's titular painting in the late 1680s, and the mannerist organ balcony (Fig.4) are now displayed at the Mdina Metropolitan Cathedral Museum. The museum also houses a possible fragment of the decorated timber beams, installed in the early 16th century (Buhagiar & Fiorini, 1996, p.179).

	592-599	Letters by Pope Gregory the Great to Lucillus, Bishop of Malta
	870	Cathedral structure possibly destroyed during Aghlabid
	1127	Definite Norman conquest of Malta and start of dominance of the Latin Christian faith on the island
	1299	Earliest documented reference to a Cathedral in Malta
	1370	Malta's oldest extant bell, 'Petronilla', is cast in Venice at the 'Bottega di Colle dei Fabbri' for the Cathedral of St Paul.
	1419?	Possible addition of lateral transepts to the existing Cathedral structure in the 15th century
Manufacture and installation of 15th-century choir stalls in the Cathedral.	***1480 – 1490?***	
	1515-1540	Structural and decorative alterations: raising of ceiling, allowing for clorestory; decorative carved gilded and painted wood ceiling; hanging crucifix; new west door by Cola Curmi and Johanni Calleja
	1625	
	1679	Construction of Gafà's new choir area commences
	1693	Following the earthquake of 11 January 1693, the Cathedral Chapter formally resolved on 11 April 1693 to dismantle and rebuild the Cathedral.
	1703	Consecration of the new Cathedral by Bishop Cocco Palmieri, on 8 October
	1725	
	1856	An earthquake caused extensive destruction to the Cathedral's dome fresco painted by the Manno brothers.
Dismantlement of the 15th-century choir stalls.	***1876***	
	1888	Two clocks – one indicating the hours and the other functioning as a calendar – were produced by renowned clockmaker Michelangelo Sapiano

Timeline 1. History of St Paul's Cathedral, Mdina

Fig. 3. The west door carved in chestnut by Cola Curmi and Johanni Calleja and installed as the main portal in 1535, later repurposed and currently serving as the door leading to the sacristy.

(a) External side (b) Internal side

(James Saliba, 2024)

Fig. 4. Mannerist organ balcony, installed in 1601, currently exhibited in the Baroque Hall at the Mdina Metropolitan Cathedral Museum.

(Gilbert Vancell, 2017, conservation records James Saliba & Atelier del Restauro, courtesy of Mdina Metropolitan Museum.)

2.2. The 15th-Century Choir Stalls in the Mdina Cathedral

2.2.1. Introduction

Among the collection at the Mdina Metropolitan Cathedral Museum are fragments of late 15th-century choir stalls, regarded by scholars as the second most significant artefact to survive within the Cathedral precincts from the late Medieval period, surpassed only by the early 15th-century St Paul polyptych (Vella, 2013, p.144). Over more than four centuries of continuous use and reuse, these choir stalls bore witness to the profound transformation of St Paul's Cathedral, from its late Medieval configuration to its eventual Baroque reinvention. On 11 November 1870, the Cathedral Chapter voted in favour of a 'general restoration, or renewal' of the choir stalls, a decision that culminated in their dismantling in July 1876 (Pullicino,1877, pp.11-12). This intervention resulted in the loss of a substantial proportion of the original 15th-century fabric. The late 19th-century dismemberment of this culturally and artistically significant ensemble was subsequently lamented by leading scholars Buhagiar and Fiorini, who observed that the event 'cannot but be regretted' (Buhagiar & Fiorini,1996, p.170).

Within a broader European context, choir stalls constituted one of the most complex and symbolically charged categories of ecclesiastical furnishing from late Medieval period onwards (Piron & Selinger, 2017). Installed within cathedral and monastic choirs, they fulfilled both practical and representational functions, structuring the daily performance of the Divine Office while simultaneously articulating hierarchy, discipline, and spatial order within the liturgical setting (Cameron, 2017). From the 15th century in particular, choir stalls across Europe developed into highly elaborate ensembles, frequently conceived as architectural structures and incorporating figurative carving, ornamental programmes, and, in certain regions, sophisticated wood inlay. Comparative scholarship has demonstrated that such furnishings were commonly produced by specialized workshops employing modular construction systems, thereby facilitating repair, reconfiguration, and adaptation over extended periods of use (Piron & Selinger, 2017). In parallel, studies concerned with the architectural and ceremonial integration of choir stalls have emphasized their close relationship to liturgical movement, sound, and ritual performance, underscoring the extent to which their meaning and function extended beyond their material fabric alone. Broader architectural and historical analyses further indicate that prolonged use, periodic renewal, relocation, and even partial dismantling were recurrent phenomena across European cathedrals, often driven by liturgical reform, institutional change, or wider architectural transformation (Villaseñor Sebastián, Teijeira Pablos, Muller, & Billiet, 2015). The fragmentary survival of choir stalls, or the reuse of their constituent elements, should therefore be understood as characteristic of the long and complex biographies of such artefacts, rather than exceptional or anomalous outcomes.

Within the Maltese context, the late fifteenth-century choir stalls associated with St Paul's Cathedral represent the earliest known surviving fragments of this category of ecclesiastical

furnishing on the island. While documentary sources attest to the prior existence of earlier choir stalls at the Cathedral, these earlier ensembles no longer survive, having been dismantled and subsequently destroyed following their transfer to the conventual church of Santa Maria della Grotta in Rabat (see 2.2.2. Origins of the choir stalls). As a result, the Mdina choir stalls (Fig. 5.) constitute the earliest extant material evidence through which the form, construction, and subsequent history of choir stalls in Malta may be examined. The broader history of choir-stall production, installation, and reuse on the island nevertheless remains largely unwritten, complicating attempts to situate the Mdina stalls within a continuous local developmental sequence and further underscoring their exceptional significance.

Fig. 5. Fragments of the 15th-century choir stalls displayed along the 2018 segmental reconstruction at the Mdina Metropolitan Cathedral Museum. (James Saliba 2021)

Although the surviving evidence remains fragmentary, preliminary indications suggest that the relocation or reconfiguration of choir stalls in Malta may not have been confined to the context of Mdina alone. During conservation works on the sixteenth-century choir stalls at St John's Co-Cathedral (Fig. 6.), several material observations—such as position marks visible on the underlying flagstones and the presence of a blocked window fitted with a metal grille suggestive of an earlier external elevation(Fig. 7)—collectively implied that the stalls might

not have been conceived for their present location when the church was first constructed[1]. These observations, recorded during conservation treatment, point to the potential mobility and spatial reassignment of choir furnishings in Malta beyond the medieval period. While this evidence has yet to be examined systematically within an art-historical framework, it may indicate that the adaptation and reorganisation of choir stalls formed part of a broader, though yet underexplored, pattern within Maltese ecclesiastical practice rather than an isolated phenomenon confined to Mdina.

Fig. 6. The 16th-century choir stalls at St John's Co-Cathedral, Valletta (Epistle side).(Joseph Borg, 2014)

Against this comparative backdrop, the surviving evidence relating to the Mdina choir stalls suggests that they, too, underwent numerous phases of alteration. Although our understanding of their detailed history remains limited, existing literature indicates that a series of major interventions, likely undertaken between 1680 and 1720, substantially altered the original design of the stalls. This interpretation appears to have been reinforced by two inscribed dates on one of the inlaid back panels, though scholars have proposed differing explanations for their significance (Pullicino, 1877, p.7; Buhagiar & Fiorini, 1996, p.169).Most interpretations of the choir stalls' design and development rely on two principal documentary sources, which effectively bookend their period of use. The first is a late 15th-century copy of the original contract of works, marking the inception of the choir stalls. The second is Canon Dr Paolo Pullicino's memoir, *'Il nuovo Coro della Chiesa Cattedrale di Malta'*, published in 1877 at the conclusion of the stalls' service life. Pullicino (1877) provides a detailed account of the

[1] Conservation observations recorded during the restoration of the sixteenth-century choir stalls at St John's Co-Cathedral, Valletta, in an unpublished conservation report by the author.

condition of the 15th-century choir stalls in 1876, at the moment they were being dismantled and replaced by the present set, which remains in-situ today (Fig. 8.).

This relatively rich documentation relating to the beginning and end of the choir stalls' use-life stands in marked contrast to the conjectures and inconsistencies found in the literature concerning their four centuries of continuous service. The paucity of intermediary evidence, combined with the potential for misinterpretation of the surviving sources, has significantly contributed to the uncertainties that continue to characterise scholarly understanding of their long and complex history.

It should be noted that the documentary evidence relating to the commissioning of the choir stalls points to an institutional context that does not necessarily coincide with their eventual installation and long-term use at St Paul´s Cathedral, a distinction that has important implications for questions of patronage and attribution.

Fig. 7. Architectural features concealed beneath the choir stalls at St John's Co-Cathedral, Valletta. (James Saliba, 2013)

*(*a) View showing the moulded stonework and timber framing forming part of the concealed window recess beneath the choir substructure.
(b) Detail of the blocked window fitted with an iron grille, indicating a possible earlier external elevation later enclosed during the reconfiguration of the choir area. These elements together suggest that the current choir stalls were installed over a pre-existing architectural boundary.

a

b

Fig. 8. The late 19th-century choir stalls at St Paul's Cathedral, Mdina. (James Saliba, 2024)

(a) Gospel side – left when facing altar (b) Epistle side – right when facing altar

2.2.2. Origin of the choir stalls

In the literature, the origin of the choir stalls has been primarily addressed through references to the surviving contractual and documentary sources, which are used to frame questions of commissioning and patronage rather than physical installation or early use.

The date of the contract

There are conflicting accounts of the contractual date of the choir stalls. This discrepancy is likely due to the potential use of different calendar systems, although the misinterpretation might have also been exacerbated by potential previous alterations to the stalls (see *5.3 Alterations*). Pullicino (1877, p.3) cites the contractual date as 2 January 1481, a date supported by De Piro (2000, p.17), who references a 17th-century manuscript explicitly stating 1481 as the year of manufacture. Abela (1647, p.334) also gives this date, and other authors, including Larinà (2008), Galea-Naudi and Micallef (1996), follow this view. In contrast, Ferres (1866, p.81) claims the choir stalls were made in 1480, likely basing his conclusion on the inscription at the top of the **Virgin and Holy Ghost** panel (Fig.9.), as visible in the late 19th century.

Other scholars argue for a later contractual date of 2 January 1482 (ab incarn 1481), citing an early modern copy of the contract preserved at the Dominican Archives in Rabat (Fsadni,1965, p.41; Buhagiar & Fiorini,1996). Azzopardi (1999) suggests that the artefact was commissioned in 1481, with the contract finalized on the 2 January 1482.

Other discrepancies arise with the names of those involved in the contract. Variations of the recorded names include Candurra/Candacha/Candachia and Calachura/Calatura/Calathura, as well as Zurchi/Zurki (Fsadni,1965; Galea-Naudi and Micallef, 1996; Buhagiar & Fiorini,1996; Azzopardi, 1999; Larinà, 2000). Nevertheless, all authors agree on the basic facts: the contractual deed was drawn up by Giovanni Enrico Candurra (or Candacha) in Syracuse. This contract bound Catanese master-craftsmen Parisio and Petro Antonio Calachura to produce a set of choir stalls, within two years, for 40 *uncie*, commissioned under the auspices of the Dominican friars of Santa Maria della Grotta, in Rabat, led by the Maltese friar Fra Pietro Zurki (Buhagiar & Fiorini,1996, pp.166-170; Fsadni,1965). This documentary association relates to the circumstances of patronage and contractual origin and does not imply that the choir stalls were ever installed or used at the Conventual Church of Sta Maria della Grotta, for which no material or archival evidence has ever been identified.

Little is known about the master-craftsmen Parisio and Petro Antonio Calachura. Giusy Larinà (2000) notes that in 1499, Parisio carved a '*gonfalone*' for the Church of San Salvatore Dei Disciplinati in Adrano, and by 1513, appearing as a witness in a deed, he is cited as architect, carver and inlay maker. Larinà also speculates that he might be the same Parisio Calici mentioned in Vito Amico's 18th-century work *Catana Illustrata* (Larinà, 2000). In this extract,

Parisio Calici is credited with producing the drawings for the doors of the Duomo of Catania in the early 1500s (Di Marzo, 1880, p.184).

Fra Pietro Zurki, a native of Mdina and the prior of the Dominican order in Malta, was highly respected by both ecclesiastical and civil authorities (Buhagiar & Fiorini, 1996 p.168). In 1466, accompanied by Fra Andrea di Morsia and Fra Pietro de Platea, he came to Malta to establish a Dominican convent (Abela,1647, p. 402). Other sources suggest that the first Dominican may have arrived as early as the 1450s (Fsadni,1965, p.22), with documented evidence of their presence dating to 15 March 1462, when the Università requested the Pope to officially grant the Dominican order responsibility for the cave-Church of Santa Maria della Grotta, located outside the Civitas (Fsadni, 1965, pp.31-32, p.37; Vella, 2013, p.163).

The origin of the convent is fundamental in comprehending the institutional dynamics surrounding the commissioning of the choir stalls, which, although conceived within a Dominican patronage context, were never installed at the Conventual Church of Santa Maria della Grotta and were instead installed at St Paul´s Cathedral. Buhagiar (2018) describes the episode as '*a skillfully crafted exercise of politico-religious intrigue*'.

Fig. 9. Virgin and Holy Ghost panel before the 2018 intervention, presenting gilding inscriptions M.CCCC.LXXX (1480) top, and MDCCXII (1712) bottom. (James Saliba, 2014)

Institutional mediation and reassignment

Abela (1647, pp. 402-403) informs us that on 27 June 1466, Bishop Antonio d'Alagona piously conceded a site within the bishopric territory to the Dominican convent for use as an orchard. This privilege was later reaffirmed by his successor, Bishop Giovanni Paternò, who in 1480 confirmed the previous concession and granted additional land for the expansion of the convent. In September 1481, the Università considered contributing to this effort by allocating an annual sum of 12 uncie for a period of 5 years (Buhagiar & Fiorini, 1996, p.168).

Tensions between the Università and the Bishop had already surfaced by 1477, when the Bishop's insistence on appointing Don Lanza Desguanez as Cathedral procurator conflicted with the Università's authority over that Office. The conflict was temporarily appeased through the appointment of two prosecutors (Buhagiar & Fiorini, 1996, p.168).

In January 1482, the Università submitted a petition to the Vicar General of the Dominican order in Sicily, requesting authorisation that Fra Pietro Zurki be appointed Cappellano Maggiore of St Paul's Cathedral instead of the Bishop's preferred nominee, whom the Università regarded as being too young and ignorant of the Maltese language (Fsadni,1965, pp.69-70; Buhagiar & Fiorini, 1996, p.168). Unfortunately, the literature does not provide confirmation of Zurki's official appointment. However, years later, he notably played a key role in mediating a dispute between the two authorities.

In 1487, the Università considered commissioning a new set of choir stalls for St Paul's Cathedral, but the Bishop claimed that such decisions fell under his jurisdiction (Fsadni,1965, p.69). This situation was further complicated by a new vacant prosecutor's position. The seriousness of the matter is reflected in a notarial deed, whereby the Vicar-General, acting on behalf of the Bishop, threatened the *Giurati* with excommunication, asserting the spiritual significance of the matter over its temporal aspects (Buhagiar Fiorini, 1996, p.168). To resolve this dispute, Zurki proposed exchanging the recently acquired choir stalls of his Dominican order with those installed in the Cathedral. This older set of stalls from Mdina Cathedral was subsequently installed at Santa Maria della Grotta, but were reportedly destroyed in 1551, when invading Turks, who had camped at Santa Maria della Grotta (Bosio, 1602, p.301), set fire to the Dominican conventual Church (Fsadni, 1965).

Completion and installation

Completion date

The available literature is inconsistent regarding the possible completion date of the Calachura choir stalls. Some authors propose 1483-4, approximately two years after the contract was signed (Pullicino, 1877, p.3), while other sources suggest a later completion date, possibly around 1487. The reasons for this discrepancy in interpretation remain unclear. Some scholars argue that the mediation of Zurki and the Dominican friars during the 1487 discord, along with the subsequent installation of the Calachura choir stalls in the Cathedral, indicates that the

choir stalls were not completed before 1487 (Fsadni, 1965; Buhagiar & Fiorini, 1996, p.169; Azzopardi, 1999, p.6).

The issue is further complicated by two inscribed dates on the already mentioned panel representing the **Virgin and the Holy Ghost**. These dates, written in gilded lettering on the top and bottom part of the panel, have been described by Buhagiar as being later interpolations (Buhagiar & Fiorini, 1996, p.169). Until recent discoveries, identified during the 2018 conservation project, and presented in this dissertation, these dates read M.CCCC.LXXX and MDCCXII DE AVR respectively. While there is consensus that the upper date (which by then read 1480) referred to the manufacture of the choir stalls, and the lower date (1712) marks a significant intervention, authors disagree on the specifics of the latter, 18th-century intervention (see *2.2.3 Alterations*).

Installation in the Cathedral

In a sermon on March 5, 1498, shortly before his execution, Savonarola delivered a sermon criticizing clergy for inappropriate behavior during Mass, including resisting the separation of their choir from the laity – a practice that allowed them to glimpse women in the congregation[2] (Morvan, 2023). His critique highlights concern about the separation of liturgical spaces during the late 15th century. Traditionally, liturgical space was often organized into three sections: the nave for the congregation, the choir for the religious community, and the sanctuary housing the main altar. This arrangement symbolized a hierarchical structure, which was widely analyzed in liturgical and theological writings by scholars like Richard of Saint-Victor[3] (c. 1110-1173), Guillaume Durand[4] (c.1230-1296), and Jacobus of Voragine[5] (c. 1230-1298), who examined the symbolic and practical organization of sacred spaces. However, churches gradually abandoned this structure, moving choirs to the apse behind the main altar and often removing rood screens (Fig. 10.). (Morvan, 2023).

[2] "...Non vogliono li sacerdoti le tende nè el muro alto attorno al coro: fatelo suso alto, cittadini, chè li sacerdoti non hanno a vedere le donne per chiesa, quando sono in coro." (Girolamo Savonarola, *Prediche sopra l'Esodo*, ed. Pier Giorgio Ricci, 2 Vols. (Rome: A. Belar- detti, 1955), Vol. 1, 261 (predica IX), as quoted in Morvan, 2023, p.113

[3] Augustinian canon and theologian, influential in mystical theology and the organization of liturgical space.

[4] Bishop of Mende and author of Rationale Divinorum Officiorum, a key medival treatise on the symbolic meaning and organization of liturgy and church architecture.

[5] Archibishop and autor of the Golden Legend, a compilation of saints´lives; also commented on liturgical practice and church hierarchy.

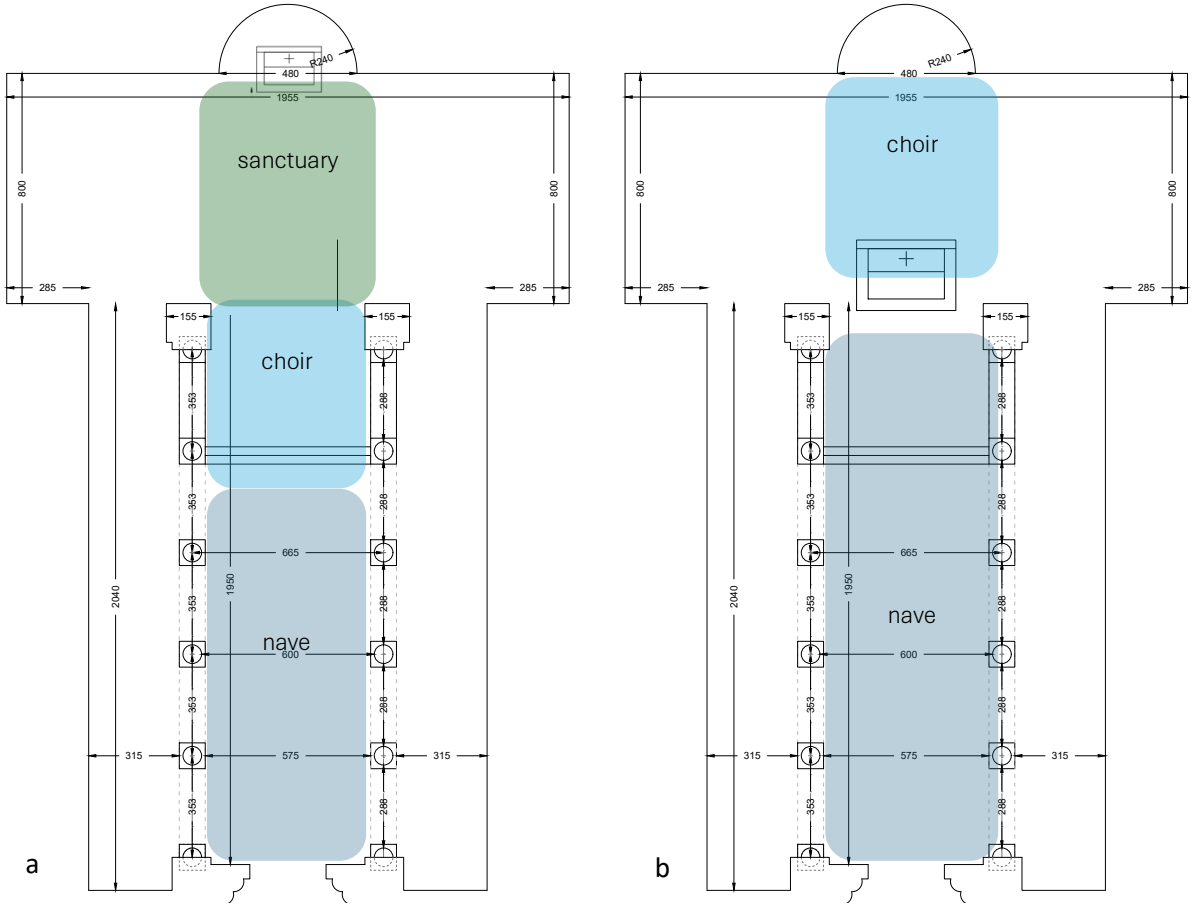


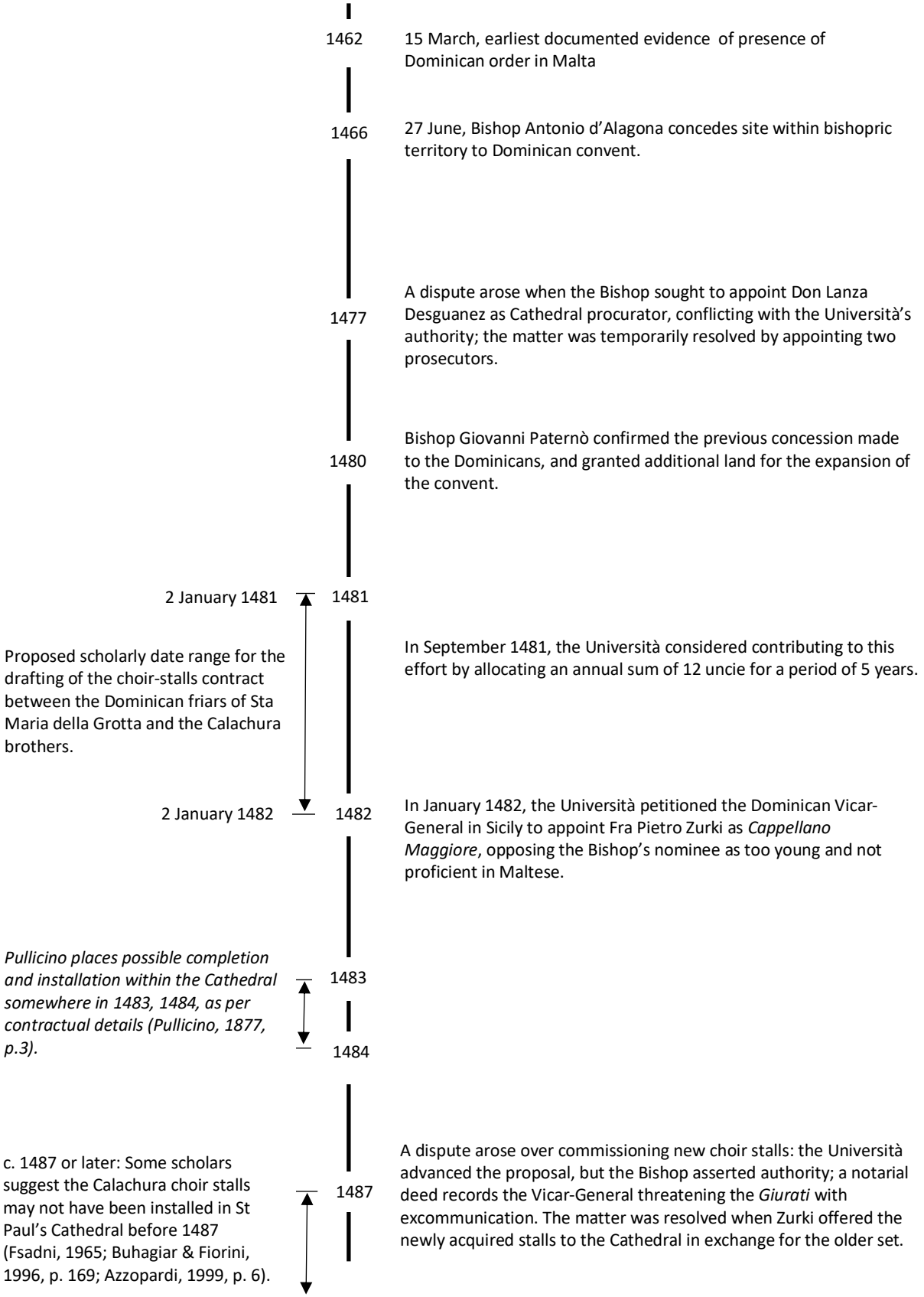
Fig. 10. Comparative schematic representation of the subdivision of liturgical spaces in cathedrals.

(a) The left diagram shows the traditional tripartite organization of sacred space, with the nave reserved for the laity, the choir for the religious community, and the sanctuary containing the main altar—reflecting a hierarchical spatial structure characteristic of medieval ecclesiology.

(b) The right diagram illustrates the later post-medieval reconfiguration, in which the choir was relocated to the apse behind the high altar and rood screens were often removed, creating a more unified spatial and visual connection between clergy and congregation.

Pullicino (1877, p.5) notes that the choir stalls, completed in the late 15th century, were originally installed in the old Cathedral's presbytery, flanking the main altar, which was positioned against the tribune. This position of the choir, closer to the tribune, seems to be partially supported by Abela (1647, p.333), who reports that by 1647, the stalls were behind the high altar. This high altar, closer to the nave, was consecrated in 1626, several decades before Gafà's expansion of the choir area between 1679-82. Conversely, Larinà (2008, p.43) states that, based on an 18th-century manuscript authored by Don Domenico Falzon, the artefact was originally installed along the nave's sides.

These seemingly conflicting accounts of the choir stalls' position within the Cathedral and how it changed over time remain problematic. Additionally, it also remains uncertain whether the stalls featured return seatings, potentially forming a closed chancel - therefore subdividing the liturgical space - or if they were arranged into two parallel wings. This ambiguity significantly complicates our understanding of the original spatial arrangement and liturgical context of the stalls within the old Cathedral.



Timeline 2. Events possibly relating to the origin and reassignment of the Calachura choir stalls.

2.2.3. Form

Stylistic analysis

The dismemberment of the 15th-century choir stalls in the late 19th century has severely limited our ability to study their original form. Current art historical research on the Calachura choir stalls focuses primarily on the salvaged inlaid panels and, to a lesser extent, on the carvings that once adorned its overhanging canopy.

Despite these limitations, art-historical research defines the choir stalls as predominantly being in Late Gothic style (Buhagiar & Fiorini, 1996, p.169), with emerging Renaissance influences (Vella, 2013, p.146). Larinà (2008, p.45) identifies a Florentine influence in the Annunciation panels, comparing drapery folds to Ghirlandaio and Botticelli, while Spanish, Umbro-Roman, and Sienese elements are evident in the figures and iconography (Vella, 2013, p.144). Flemish and Provençal influences also emerge, possibly linked to Sicilian artists' exposure to works from the Angevin court after 1442 (Buhagiar, 2018). Vella (2013) suggests the naturalistic details reflect Antonello da Messina's workshop, blending Flemish, Sienese, and Catalan styles.

Buhagiar (2018) suggests that the differences in artistic quality among panel inlays may stem from their being based on drawings by artists of varying skill levels. This variability has often been linked to the involvement of a bottega or workshop assisting the Calachura brothers (Larinà, 2008, p.45; Vella, 2013, p.146). However, while the participation of multiple craftsmen in the stalls manufacture cannot be ruled out, their involvement may not directly account for the observed inconsistencies in the panels' artistic quality.

Bottega or model?

The practice of adopting a model or presenting a sample was common practice in the production of Medieval and early-Modern choir stalls, facilitating a mutual understanding between the commissioner and the manufacturer regarding the outcome (Glover, 2016, pp.237-238; 245-246). Scholars agree that the contract required the Calachura brothers to model their stalls on the choir stalls at the Church of San Domenico in Syracuse (Buhagiar & Fiorini, 1996, p.169; Larinà, 2008, p.43; Vella, 2013, p.144). Unfortunately, existing scholarship indicates that these stalls are no longer extant. Their apparent absence, combined with the fragmented state of the Malta stalls, complicates efforts to determine the extent to which the San Domenico model influenced the Malta stalls. This also hinders possible research into the artistic contributions of the Calachura brothers.

Giusy Larinà (2000) conducted a comparative study of the Mdina choir stalls and another set from the late 15th century, which reportedly follows the same model. These stalls, currently housed in the sacristy of the Duomo of Ortigia, Syracuse (Vella, 2013, p.144), are attributed to Nardo Mirtello. According to a deed dated 7 April 1483, presented by G. Capodieci, Mirtello

was contractually obligated to manufacture half of the Ortigia stalls, based on the model of the Church of San Domenico, for the sum of 23 oncie (Larinà, 2008, p.48).

Through an analysis of the stylistic approach to the inlaid panels and canopy carvings, Larinà (2008) identifies striking similarities between the Ortigia stalls and the Mdina choir. She notes that the in the **Nativity** panel and **Annunciation** scene (composed of 2 panels - **God the Father and Archangel Gabriel panel** & **Virgin and Holy Ghost** panel, Fig. 11.) share closely corresponding compositional lines across both choirs, suggesting the possibility that the same *cartoni* were used for both sets of stalls. Given that the contract produced by Capodieci explicitly assigns Mirtello responsibility for half of the choir stalls, Larinà considers the potential involvement of the Calachura brothers in the production of the Ortigia stalls a plausible scenario (Larinà, 2008, p.48).

Fig. 11. **Annunciation** scene - **God the Father and Archangel Gabriel** panel (left) and **Virgin and Holy Ghost** panel (right), forming the Annunciation scene, before their latest restoration, completed in 2018. (James Saliba, 2014)

Original design

Determining the original design of the St Paul's Cathedral choir stalls from existing published sources remains challenging due to the lack of detailed information about the initial configuration of the Calachura choir stalls. Our understanding is primarily derived from the contract (see *Appendix A*) and first-hand testimonies by individuals who observed the artefact in the Cathedral during the 17th, 18th and 19th-centuries. However, it is essential to approach these accounts with caution, given their context-dependent nature and the likelihood that alterations to the original design may have occurred prior to these observations.

Contractual details

Panels, guarda-polvere, coronetta: The prevailing consensus in the literature affirms that the Calachura choir stalls were to be adorned with inlaid panels, above which stood a protruding cornice, referred to in the contract as '*guarda-polvere'* (Fig. 12.). The choir stalls were to be crowned with an ornamental finial referred to as '*coronetta*' (Pullicino, 1877, p.4; Larinà, 2008, p.43).

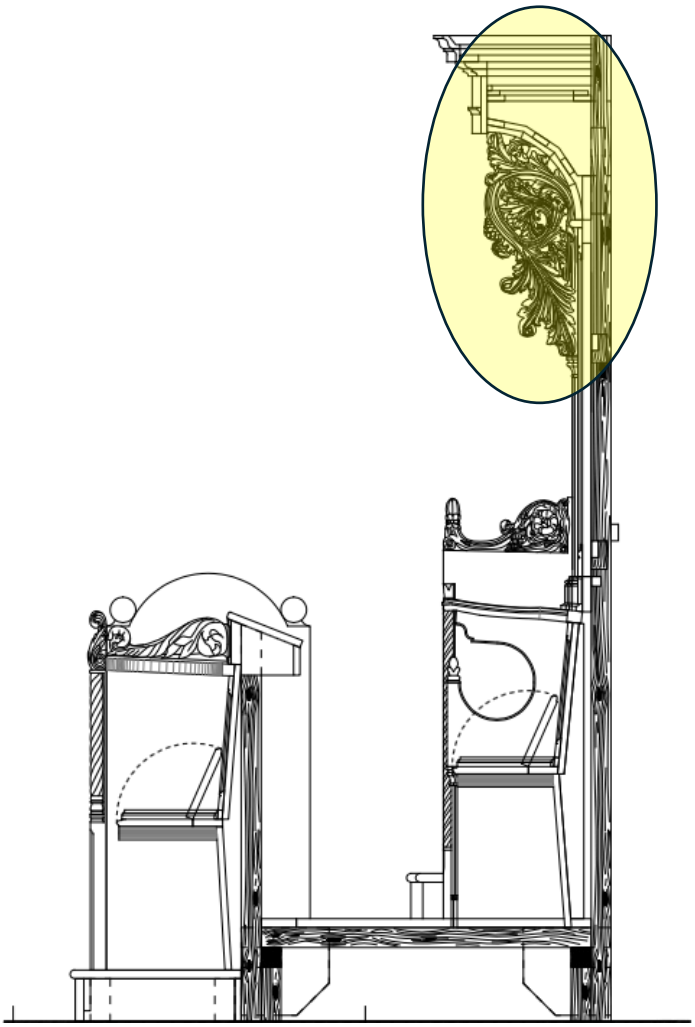


Fig. 12. Cross-section sketch of the hypothetical structure of the fifteenth-century choir stalls, showing the guarda polvere highlighted in yellow. (James Saliba, conservation notes, courtesy of Mdina Metropolitan Museum).

Number of Seats: Sources are less clear about the exact seating arrangement, with authors providing differing interpretations. Buhagiar and Fiorini (1996, p.169) refer to ten stalls on each side in the choir of the Cathedral, while Vella (2013, p.144) confirms that the commissioned set comprised of 20 stalls.

Other authors argue that the contract specifies a two-tier of seating arrangement, with 20 stalls per wing, thus accommodating a total of 40 stalls (Pullicino, 1877, p.4; Fsadni, 1965, pp.36-37; Galea-Naudi & Micallef, 1996, p.38; Larinà, 2008, p.43). This interpretation, however, remains conjectural, particularly for the lower tier. The seating capacity of the lower tier would have been influenced by factors such as the overall distribution of the choir stalls, that is whether the stalls were arranged in parallel or in 'L'-shape formation, the positioning of steps and passage for accessing the upper tier, etc.

Timber species: Authors have put forward different interpretations on the timber species that may have been used for the manufacturing of the choir stalls. Buhagiar and Fiorini (1996, p.168) assert that the stalls were made from chestnut and pine wood, although in a subsequent publication, Buhagiar also includes walnut in the list of materials (Buhagiar, 2018). Galea Naudi and Micallef argue that the contract stated that walnut was to be used for the carcase and chestnut for the back and substructure (Galea-Naudi & Micallef,1996, p.38). Nevertheless, other sources interpret the contract differently, suggesting walnut was designated for the upper stalls, and chestnut for the lower tier (Pullicino, 1877, p.4; Larinà, 2008, p.43). Abela (1647, p.334) contradicts this, describing the choir stalls as being made entirely out of walnut.

Other sources

Additional insight into the decorative elements and overall form of the choir stalls is offered through first-hand accounts and visual observations by various authors. However, it is important to recognise that these descriptions may refer to an artefact that had already undergone alterations by the time of their observations.

Frames: Galea-Naudi and Micallef note that the inlaid panel representing '**the original sin'** or **Adam and Eve** (Fig. 13.a.) still retains its original frame (Galea-Naudi Micallef, 1996, p.37), suggesting that the frames of other panels (Fig. 13.b.) may have been replaced during a previous intervention. However, the authors do not explore further the circumstances or timing of these potential alterations.

a  b 

Fig. 13. Two panels presenting distinct frames

(a) Adam and Eve panel in a moulded and toppo inlaid frame. (James Saliba, 2024)

(b) Nativity panel in a moulded and gilded frame, before the 2018 restoration. (James Saliba, 2014)

Gilding: Several authors interpret the 1712 inscription on the **Virgin and Holy Ghost** panel (Fig.6) as evidence of a significant restoration, possibly following damage sustained during the 1693 earthquake (Pullicino, 1877, p.15; Galea-Naudi & Micallef, 1996, p.37). Other scholars dispute this connection, with some stating that the choir stalls sustained only minor damage on this event (Buhagiar & Fiorini, 1996, p.169). Despite these differing views, there is consensus that the 1712 inscription marks a major restoration, widely recognized to have included the gilding of the choir stalls (Larinà, 2008, p.45) (see *Timeline 3.*). This interpretation is further supported by the inscription´s use of the term 'De Aur', which denotes the application of gold, consistent with the gilding observed on the stalls remnant parts.

Pullicino's use of the term 're-gilding' suggests that some gilded decoration existed before 1712. However, uncertainty remains as to whether the gilding was part of the original design. A 17th-century manuscript, cited by De Piro (2000, p.17), notes that *'*a cornice ran along the stalls but the Bishop's section was gilded'. This specific reference to the gilding of only a section of the choir stall seems to imply that other areas were not originally gilded. The full extent of the gilding and whether it formed part of the choir stalls' initial design remain unknown.

The document, cited by De Piro, also reveals that, in the 17th century, the Bishop's seat in the choir was elevated by approximately two-thirds of a palmo, compared to the seats of the canons. His kneeler was also higher and consistently covered in damask.

Decorated back side of the stalls: : Pullicino (1877, p. 17) records that the 19th-century dismantling of the choir stalls revealed decoration on the *reverse* of the ensemble, a surface that had been concealed from view after the stalls were relocated to Gafà's Baroque choir area in 1681. He describes the back as articulated by small architectural columns framing two horizontal registers of "openings," apparently conceived to receive inlaid panels (Figs. 14&17). According to Pullicino, several panels in the lower register—at approximately the same height as the lower zone of the upper-tier seating on the front—were still in situ at the time of dismantling, and he further specifies their sequence and placement (Figs.14-18). By contrast, the upper register, which corresponded in height to the inlaid panels on the internal face of the choir and which Pullicino assumed had originally held additional panels, was found empty.

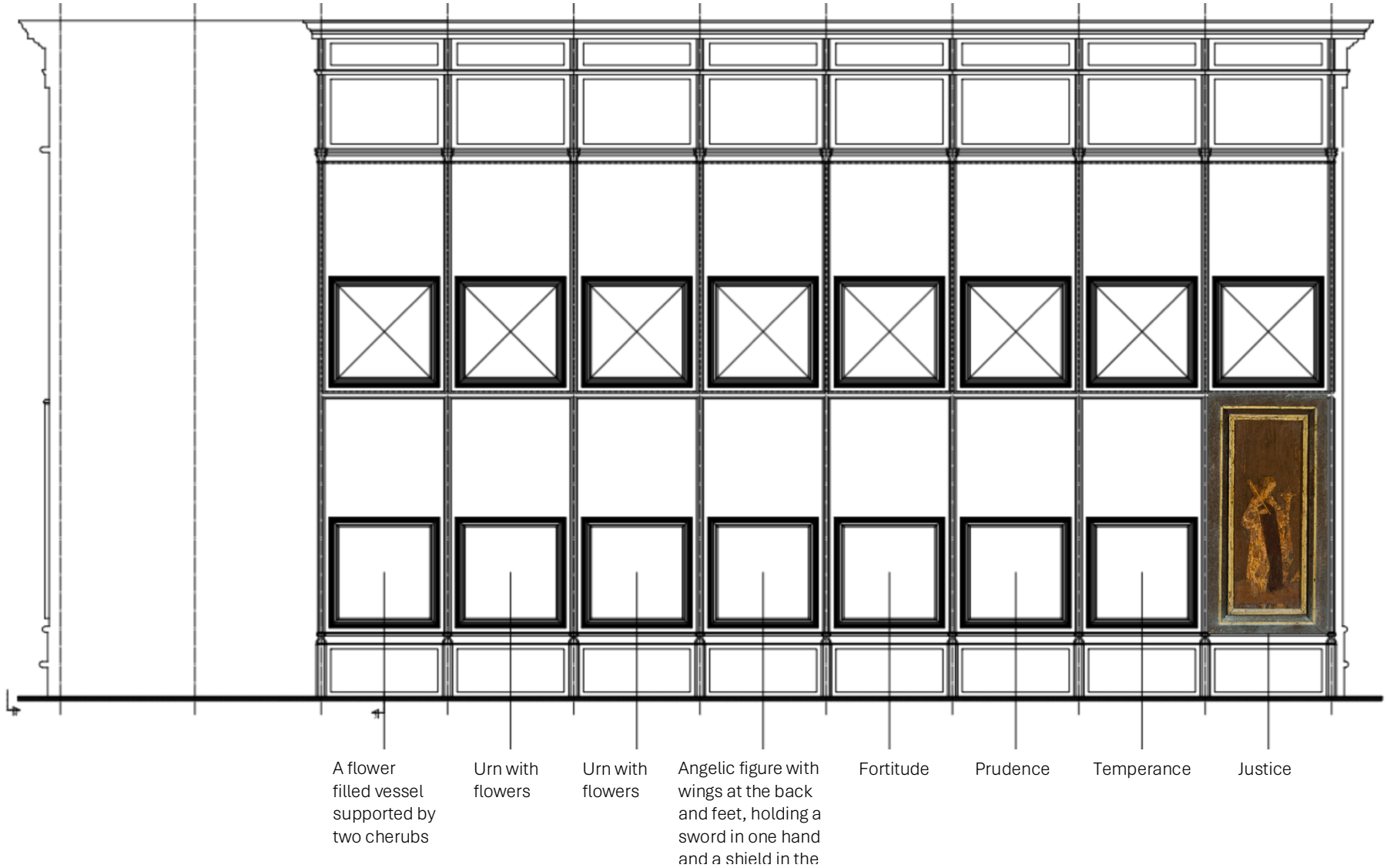


Fig. 14. Hypothetical reconstruction of the decorated back side of the choir stalls

in a 10-stall setting, and the possible placing of inlaid panels based on Pullicino's 1877 account on the state of the stalls in the late 19th-century. Gospel side (left when facing altar).

Fig. 15. Hypothetical reconstruction of the placing of inlaid panels in the upper tier with 10-stall setting, based on Pullicino's 1877 account on the state of the stalls in the late 19th-century. Gospel side.

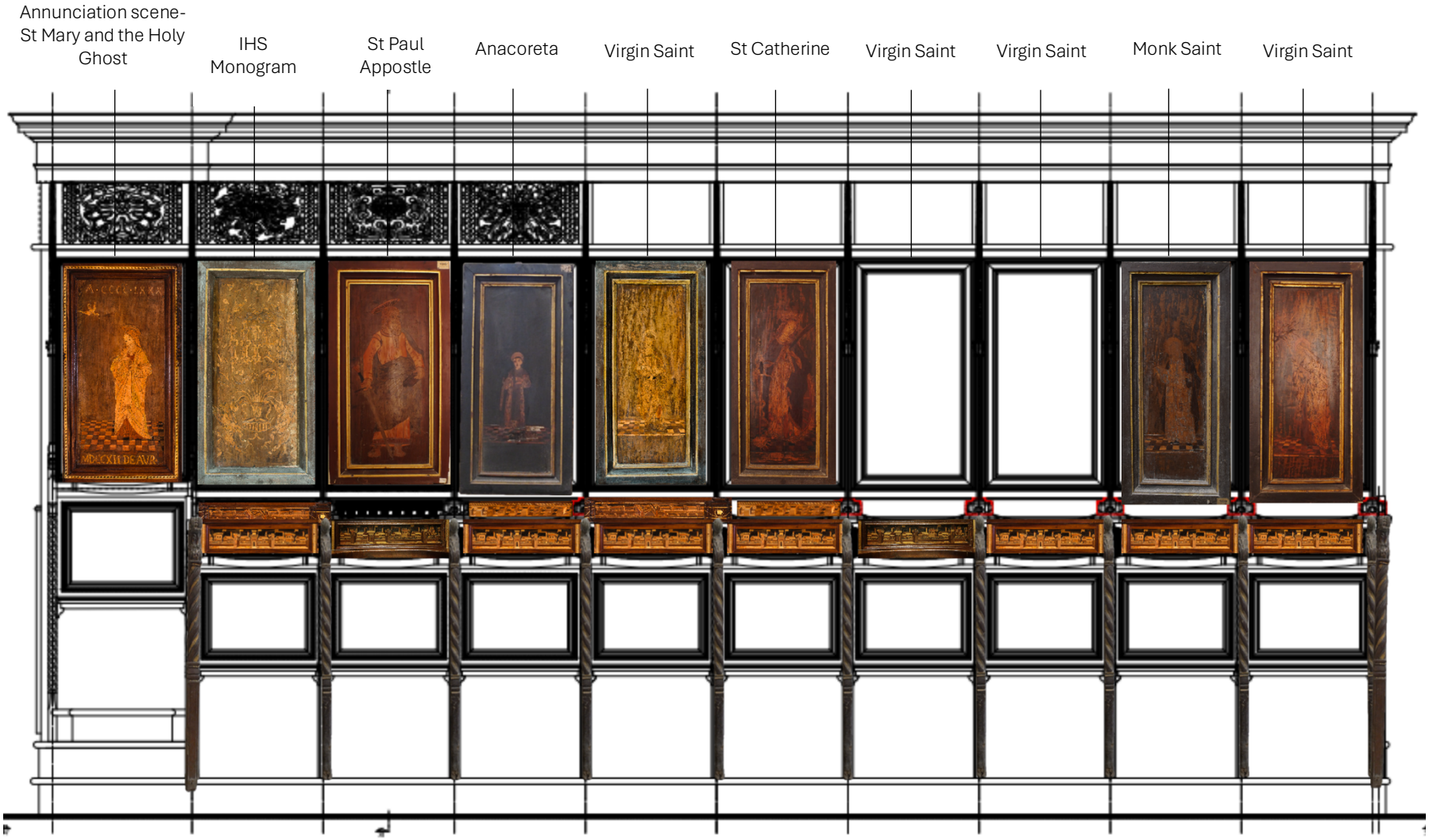


Fig. 16. Hypothetical reconstruction of the placing of inlaid panels in the upper tier with a 10-stall setting - the placing of the inlaid panels is based on Pullicino's 1877 account on the state of the stalls in the late 19th-century (12-stall setting). Epistle side (right when facing altar).

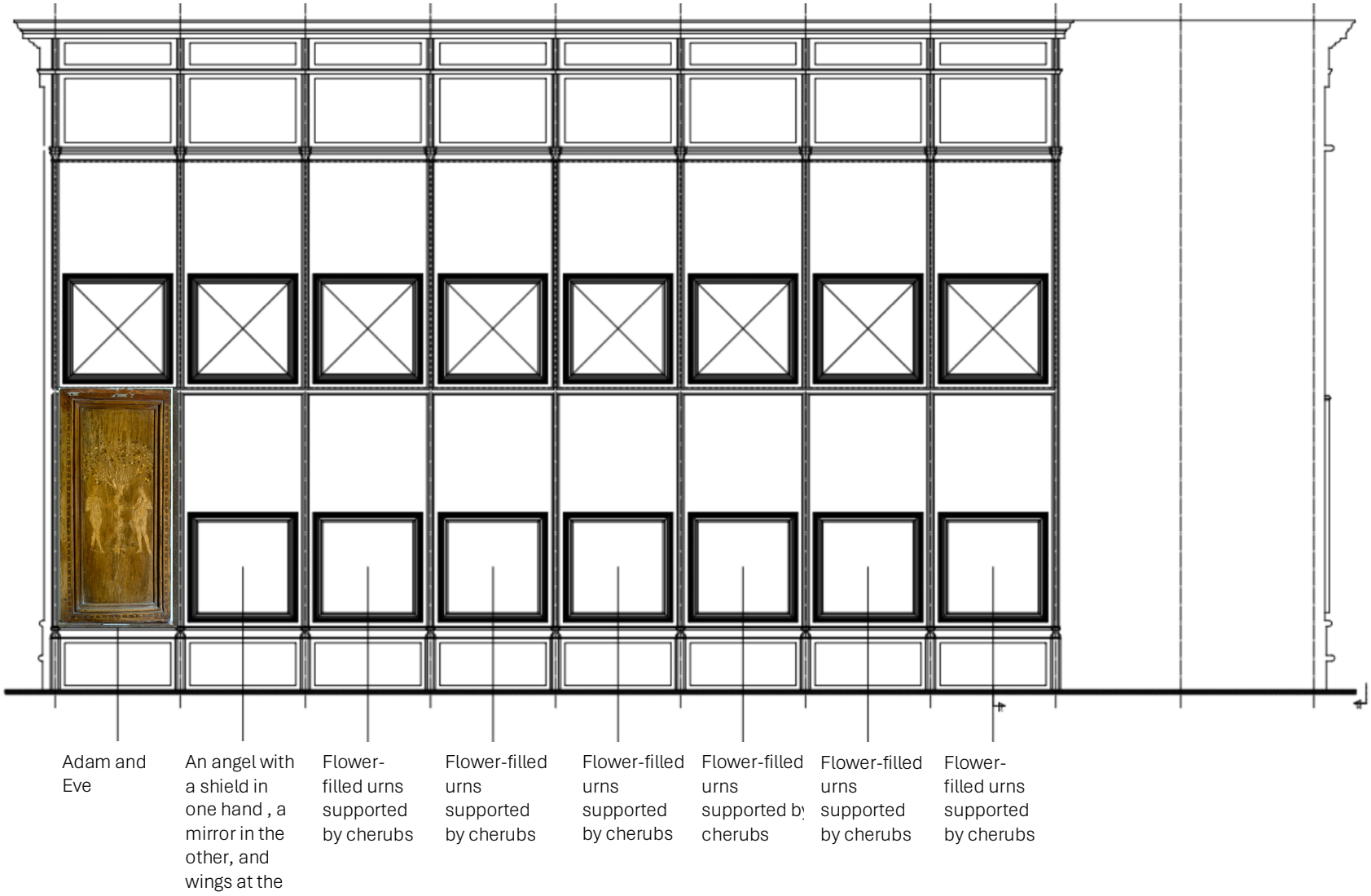


Fig. 17. Hypothetical reconstruction of the decorated back side of the choir stalls in a 10-stall setting and the possible placing of inlaid panels based on Pullicino's 1877 account on the state of the stalls in the late 19th-century. Epistle side.

State of the choir stalls in the late 19th century

Canon Paolo Pullicino (1815–1890), an erudite priest and patron of the arts, was the driving force behind the replacement of the stalls in 1876, and the manufacture of a lectern in 1879. During a chapter meeting on the 11 November 1870, he presented his plan for consideration by the other chapter members, highlighting the improbabilities of a successful restoration and advocating in favour of the replacement (Aquilina, 2023, p.28). From his memoirs we may catch a glimpse of the state of the choir stalls in the late 19th century. However, his key role as patron of the project may have subtly shaped some of his observations.

His account reveals that the stalls had undergone numerous interventions over the years which gradually modified their appearance. Despite the multiple restorations, the choir stalls kept degrading along the years. By the late 19th century, fungal decay and woodworm infestation had advanced significantly, with the wood in certain areas disintegrating into powder (Pullicino, 1877, p.10). The structural timber was so rotten and infested that, once detached from the supporting wall, the stalls could not stand independently (Pullicino, 1877, p.17).

Pullicino also reports that some of the inlaid back panels were in such a poor condition, and had been so poorly restored, that it was impossible to decipher what they portrayed. Despite their deteriorated state, the panels continued to attract attention. Giuseppe Hyzler admired them, and his younger brother Vincenzo (1813-1849) even traced drawings of some of these panels, which were eventually published by Anna Brownell. Jameson (1794-1860) in the second volume of *Sacred and Legendary Art* (1848) (Pullicino, 1877, p.9) (Figs. 18.–19).

By the time of the choir stalls' replacement, in 1876, each wing featured twelve stalls on the upper tier, and ten seats on the lower tier, totalling twenty-two seats per wing. The upper-tier seats were reserved for the Bishop and Canons, while the lower-tier seats were used by priests (Pullicino,1877, p.13). The twenty-four inlaid dorsal panels, framed and alternated with small columns, adorned the upper-tier stalls (Pullicino, 1877, p.14). Two additional inlaid panels were positioned on the outer face of the dignitary stalls. One of these, referred to as the '**Orpheus**' panel was later re-used, along with the carved elements constituting the 'guarda polvere', in the new choir stalls, manufactured by Emmanuele Decelis, which remain in the Cathedral today (Pullicino,1877, pp.11,16,25; Larinà, 2008, pp.43-44; Aquilina, 2023) (Figs. 20.–21.).

Fig. 18. Images of Vincenzo Hyzler's drawings of St Margaret (a) and St Agatha (b), from Mrs Jameson's Sacred and Legendary Art Vol.2 (1895, pp. 520 & 611, respectively). Note - in her book Jameson erroneously misplaces the panels as belonging to the choir stalls at St John's Co-Cathedral.

Fig. 19. The panels of St Margaret (a) and St Agatha (b). (James Saliba, 2014)

a

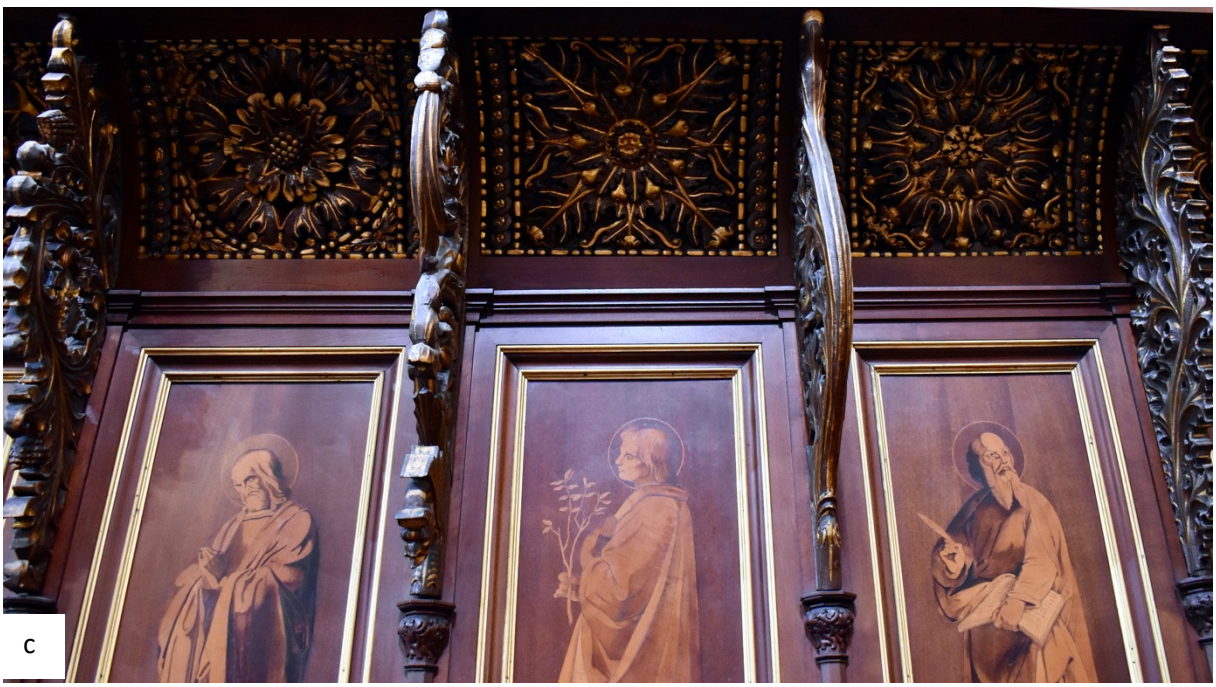
b

Fig. 20. Carved elements from the 15th-century choir stalls incorporated in the current set of stalls at St Paul's Cathedral, Mdina, crafted and installed by Emmanuele Decelis in 1876. (James Saliba,2024)

(a) The position of the carved *guarda polvere* elements, indicated by the white and yellow arrows..

(b) White arrow – carved stall dividers, each presenting a unique fantasy of vegetal and zoomorphic elements

(c) Yellow arrow – concave carved rosettes with floral motifs.



c

Pullicino (1877, p.26) dismisses some smaller inlays, scattered around the major ones and on the backs of the lower-tier seats, as common and insignificant. The architectural frieze inlays (Fig. 22.), which Vella (2013, p.146) considers noteworthy and deserving more attention, were also deemed by Pullicino to be of little value.

Another four inlaid panels were located on the outer sides of the kneelers, marking the ends of each wing's lower tier (Fig. 23.). Pullicino (1877, p.28) criticizes these panels for disrupting the aesthetic flow of the stalls, as they interfered with the visual lines formed by the profiles of the seats and kneelers. These panels are further described as being covered with ornaments which were ill-suited for the ecclesiastical setting. He further criticised the columns (Fig. 24.) between the lower-tier seats for being rough and deformed, while carved zoomorphic figures (Fig. 25.), which stood on the dignitary stalls, were described as crudely carved, '*vulgar and Baroque*'.

The cornice over the stalls, described as being big, heavy and in bad taste, and was considered by Pullicino as a later addition. It was split at the last two stalls, creating an uneven appearance. As for the surmounting 'coronetta' mentioned in the contract, only a portion remained in 1876, located above the Bishop's stall.

Fig. 21. The 15th-century Orpheus inlay incorporated in the late-19th-century choir stalls. (James Saliba, 2024)

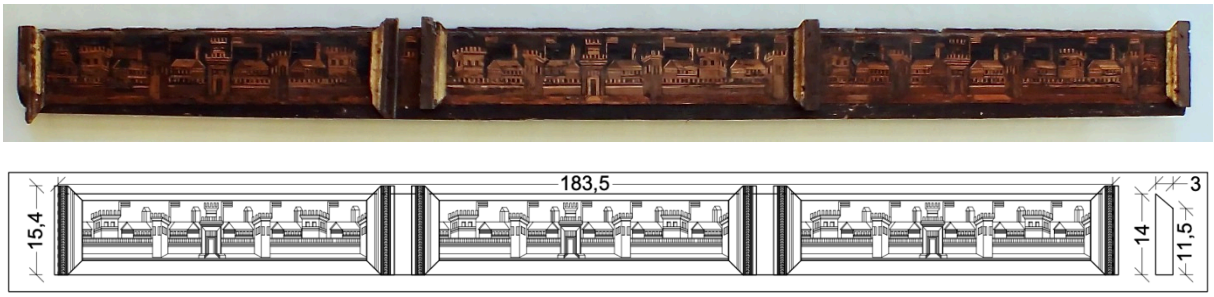


Fig. 22. 15th-century architectural frieze, deemed by Pullicino (1877) to be of little value. Currently exhibited in the Museum's Baroque Hall (James Saliba, 2014)

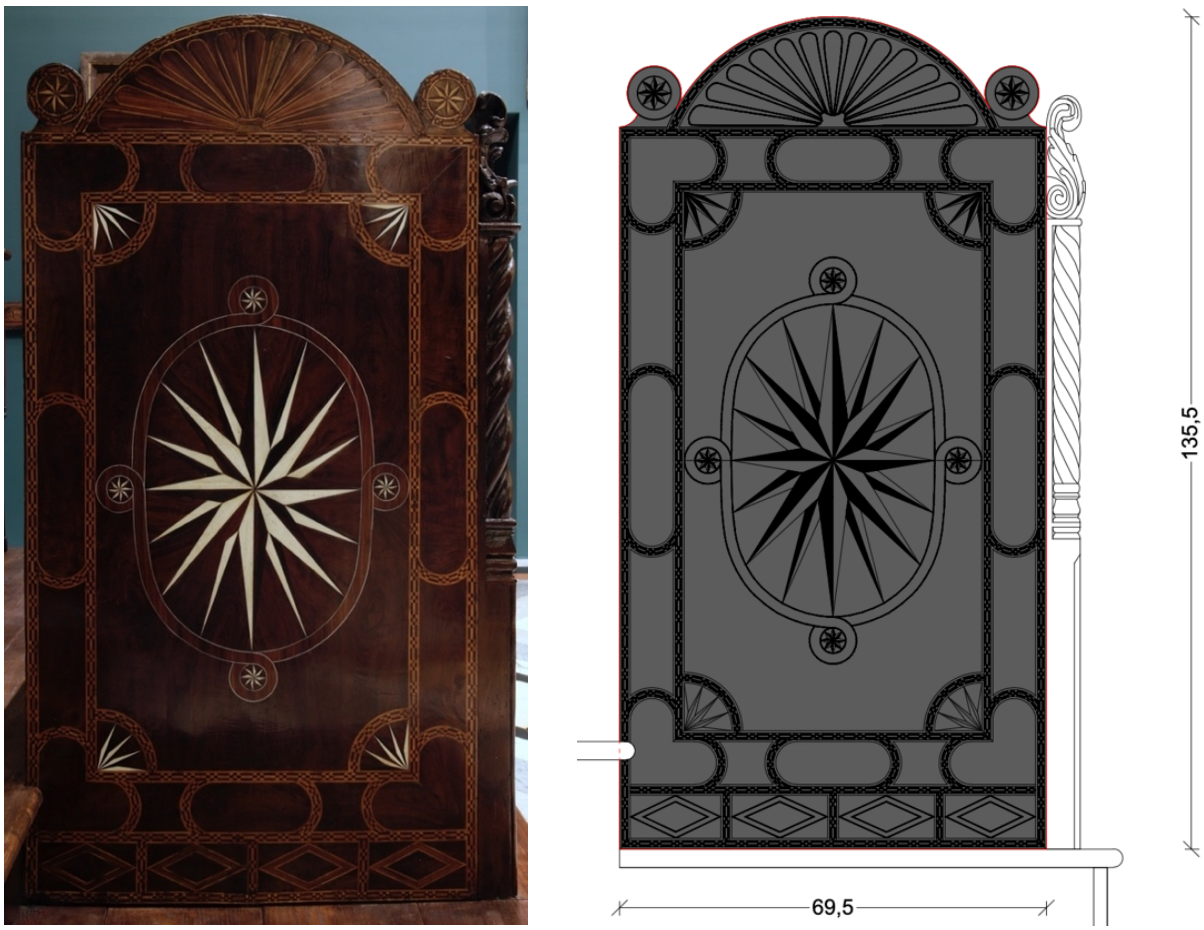


Fig. 23. 15th-century inlaid side panel incorporated in 2018 reconstruction. Criticised by Pullicino (1877) for breaking the aesthetic flow of the stalls and presenting unsuitable decoration. (photos: James Saliba, 2024; drawings: Bruno Ambrosio, 2016)

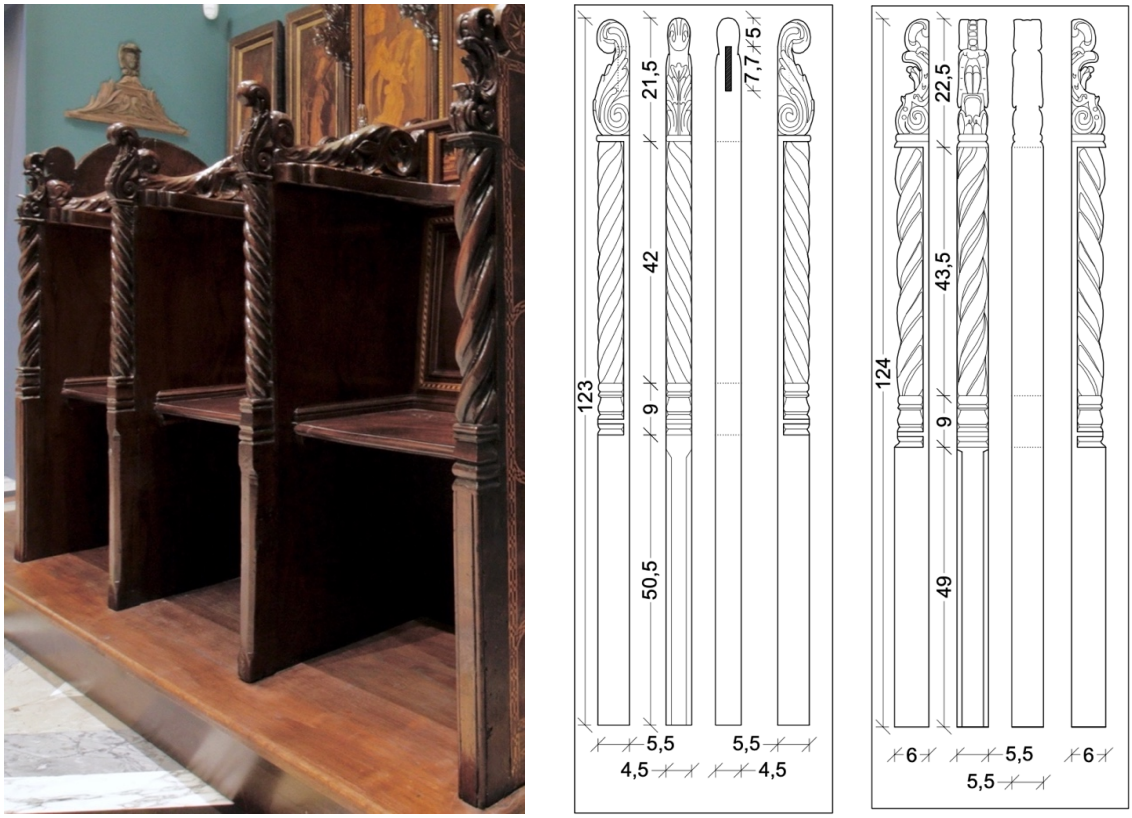


Fig. 24. 15th-century carved Solomonic columns and acanthus leaves, currently incorporated in the 2018 reconstruction. Described by Pullicino (1877) as being rough and deformed. (photos: James Saliba, 2024; drawings: Bruno Ambrosio, 2016)

Fig. 25. 15th-century carved zoomorphic figure from bishop's stall. Considered by Pullicino (1877) to be crudely carved 'vulgar and Baroque'. Museum's Reserve collection. (James Saliba, 2014)

The late 19th-century choir stalls, currently installed in the Cathedral (Fig.17), provide very limited insight into the design of the 15th-century stalls. Pullicino (1877, p.20) notes that the newer stalls did not follow a completely new design but rather maintained the general proportions and ornamental style of the older stalls. However, modifications were made to 'correct' certain elements considered as having been altered by previous interventions. The influence of 19th-century cultural trends, such as the Neo-Gothic movement and the Arts and Crafts movement, as well as stylistic restoration practices (Jokilehto, 1999), evidently influenced the intervention. For instance, the architectural frieze was replaced with inlays modelled after those on the choir stalls of San Pietro in Perugia, attributed to Raffaelo d'Urbino, as they were considered a better match for the 15th-century style (Pullicino, 1877, p.26). Similarly, the 'disproportionate' cornice was 'corrected' to better align with the Medieval proportions. Similarly, the 'rough and deformed' columns on the front-tier were 'improved' and a small capital, matching to the style of the choir, was introduced. Various other minor elements were meticulously 'studied' and 'improved' to enhance the overall 'perfection' of the stalls (Pullicino,1877, pp.30-31). Any interpretation of the previous 15th-century choir stalls based on the currently installed 19th-century version must therefore be approached with great caution.

2.2.4. Alterations

The earliest published references to maintenance work on the choir stalls date back to the early 16th century (Fiorini, 1992, p.88). In his review of the Mandati documents, Fiorini identifies an entry dated 24 October 1523, in which a certain craftsman, Mastro Luca Burg, was paid for hinges used to repair the choir stalls (Fiorini, 1991, p.332). While Fiorini downplays the art historical significance of this entry, it is notable because it highlights the ongoing wear and tear the choir stalls experienced from regular use, as well as the consistent efforts to maintain them.

Literature suggests that major alterations to the choir stalls occurred between 1680 and 1720. Pullicino's memoirs (1877) serve as the primary source for this timeline. While Pullicino acknowledges that numerous smaller interventions likely took place throughout the period of use of these stalls (p.8), he identifies three principal phases of change: the relocation of the stalls, an increase in seating capacity followed by a later reduction and further works undertaken in the aftermath of the 1693 earthquake (pp.6-7). The precise sequence and extent of these events, however, remain a matter of debate.

1681: Relocation and possible enlargement:

In 1679, the Cathedral Chapter approved Lorenzo Gafà's design for the enlargement of the presbytery. Work began in April that year and was officially completed and inaugurated on 28 June 1682 (Thake, 2018). According to the timeline presented by Pullicino (1877), in 1681, during Bishop Molina's tenure, the choir stalls were relocated to the newly built choir area behind the altar, where they were positioned against the wall, in similar manner to the present-day arrangement of the choir stalls within the Cathedral. During this relocation, the decorated back side of the choir stalls became concealed (p.5) (see *2.2.3. Form – Decorated back side of the choir stalls*). Pullicino reasoned that since the back of the choir stalls were visible before 1681, the empty spaces in the upper row of the backside, discovered during the 1876 dismantling, would have contained inlaid panels.

He suggests two possible occasions for the removal of these panels: the 1682 relocation or an undated intervention when three additional stalls were added to each wing. He argues that the need for decorative inlaid panels for the new stalls may have led to the redistribution of the original panels. (Pullicino, 1877, pp.17-18).

He notes that, owing to an increase in the number of Canons, and given the ample space provided by Gafà's new choir area, the Bishop and Canons agreed to enlarge the stalls by adding 3 stalls per side, therefore increasing the number of stalls from 20 to 26 (Pullicino, 1877 pg.6). The event, uniformly acknowledged by all authors, is corroborated by two 17th-century documents. Abela (1647, pp.333-334) notes that on feast days and major solemnities, 20 Canons and 12 Chaplains presided over the choir, suggesting 20 upper-tier stalls in 1647. Another 17th-century manuscript, cited by De Piro (2000, p.17), (later identified through archival research as being Misc.173 Tom.3, f.64, and being written after 1685) states that the

choir consisted of *"12 seats a side for the Canons plus 2 more slightly higher for the Bishop and Cantor at the head"*, substantiating that the upper tier of the choir consisted of 26 stalls, at some point, in the 17th century.

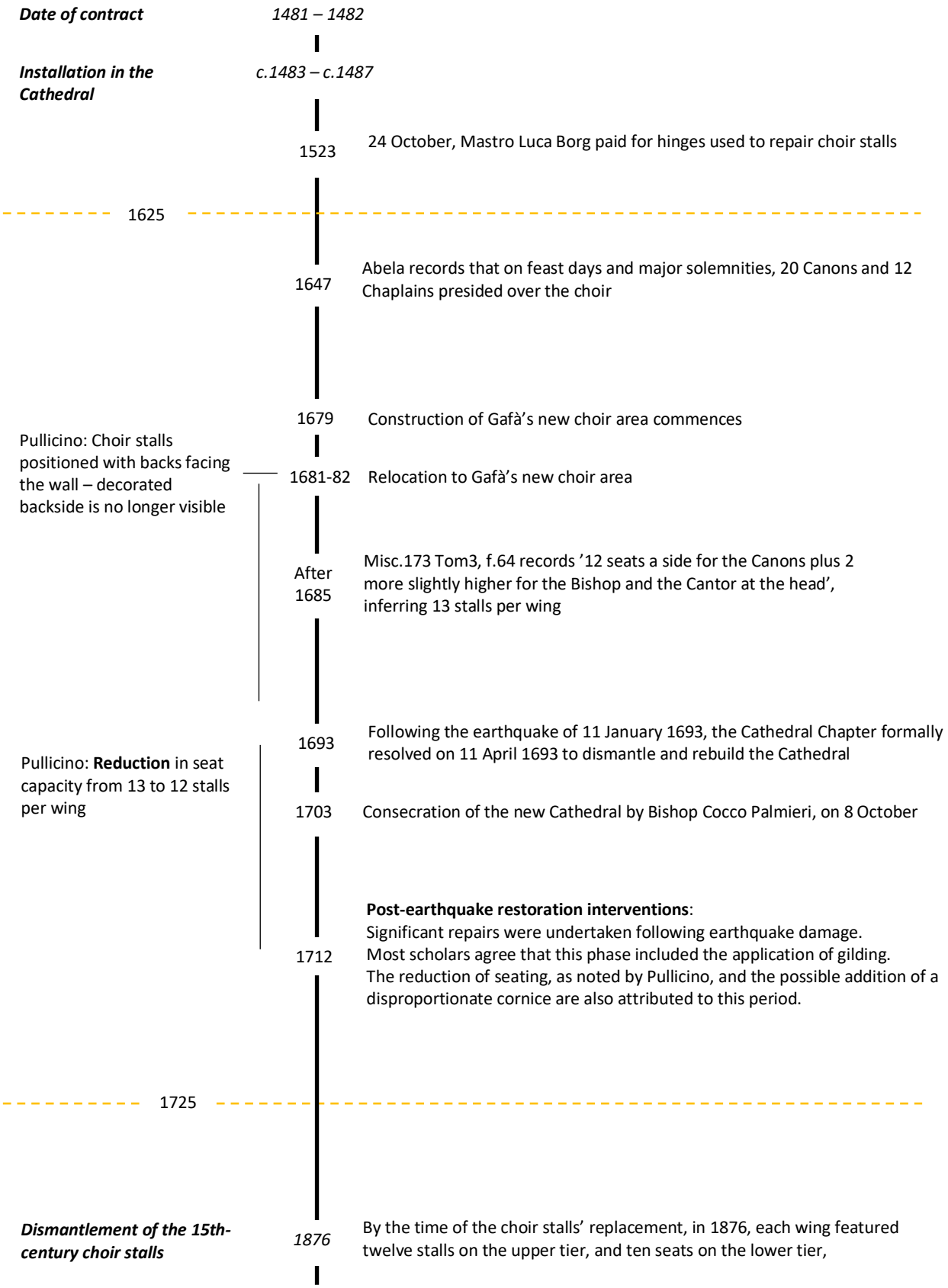
Post-1681: reduction of seating capacity

At a later stage, the total number of stalls was reduced again to 24. Pullicino suggests this reduction occurred during the redecoration of Gafà's new choir area, when the marble wall cladding reduced the available space, necessitating the removal of one stall from each wing of the choir (Pullicino, 1877, p.6). Although Pullicino does not date this phase explicitly, later scholarship places the reduction in 1712 (Buhagiar & Fiorini, 1996).
In 1693, twelve years after the choir stalls had been relocated behind the altar, a devastating earthquake severely damaged the Cathedral. Gafà's newly constructed choir area suffered the least damage. Some authors, such as Buhagiar and Fiorini (1996), recount that the choir stalls only incurred minor damage. However, Pullicino (1877) urges caution in assuming that the choir stalls were unaffected by such a catastrophe. Both agree that significant restoration efforts following the 1693 earthquake were undertaken during the intervention of 1712.

1712: major intervention

This 1712 date, inscribed in gilded lettering on the lower section of the **Virgin and Holy Ghost** panel (see *2.2.2.3 Completion and installation*) is widely understood to mark a major intervention on the choir stalls. However, the specifics and aim of the intervention remain unclear.

Pullicino (1877, p.7) speculates that after the Cathedral had been rebuilt anew, in grand architectural style, complementing the newly constructed choir area and the grandiose titular painting by Mattia Preti, it would have been inconceivable not to enhance the choir stalls in some manner. He believes that the inscription refers to the general restoration following the 1693 earthquake, which included the re-gilding of the choir (Pullicino,1877) pg.15). Other scholars suggest that this intervention involved the reduction of the two stalls (Buhagiar & Fiorini, 1996, p.169), or the possible addition of the disproportionate cornice mentioned by Pullicino as a later addition (Larinà, 2008)



Timeline 3. Chronological overview of alteration events, as described in published literature.

2.3. Research Gap

The significance of these choir stalls is widely recognized by scholars, yet their original form remains largely unexplored. Existing research has predominantly focused on their art historical value, often limited to specific elements such as the inlaid panels and carvings. This narrow scope has left ample room for further investigation to achieve a more comprehensive understanding of the artefact and its evolving use over time. Moreover, several salvaged components, including disassociated carved and functional elements known to have formed part of the choir stalls, remain unexamined, while numerous fragments preserved in institutional storage are absent from published literature.

Given these uncertainties, tracing the curation decisions and modifications made over time becomes essential for an accurate interpretation of the artefact. This dissertation seeks to address the critical question: Can an interdisciplinary approach—combining art history, material analysis, and archival research—offer new insights into the dynamics of these alterations and decisions?

To address this research gap, the objectives of this dissertation are to:

- document and analyse the surviving fragments through material and technical examination.
- to reconstruct, as far as evidence allows the original configuration of the stalls and identify subsequent phases of modification.
- investigate the archival and documentary evidence relating to the curation, relocation, and alteration of the stalls between the 17th and early 18th centuries.
- assess how an interdisciplinary approach can contribute to a more nuanced understanding of the stalls' evolving function and meaning.

While the dissertation engages with scholarship on reuse, liturgical space, and the documented history of the Mdina stalls, a systematic review of the wider typological and technical literature on Renaissance wooden choir ensembles was not developed as a standalone strand of the literature review. This is partly due to the stalls' fragmented survival and the project's prioritisation of evidence-led reconstruction based on archival sources and direct material observation. Nevertheless, the broader literature on Renaissance choir stalls—particularly studies that synthesise timber selection, constructional typologies, workshop practice, and surface treatments—offers a valuable comparative framework and is therefore identified as a priority for further extension of this research (see 7.7)

3. METHODOLOGY

3.1. Introduction

The research focuses on the study of a historical and cultural artefact in relation to its context: the 15th-century choir stalls at St Paul's Cathedral, Mdina, Malta, between 1625 and 1725. This methodology section outlines the research design, data collection methods, and analytic procedures employed to investigate the historical narrative of the choir stalls.

3.1.1. Research philosophy

A pragmatic approach underpins this research, allowing the integration of contextual interpretation with evidence-based analysis. The study combines the interpretation of historical, cultural, and archival contexts with the examination of material and documentary evidence, enabling a balanced understanding of the choir stalls´history that accommodates both interpretative perspectives and empirical data

3.1.2. Research design

The research was designed to investigate and describe the material transformations of the choir stalls in relation to their historical context. By employing a mixed-methods approach, that includes archival research, material analysis and data triangulation, this dissertation offers a comprehensive examination of the history and alterations of the choir stalls during the period from 1625 to 1725.

The investigation adopted a thematic approach, focusing on three main themes:

Original form;

Structural and functional alterations; and

Changes in decorative treatment

Original form: this is focused on identifying the original design of the choir stalls to establish a baseline for assessing later modifications. The analyses explored the manufacturing techniques and materials used, as well as the original positioning, dimensions, and distribution of components.

Structural and functional alterations: this section examines modifications related to the structural and functional aspects of the choir stalls and/or their individual components. The investigation uncovered evidence of relocations, dimensional changes, and addition or removal of functional elements. This analysis aimed to determine how these alterations affected the configuration and functional use of the choir stalls over time.

Changes in decorative treatment: the focus of this theme was on identifying and analysing alterations that may have affected the choir stalls' aesthetic appearance. Subdivided into

categories such as frames, gilding, carving, and inlays, this section sought to understand how changes in these areas impacted the overall visual character of the choir stalls.

3.2. Data Collection Methods

3.2.1. Archival research

Archival research primarily relied on the Archivium Cathedralis Melitensis (ACM) at the Mdina Cathedral Archives, from which all documents referenced in this dissertation were sourced, except for the original contract of works. The latter is conserved in the Giuliana Antica at the Dominican Archives in Rabat. These sources offered valuable insights, including contractual details, Cathedral plans, and chapter deliberations, which were analyzed to reconstruct the historical narrative and identify key events influencing the choir stalls.

Re-interpretation of contract: Details relating to the manufacture and/or design of the choir stalls included in the contract were re-interpreted and analysed in relation to material evidence. The transcription of the contract was conducted by Ms Mireia Peris Vicent, researcher in the field of historiographical sciences and techniques at the Complutense University of Madrid (UCM).

Survey of Cathedral plans: This process aimed to identify possible relocations of the choir stalls and/or any significant alterations made to their immediate surroundings. The plans were scaled proportionally and super imposed. Scaling was derived from the scale indicated on Drawing 474 (see *Spatial Analysis under Documentation*).

Survey of Chapter deliberations: This survey provided supporting evidence for the timeline decisions by the Cathedral Chapter regarding alterations and could offer insights into how the choir stalls were valued and curated.

Analysis of other archival sources and secondary data: This analysis included examining the content of other historical documents, such as the Cathedral journals and firsthand accounts of individuals who witnessed the choir stalls installed in the Cathedral. The sources were used to gather descriptive information about the stalls and/or their immediate surroundings.

3.2.2. Conservation records and visual observations

Conservation records

This dissertation includes previously unpublished insights gained from the detailed examination of the choir stall fragments during the 2014–2018 conservation project (see *1.3. Positionality of Researcher*). The project focused on identifying the original form of the choir stalls, with non-original alterations carefully recorded through photographic and descriptive documentation, forming the basis for subsequent analysis in this research.

Current distribution of remnant fragments

The identified fragments of the 15th-century choir stalls are currently distributed across three distinct areas of the Mdina Cathedral and Cathedral Museum complex:

1 - **The Cathedral** - The elaborate canopy carvings, along with an inlay depicting a figure playing the lute (commonly identified as Orpheus), were repurposed and integrated into the 1876 choir stalls. These elements remain in situ and are still preserved within the Cathedral.

2 - **Museum's Baroque Gallery** – Select fragments are displayed in the Cathedral Museum's Baroque gallery, alongside the 2018 reconstruction (Fig.26.), which also incorporates the fragments restored during the project.

3 - **Museum's Reserve Collection** – Other fragments and panels are currently housed in storage within the same building as part of the Museum's reserve collection.

Fig. 26. Annotated image of the 2018 segmental reconstruction of the 15th-century choir stalls. (Joseph Borg, 2018)

Visual examination of physical elements

A meticulous visual examination of the salvaged fragments, identified as belonging to the choir stalls through existing cataloguing records and material examination, was conducted using the naked eye and a handheld 10x lens, noting any visible modifications, signs of wear, or damage that might suggest previous alterations. Observations were undertaken under diffuse and raking light conditions, with selected areas examined in greater detail using a handheld DinoLite Edge Digital microscope AM7915MZT for magnifications ranging between 20-200X.

The visual analysis focused on several key aspects:

Manufacturing techniques: A detailed examination was carried out of the joining systems, inlay techniques, carving styles, and construction methods employed in the choir stalls. These findings were compared with historic woodworking techniques from the 15th century, as well as those of later periods, to assess whether the techniques observed reflect original manufacture or subsequent modification.

Marks and indicators: Analysis was carried out of markings present on the fragments, including tool marks, inscriptions and patterns of wear, which provide insight into processes of construction, alteration, and use over time.

Wood identification (Macroscopic): Identification was carried out of the types of wood used in the construction and modification of the choir stalls. Variations in wood grain, colour, or texture were carefully recorded to identify differences in material sources or phases of replacement, shedding light on any possible restoration interventions.

Documentation

Photographic documentation

Each fragment was photographed from a series of standard viewpoints, including front, reverse, lateral, and detailed views, under both natural and artificial light, with particular attention to distinctive features and signs of alteration. Images from the conservation project were taken using a Fuji HS30EXR, while more recent photographs were captured with a Nikon D5600. Selected images were rectified in Photoshop to correct distortions and prepare them for AutoCAD processing.

Metric Survey

The metric analysis of the choir stall fragments was conducted to obtain precise measurements, assess proportions, and to understand the original construction of the choir

stalls. This analysis also assisted in identifying patterns and inconsistencies that could provide insights into the original layout and the subsequent alterations made to the ensemble over time.

Metric analysis was performed using a combination of traditional and digital tools to ensureaccuracy and consistency. Calipers and micrometers were used for precise measurements of small-scale details, while measuring tapes, rulers, and a Trotec BD21 distance meter were employed for larger-scale measurements, including architectural dimensions of the Cathedral required for plan scaling. All measurements were recorded in standardised format usingmetric units (millimeters) to ensure consistency.

Graphic documentation

The measurements obtained were utilized to reconstruct a hypothetical model of the choir stalls' dimensions. This reconstruction, combined with data from Cathedral plans and extracted measurements of the old church, facilitated a more detailed analysis of the stalls' spatial relationships (measurements on illustrations are referenced in cm).

All graphic documentation for this research was conducted by conservation architect Mr Bruno Ambrosio.

Spatial analysis

The center-to-center width of the stalls was derived from measurements recorded on the original fragments and established at approximatel 630mm for regular stalls and 670mm for dignitary stalls. Measurements of the old Cathedral were extracted from Drawing 474, (Fig. 27.) which incorporates a scale expressed in *canne Maltesi*, with one *canna* taken as equivalent to 2090.04mm (Gyllenbok, 2018). These data were compared with dimensions measured on-site within the current Cathedral. While the fundamental measurements—such as the radius of the cupola, nave length and width, and other key features— were found to be broadly consistent between Drawing 474 and the present building, certain discrepancies between the historical plan and the existing structure were also identified. These discrepancies fall outside the scope of the present study and merit further investigation in a dedicated analysis.

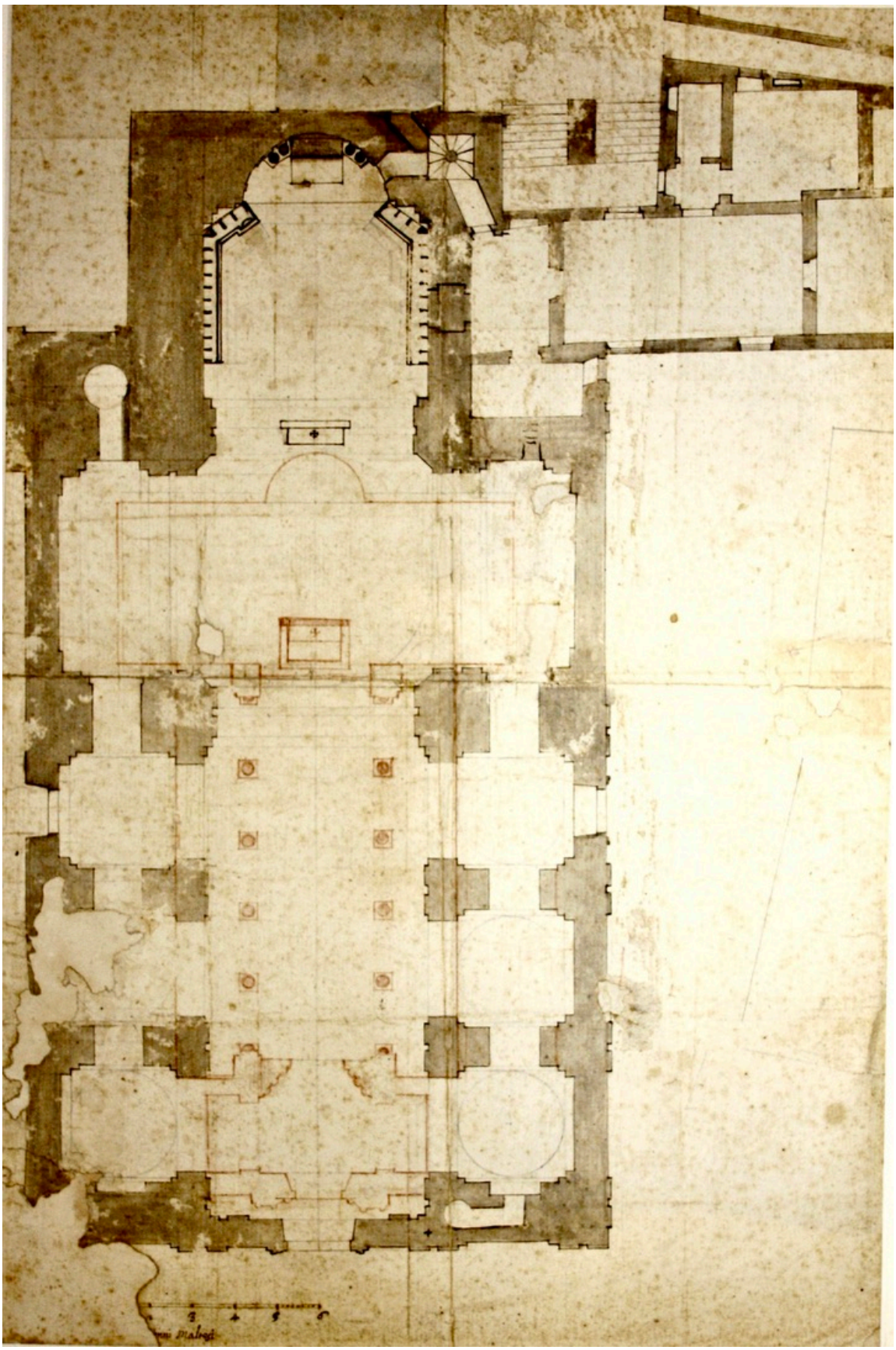


Fig. 27. Drawing 474 (MCM). Undated, carefully scaled plan (scale in *canne Maltesi*) depicting the footprint and proportions of the pre-1681 St Paul's Cathedral in relation to Gafà's Baroque intervention, providing a key baseline for extracting the dimensions of the earlier structure. (courtesy of Mdina Cathedral Archives)

Non-destructive examination informing material interpretation and sampling

Prior to any sampling, the fragments were examined using non-destructive methods to characterise surfaces and identify areas of diagnostic value. This included systematic visual inspection under diffuse and raking light, low-magnification microscopy to assess stratigraphic complexity at edges and losses, and comparative inspection of original and replacement elements to distinguish manufacturing and modification phases. These observations supported the identification of tool marks, repairs, and finish residues, and were recorded photographically and in written proformas. The outcomes of this non-invasive examination informed the sampling strategy by highlighting representative zones where surface observation alone could not reliably establish the chronological relationship between finishes and interventions.

3.2.3. Stratigraphic analysis

Introduction

Stratigraphic analysis was undertaken by the author, under the supervision and guidance of Dr Roberta De Angelis, only where non-destructive examination could not, on its own, establish the chronological relationship between observed finishes and identified modification phases. Initial visual and low-magnification inspection was used to map areas of clear layering, distinguish original from replacement timber, and identify surfaces likely to retain earlier coatings beneath later campaigns. On this basis, a limited sampling programme was designed to minimise impact while maximising interpretative value, with results presented and discussed in Chapter 6.

On this basis of this non-invasive assessment, it became possible to identify a limited number of locations where targeted sampling could meaningfully clarify the sequence of decorative interventions. Stratigraphic sampling was therefore undertaken only where surface examination alone could not reliably establish the chronological relationship between finishes. The objective of this exploratory stratigraphic analysis was to determine the sequence of decorative campaigns, with results presented and discussed in Chapter 6.

Sampling strategy and Methodology

Given the inherently destructive nature of sampling, this stage was approached with caution and sensitivity. A systematic and methodologically informed strategy was adopted, in which the selection of sampling locations was directly guided by the results of prior non-invasive examination. Visual and microscopic analyses were used to identify representative areas that exhibited clear stratigraphic layering, visible alterations, or finishes associated with distinct construction or modification phases.

On this basis, three samples were extracted (see *Table 1*.), each selected to address a specific research question relating to original manufacture, and subsequent modification (see *6.1. Stratigraphic analysis - introduction*). Collectively, the three samples were selected to represent (i) an original structural/carved element, (ii) an original pictorial/inlaid element, and (iii) a later-added component associated with a known modification phase, thereby enabling a controlled comparison between original manufacture and subsequent interventions (Table 1; Fig. 28.). This targeted approach ensured that the number of samples was kept to a minimum while maximising the interpretative value of the results. The samples measured approximately 2mm in width and 4mm in length. The extraction included part of the support to ensure a comprehensive stratigraphic sequence and was undertaken following formal authorisation and ethical approval (see *Section 3.4. Ethical considerations*).

Systematic documentation was critical throughout the sampling process. Details and characteristics of each sampling location were recorded using proformas (see *Appendix B*) whilst high-resolution images were taken before and after sample removal using a Nikon D5600 camera and a Dino-Lite digital microscope. Each sample was lifted using a surgical scalpel, placed in aluminium foil and carefully stored in a labelled container.

Sample label	**Type of element**	**Presumed period of manufacturing**
CSM02_SC	Solomonic Column	15th century
CSM03_AF	Added Frame	17th century
CSM04_AEP	Adam and Eve Panel	15th century

Table 1. List of samples including their location and the presumed manufacturing period of the sample source.

Sample preparation

Each sample was first examined under a Nikon SMZ800 stereomicroscope (10-63x) and imaged using a Nikon Digital Sight DS-Vi1 camera operated with a NIS Elements BR software (versions 4.20 and 5.21). Samples were then embedded in Technovit 2000 methacrylate resin and cured under blue light. Cross sections were prepared by initially using wet grinding to remove excess resin from the resin blocks. Samples were then mounted on a MOPAS hand polishing device, ground and polished using Micro-mesh abrasive polishing cloths (2400-8000 mesh). Throughout the grinding and polishing process, the samples were monitored under a Nikon SMZ800 stereomicroscope to ensure proper exposure of the cross-section and to avoid any potential damage during the preparation process.

Fig. 28. Sampling locations for stratigraphic analysis. The locations correspond to the samples listed in Table 1. (a) **CSM02_SC** (Solomonic column), (b) **CSM03_AF** (added frame), and (c) **CSM04_AEP** (Adam and Eve panel). (James Saliba, 2024)

Polarising Light Microscopy

The polished cross-sections were examined using a Nikon Eclipse CiPOL Polarizing Microscope, under both visible light and UV-induced luminescence, at magnifications ranging from 50x to 500x. This magnification range enabled both the assessment of overall stratigraphic structure and the detailed examination of individual layers, interfaces, and material characteristics relevant to the identification of successive decorative campaigns. Visible light was provided by a halogen light source, whereas the UV setup included a C-SHG1 Super High-Pressure Mercury Lamp supplying ultraviolet illumination, and a Nikon UV-2A filter block (Excitation: 330-380 nm, Dichroic mirror: 400 nm, Emission: 420 nm). Characteristics of each layer were described and recorded on proformas, while images were taken using a Nikon Digital Sight DS-Fi2 camera operated by Nikon NIS Elements BR software (versions 4.20 and 5.1).

3.3. Data Analysis

A thematic approach was employed, focusing on key themes including original form, relocations, frames, gilding, inscriptions, inlays, and carvings. Comparative analysis of archival sources, material evidence, and historical context, was used to assess areas of convergence and divergence between previous scholarly interpretations and the findings of this study, thereby refining existing narratives concerning the choir stalls' history. This process involved correlating archival data, measured dimensions, tool marks, construction features, and material characteristics of the surviving fragments in order to validate proposed chronologies and identify previously undocumented changes.

A hypothetical reconstruction was developed through the synthesis of physical evidence, archival documentation, and comparative analysis, offering a visualisation of choir stalls' original design. Chronological mapping was used to establish a timeline of alterations and relocations based on material analysis and documentary source. Spatial analysis was conducted to gain deeper insight into the relationship between the choir stalls and the Cathedral's architectural framework (see *Spatial Analysis* under *3.2.2*). Finally, the findings were integrated within their broader historical context, allowing assessment of the cultural and artistic significance of the choir stalls, as well as the influence of external factors such as political events, economic conditions, and ecclesiastical directives on their modifications over time.

This structured approach provides an in-depth analysis of both the original features and subsequent modifications of the choir stalls, contributing valuable knowledge to the broader understanding of the artefacts' historical context and evolution.

3.4. Ethical Considerations

One body of data examined in this dissertation was compiled by the author between 2014 and 2018 as part of a conservation project aimed at reconstructing a segment of the 15th-century choir stalls for didactic purposes at the Mdina Metropolitan Cathedral Museum (see *1.3. Positionality of Researcher*). That project was funded by Mme Marie-Amélie Dewavrin and the Institute for Maltese Culture. Permission for the use of this material for academic research purposes was granted by the Metropolitan Chapter. Permission for the lifting of samples and undertaking of invasive analysis was granted following a formal request to the Commission for Church Cultural Patrimony, ensuring compliance with established ethical and conservation standards.

A limited use of ChatGPT, a generative AI language tool was employed in accordance with University of Malta regulations. Their application was restricted to tasks such as text refinement, conciseness, and language enhancement and did not extend to data analysis, interpretation, or the generation of original research content.

4. RESULTS – Archival Research

4.1. Introduction

This chapter explores archival documents detailing the curation and transformation of the 15th-century choir stalls at St Paul's Cathedral, Mdina, between 1625 and 1725. To ensure clarity and coherence, the content is organised thematically around the following key topics:

Original Form: Insights into the stalls' original design and purpose, with the full contract provided in *Appendix A*.

Relocations: Analyses the history of the stalls' movements, uncovering a previously unrecognised relocation event.

Spatial Analysis: Examines the Cathedral's dimensions and the stalls' placement within the space.

Resizing: Investigates evidence of resizing or structural modifications to the stalls.

Decorative treatment: Traces changes to the stalls' decorative and visual elements.

This thematic approach highlights patterns of continuity and change, offering a deeper understanding of the decisions that shaped the stalls' curation and adaptation over time.

4.2. Original Form

The works contract (Fig.19), transcribed and presented in *Appendix A,* is a critical source for understanding the original concept of the choir stalls (see *2.2.3. Form – Original design*). The reinterpretation of this document, undertaken as part of this research, suggests that some contradictory narratives surrounding the stalls may stem from earlier misinterpretations of its content.

Further details regarding the contract's reinterpretation and its implications are explored in sections *7.3.1. Before 1625 - Original configuration and placement of the choir stalls,* and 8.2. *Reconstructing origins*.

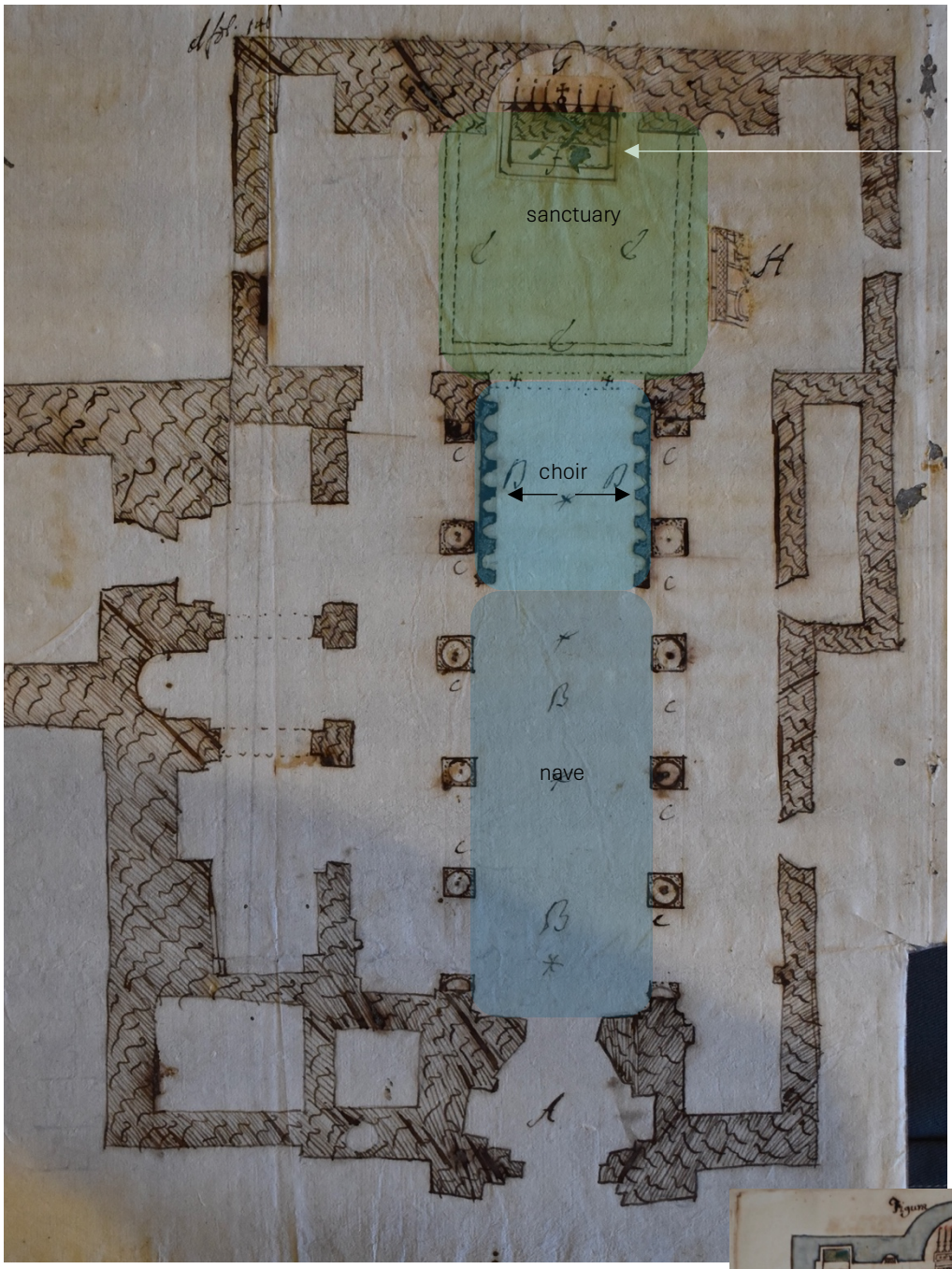
4.3. Relocations

Literature presents seemingly conflicting details for the positioning of the choir stalls prior to their relocation to Gafà's reconstructed choir area in 1679-82. (See *Completion and Installation* under *2.2.2.*). An analysis of the Cathedral plans and other documents offered valuable insights into the shifts and alterations of the choir stalls between 1625 and 1725.

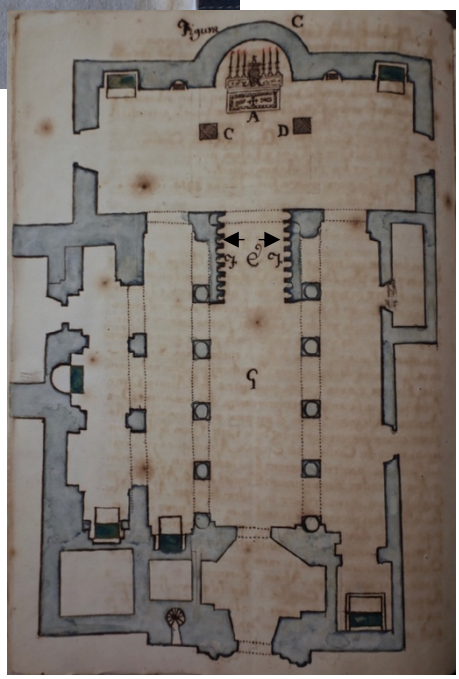
4.3.1. Original position of installation

Upon closer examination, it becomes evident that the original position of installation, as noted by Larinà (2008, p.43), was within the nave, specifically occupying the space between the first four pilasters (Fig. 29.). At this time, the main altar, later referred to as titular altar, was positioned against the tribune, as Pullicino (1877, p.5) also correctly states.

This layout is illustrated in MCM. Drawing 636 (Misc. 60 f.146) (Fig.29.a) and corroborated by another plan found in ACM. Misc.47 (f.234, after 1741) (Fig.29.b). This manuscript (Misc.47, f.235) further confirms that the choir stalls remained in the nave till 1626, when they were relocated to the presbytery area, and set against the tribune - '*tirato l coro in sopra et attaccato alla Tribona*' (Fig. 30.).



a



b

Fig. 29. Plans of the pre-Baroque St Paul's Cathedral (Mdina) showing the choir stalls positioned within the nave (black arrows), a configuration most likely in use between c. 1490 and 1626. The arrangement suggests a tripartite articulation of liturgical space, distinguishing the sanctuary/presbytery from a choir zone inserted within the nave, with the remaining nave reserved for the laity. The titular altar is shown at the east end within the apse. (James Saliba, 2024)

(a) MCM. Drawing 636 (ex-ACM. Misc. 60, f. 146);

(b) ACM. Misc. 47, f. 234.

4.3.2. 1626 – A forgotten relocation

The 1626 relocation of the choir stalls was part of a broader spatial reorganization within the Cathedral. A new main altar was constructed closer to the nave, while the previous altar, originally positioned against the tribune, was designated as the titular altar. This transformation reshaped the presbytery, which was extended outward toward the nave (ACM. Misc.47 f.235), occupying the space between the first four pilasters that had formerly housed the choir. As a result, the high altar and presbytery were brought closer to the congregation, improving visibility, while the titular altar remained against the tribune. The choir stalls were relocated to the space between the two altars as part of this major reorganization (Fig. 30.).

Misc.47 further supports this reorganization by citing the testimony of Don Antonio Allegritto, recorded in the *Registro delle nove più mirabili della buon memoria di Monsignor Cocco Palmieri*, stating –

> *Translation*: "…In the Cathedral Church, the altar, which was previously attached to the wall of the tribune and had the choir positioned before it in the nave, was in 1626 relocated by Bishop Cagliares, of blessed memory. The altar dedicated to St Paul was transferred and newly erected at the entrance of the nave, and the presbytery was constructed in front of it, extending across the nave's width. Meanwhile, the choir stalls were relocated behind the altar, placed in the space between the two altars." (ACM. Misc.47, f.235) (Fig. 31 yellow)

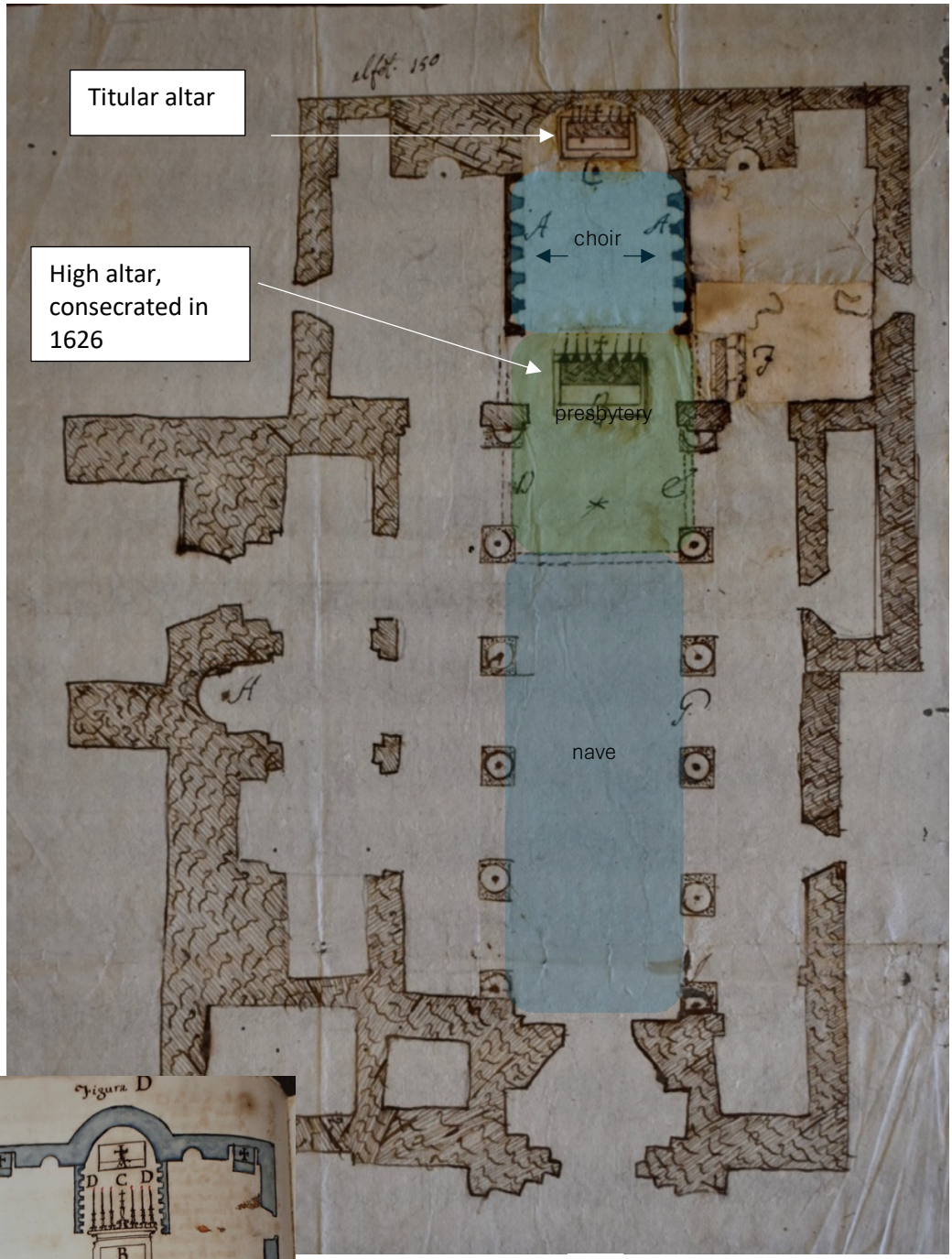
The consecration of this new altar took place on 14 April 1626, as recorded in the *Giornale della Cattedrale* (ACM. Misc.168, Tom.3, f.671) (Fig.32). This date is also corroborated by the entry in the Chapter deliberations (ACM. Delib. Capit. 1624 -1654, Tom.2, fol.26) (Fig.33) as well as in Abela's *Descrittione* (1647, p.333). This suggests that, in the weeks leading up to this event, the choir stalls were being altered and moved to their new location. This overlooked relocation is a major discovery of this dissertation, as it identifies a previously unrecognized movement of the 15th-century choir stalls—a key contribution that clarifies the chronology of the choir's spatial evolution (see *2.2.1. completion and installation & 7.3.2. 1626 Relocation).*

This previously unrecognised relocation is corroborated by the following plans:

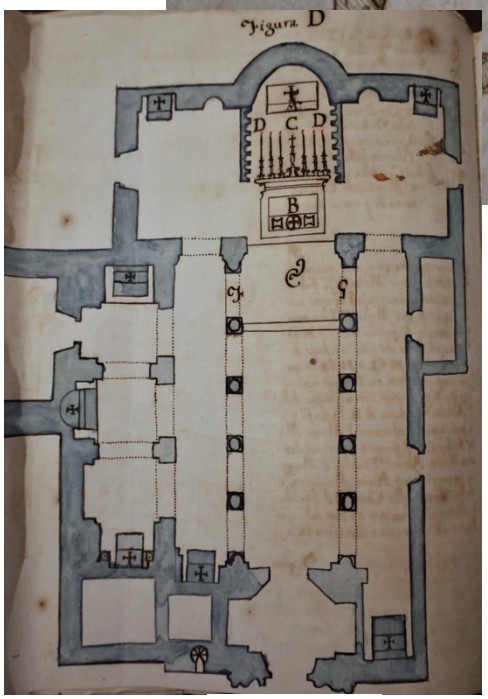
MCM. Drawing 637 (ex–ACM. Misc.60 f.150)

MCM. Drawing 752 (ex– ACM. Misc.60, dating 1700)

ACM. Misc.47 f.236 (dating after 1741)



a



b

Fig. 30. Plan of the pre-Baroque St Paul's Cathedral (Mdina) depicting the choir stalls after the 1626 relocation (black arrows). The drawing indicates a wider reordering of liturgical space in which a new high altar was established further west, closer to the nave, while the titular altar remained within the apse. In this scheme, the choir area is repositioned behind the high altar, redefining the relationship between sanctuary, choir, and nave. (James Saliba, 2024)

(a) MCM. Drawing 637 (ex–ACM. Misc.60, f.150)

(b) ACM. Misc.47, f.236

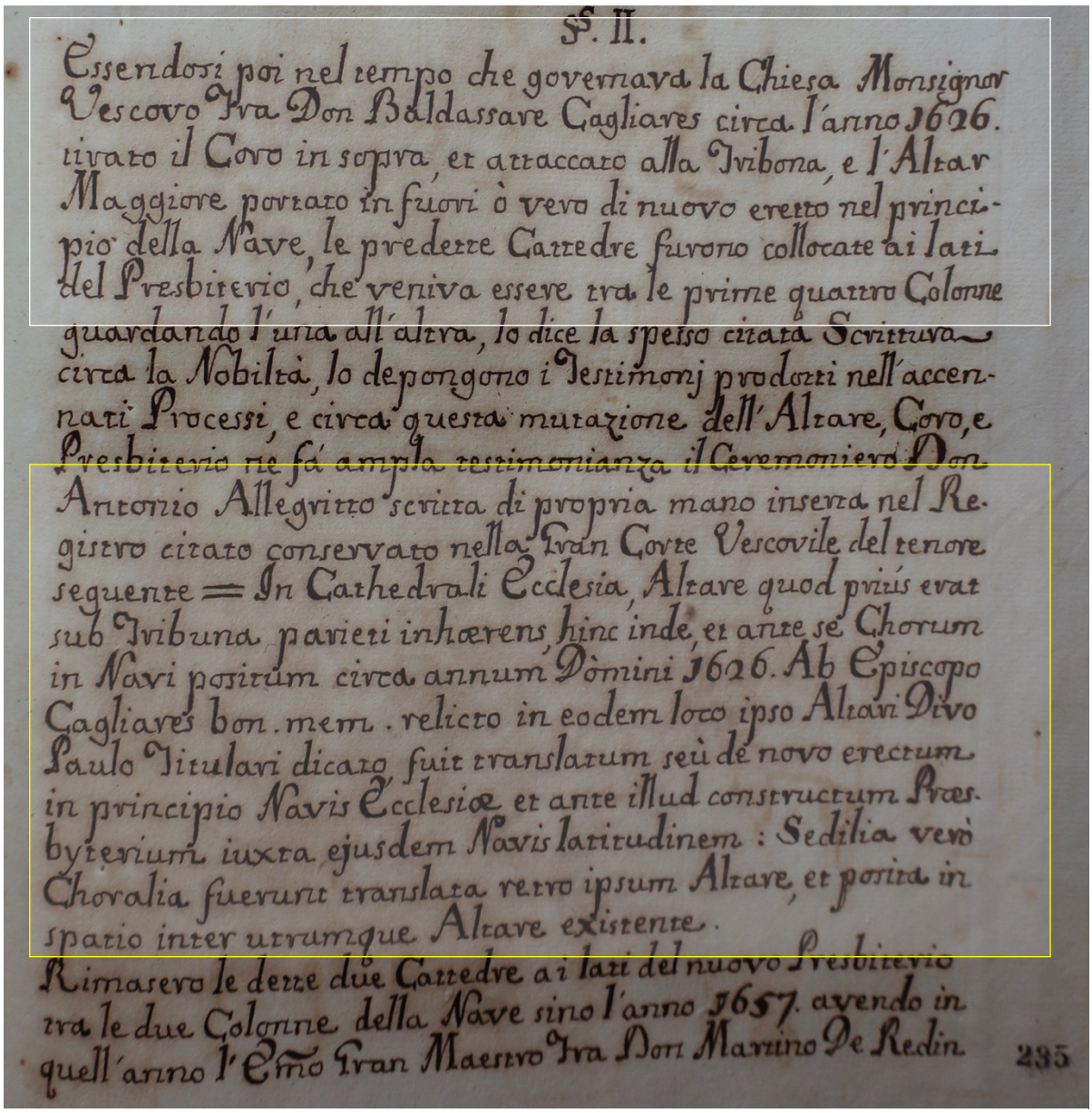

§. II.
Essendosi poi nel tempo che governava la Chiesa Monsignor
Vescovo Fra Don Baldassare Cagliares circa l'anno 1626.
tirato il Coro in sopra, et attaccato alla Tribona, e l'Altar
Maggiore portato in fuori ò vero di nuovo eretto nel princi-
pio della Nave, le predette Cattedre furono collocate ai lati
del Presbiterio, che veniva essere tra le prime quattro Colonne
guardando l'una all'altra, lo dice la spesso citata Scrittura
circa la Nobiltà, lo depongono i Testimonj prodotti nell'accen-
nati Processi, e circa questa mutazione dell'Altare, Coro, e
Presbiterio ne fà ampla testimonianza il Cerimoniero Don
Antonio Allegritto scritta di propria mano inserta nel Re-
gistro citato conservato nella Gran Corte Vescovile del tenore
seguente = In Cathedrali Ecclesia, Altare quod priùs erat
sub Tribuna parieti inhærens, hinc inde, et ante se Chorum
in Navi positum circa annum Dòmini 1626. Ab Episcopo
Cagliares bon. mem. relicto in eodem loco ipso Altari Divo
Paulo Titulari dicato, fuit translatum seù de novo erectum
in principio Navis Ecclesiæ et ante illud constructum Præs-
byterium iuxta ejusdem Navis latitudinem: Sedilia verò
Choralia fuerunt translata retro ipsum Altare, et posita in
spatio inter utrumque Altare existente.
Rimasero le dette due Cattedre ai lati del nuovo Presbiterio
tra le due Colonne della Nave sino l'anno 1657. avendo in
quell'anno l'Emo Gran Maestro Fra Don Martino De Redin
235

Fig. 31. ACM. Misc. 47, f. 235. *Extract recording the 1626 spatial reorganisation of the pre-Baroque Cathedral*. The former main altar "under the tribune" was retained as the titular altar, while a new high altar and presbytery were established further west and the choir stalls were relocated from the nave to the space between the two altars. (James Saliba, 2024)

Original text*:* Essendosi poi nel tempo che governava la Chiesa Monsignor Vescovo Fra Don Baldassare Cagliares circa l'anno 1626 tirato il Coro in sopra, et attaccato alla Tribona, e l'Altar Maggiore portato in fuori ò vero di nuovo eretto nel principio della Nave....
Translation*: 'Later, during the time when the Church was governed by Bishop Monsignor Fra Don Baldassare Cagliares, around the year 1626, the choir was raised upwards and attached to the tribune, and the main altar was moved forward or rather newly erected at the beginning of the nave....'*

Quoted testimony of Don Antonio Allegritto (Yellow) - Translation in main text.
Original text*:*…In Cathedrali Ecclesia Altare quod prius erat sub Tribuna parieti inhoerens hinc inde et ante se Chorum in Navi positum circa annum Domini 1626 Ab Episcopo Cagliares bon.mem. relicto in modem loco ipso Altari Divo Paulo Titulari dicato fuit translatif seude novo erectum in principio Navis Ecclesiae et ante illud constructum Proesbyterium iuxta ejusdem Navis latitudinem: Sedilia vero Choralia fuerunt translata retro ipsum Altare et posita in spatio inter utrumque Altare existente

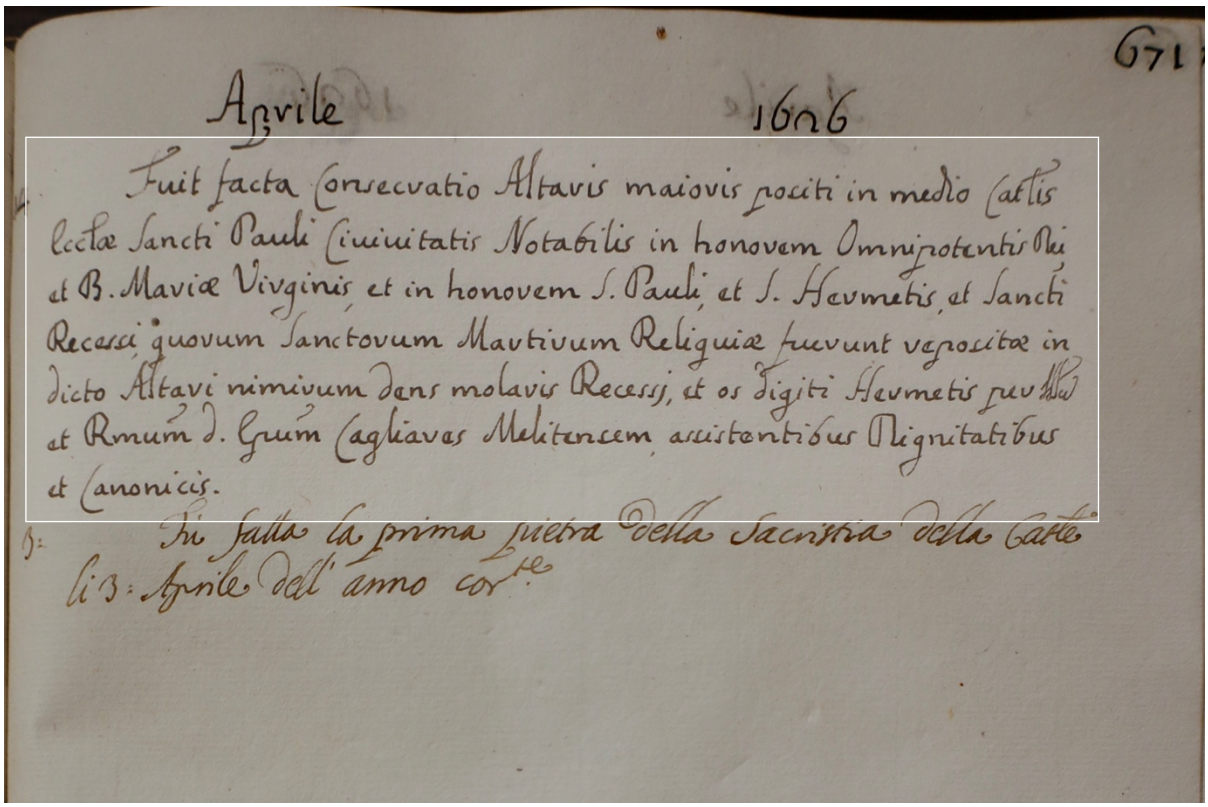

671
Aprile 1626
Fuit facta Consecratio Altaris maioris positi in medio Catlis Ecclae Sancti Pauli Civitatis Notabilis in honorem Omnipotentis Dei et B. Mariæ Virginis, et in honorem S. Pauli, et S. Hermetis, et Sancti Recessi quorum Sanctorum Martirum Reliquiæ fuerunt repositæ in dicto Altari nimirum dens molaris Recessi, et os digiti Hermetis per xxxx et Rmum d. Epum Cagliares Melitensem assistentibus Dignitatibus et Canonicis.
Si fatta la prima pietra della Sacristia della Catte
li a: Aprile dell' anno cor.te

Fig. 32. ACM. Misc.168, Tom.3., f.671. Entry in the Giornale della Cattedrale dated 14 April 1626 recording the consecration of the new high altar (altare maggiore) at St Paul's Cathedral. The entry corroborates the documented chronology for the 1626 liturgical reorganisation and the establishment of the new altar. (James Saliba, 2024)

Fuit facta Consecratio Altaris maioris positi in medio Catlis Ecclae Sancti Pauli Civitatis Notabilis in honorem Omnipotentis Dei et B. Maria Virginis, et in honorem S.Pauli, et S.Hermetis et Sancti Recessi quorum Sanctorum Martirum Reliquaiae fuerunt repositatae in dicto Altari nimirum dens molaris Recessi, et os digiti Hermetis per xxxx et Rmum d. Epum Cagliares Melitensem assistentibus Dignitatibus et Canonicis.

Translation – 'The consecration of the high altar, placed in the middle of the Cathedral Church of St Paul in the City of Notabile, was carried out in honor of Almighty God and the Blessed Virgin Mary, and in honor of St Paul, St Hermes, and St Recessus, whose relics of the holy martyrs were placed in the said altar, namely, a molar tooth of Recessus and a finger bone of Hermes, by the Most Reverend Lord Bishop of Cagliari in Malta, assisted by the dignitaries and canons.'

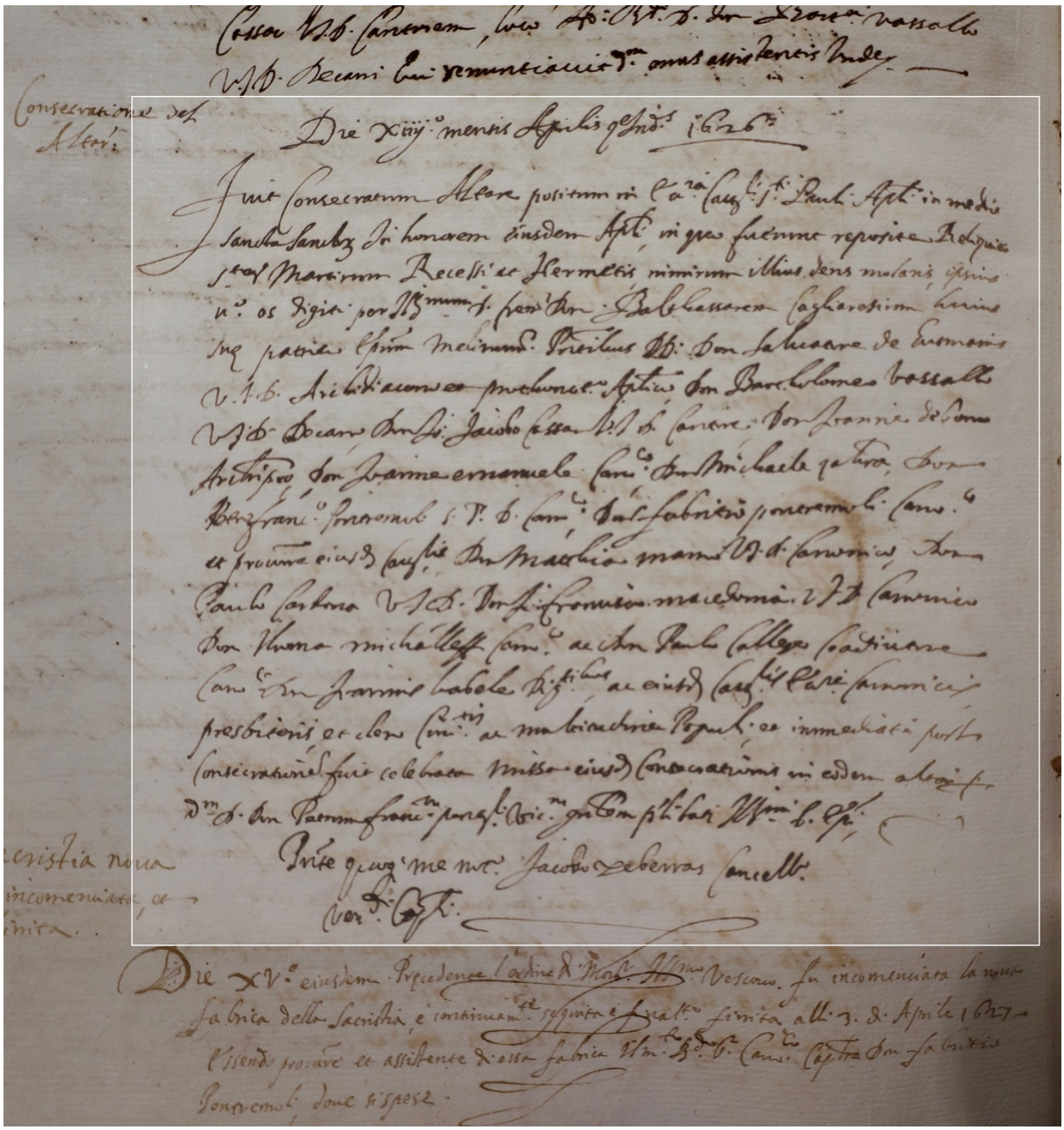


Fig. 33. *ACM. Delib. Capit. 1624 -1654, Tom2, fol.26.*

Entry from the Cathedral Chapter deliberations recording the 1626 consecration of the new high altar and corroborating the documented chronology for the liturgical reorganisation. The record also indicates the number of chapter members officiating at the ceremony (14 Canons, excluding the Bishop), providing contextual evidence for the size of the Chapter at this date. (James Saliba, 2024)

4.3.3. 1682 – Relocation to Gafà's choir area

As is well known and agreed among scholars, the choir stalls were relocated again during the reconstruction of Gafà's choir area (1679-1682) (see *2.2.4. Alterations*). The plans (Fig. 34. & 35.a.) showing the choir stalls in this new position also indicate that the raised presbytery, which had previously extended into the space between the first four columns of the nave, had by then receded back to the main pilasters at the crossing (Fig. 35).

Evidence for the relocation of the stalls is provided by a contemporary or near-contemporary documentary source, likely compiled in or shortly after 1685 (ACM. Misc.173 Tom.3, f.64), which retrospectively records that the choir, originally made in 1481, was transferred to the new choir area during the sede vacante of 1682. A second document, ACM. Misc.47 (f.237), which on internal evidence appears to post-date 1741, corroborates this relocation within the newly defined choir structure, positioned between the two altars:

> *Original text: le sedie corali furono riportati dentro la fabrica del nuovo coro tra li due altari Titolare e Maggiore.*
>
> Translation: 'The choir stalls were brought back into the structure of the new choir between the two altars, the Titular and the Main.'

However, although this latter document also confirms that the relocation occurred during the sede vacante, it proposes the possibility that it may have occurred either between 1681-1682 or 1683-1684, as indicated by the disputes over the positioning of the *sedia giuratale*,which took place after 1702.

Although the precise date of the relocation has yet to be determined (between 1679 – 1682), for the purposes of this dissertation, it will be referred to as the 1682 relocation, based on the consecration date of Gafà's new choir area which took place on 28 June 1682 (Buhagiar & Fiorini, 1996, p.217).

The Cathedral plans reveal that the choir stalls maintained the same position, within Gafà's choir, till their dismantling in 1876.

The analysis of the choir stalls' relocations, supported by plans and archival records, establishes a more precise chronology of their movements within the liturgical space, while shedding light on the spatial evolution of the Cathedral between 1625 and 1725 (see *Timeline 4.*).

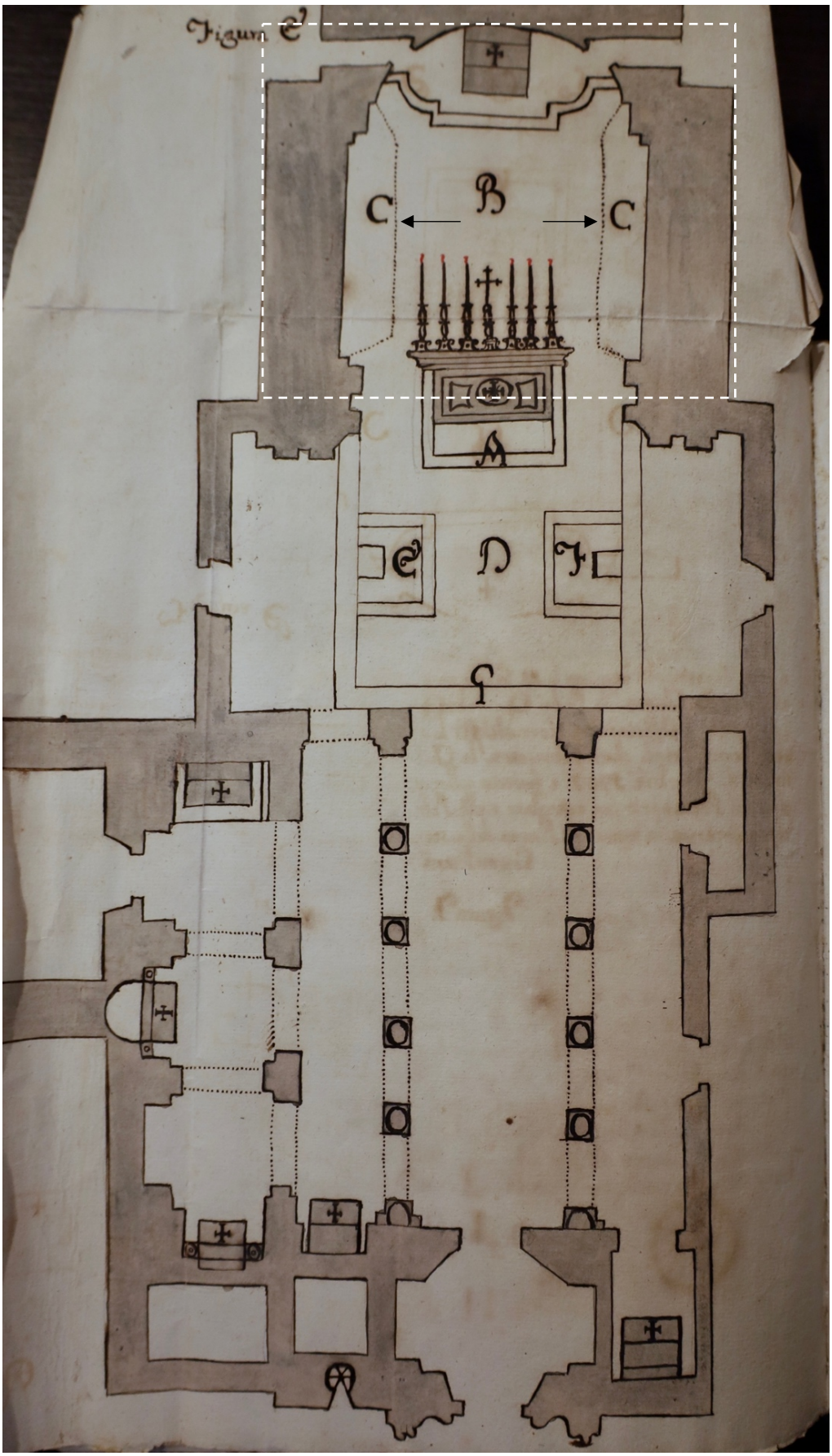
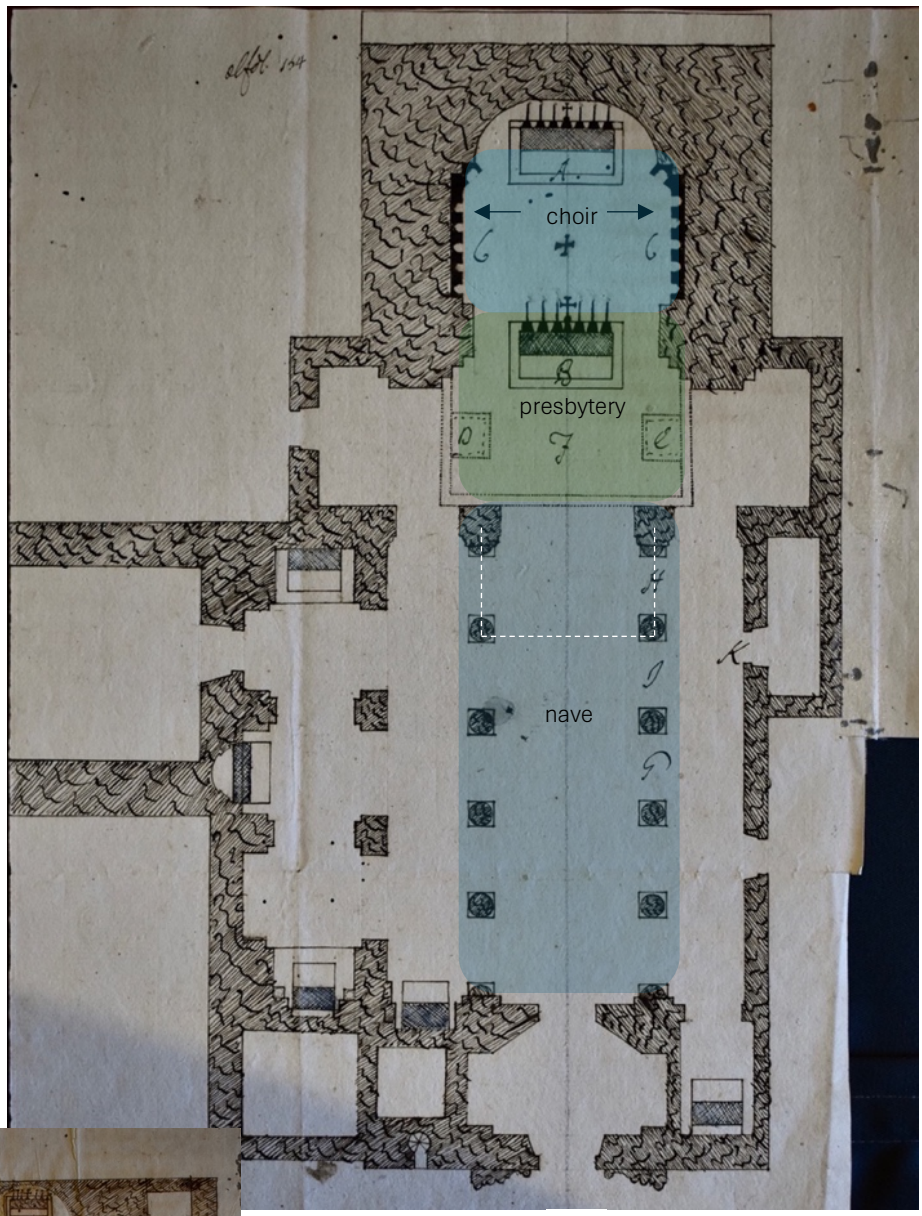
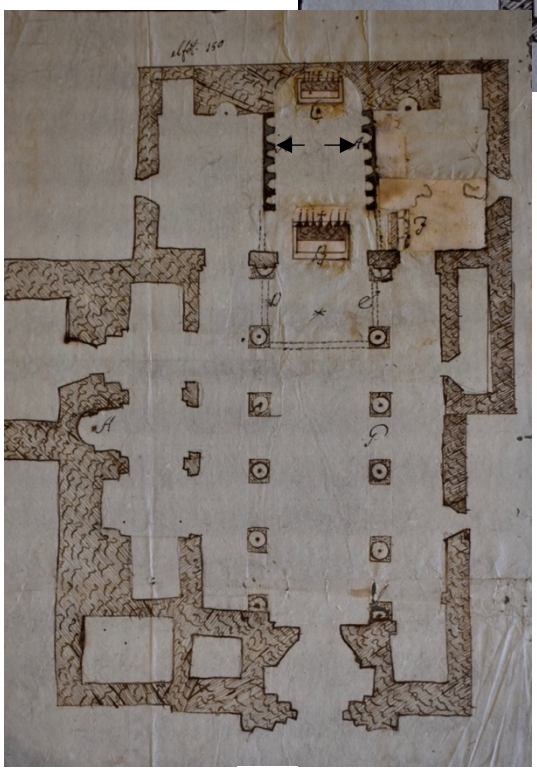


Fig. 34. ACM. Misc. 47, f. 238. Plan of the pre-Baroque St Paul's Cathedral (Mdina) incorporating Lorenzo Gafà's added choir area (1679–1682), showing the choir stalls in their post-1682 position (black arrows) within the new choir space (white dotted line). This arrangement remained in use until the stalls were dismantled and replaced in 1876. (James Saliba, 2024)



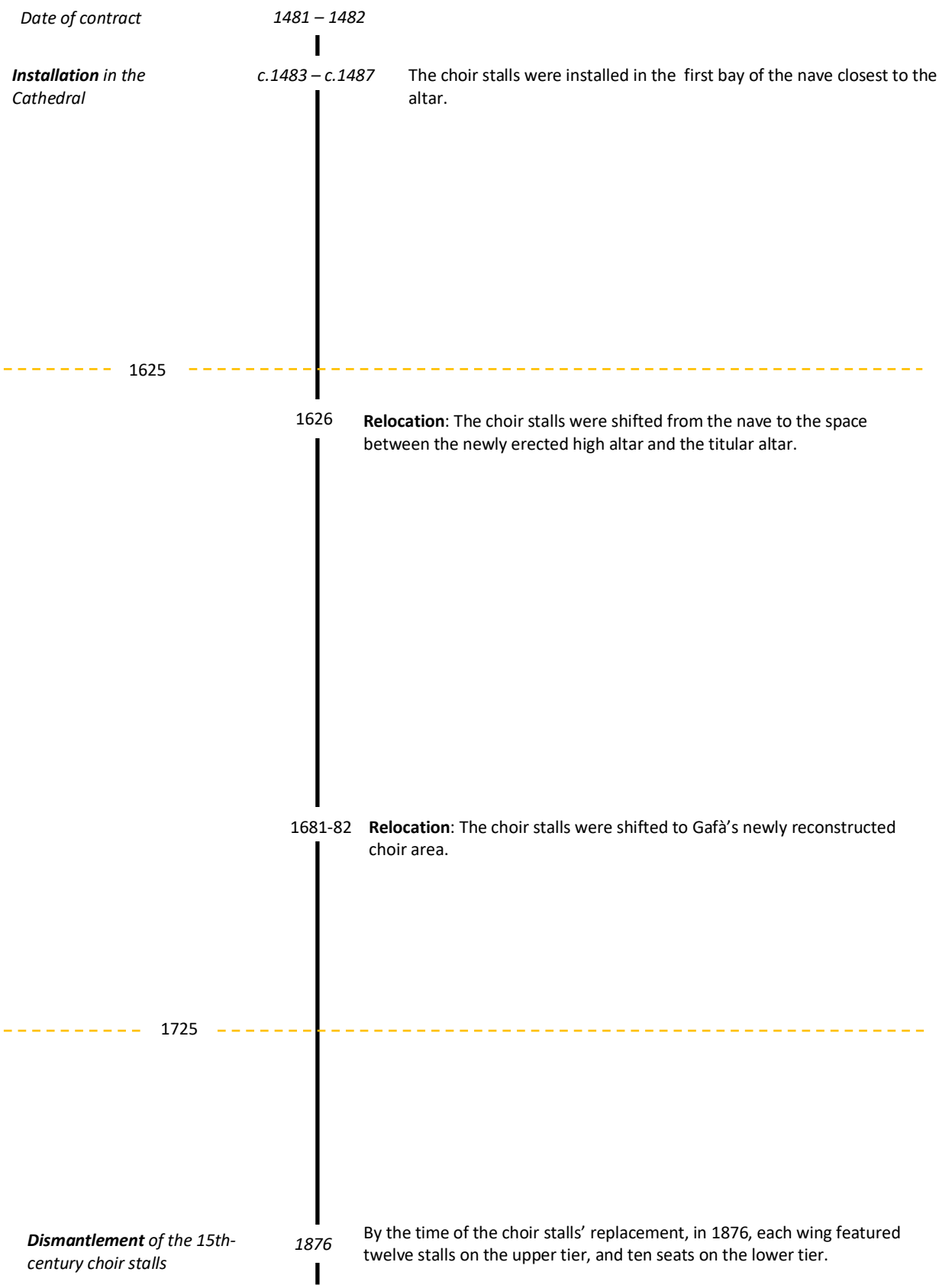
a



b

Fig. 35. Comparative plans illustrating the shift in the presbytery boundary before and after Gafà's choir enlargement. (James Saliba, 2024)

(a) MCM. Drawing 638 (Ex-ACM, Misc. 60, f. 154). Plan of St Paul's Cathedral (Mdina) after the addition of Lorenzo Gafà's choir area (1679–1682), showing the choir stalls within the new choir space (black arrows) and the subdivision of choir area, presbytery, and nave. The white dotted line indicates the earlier (pre-1682) extent of the presbytery, which had projected to the first nave columns but subsequently receded to the first pilasters.
(b) MCM. Drawing 637 (ex–ACM. Misc. 60, f. 150). Plan representing the Cathedral configuration between 1626 and 1682, with the presbytery extended forward into the first bay of the nave.



Timeline 4. Relocations of the choir stalls

4.4. Spatial Analysis

4.4.1. Cathedral dimensions

To fully understand the spatial distribution of the choir stalls, it is essential to establish a clear baseline of the Cathedral's layout during the period under study. The architectural plans provide a valuable means of deducing the dimensions of the old Cathedral. MCM. Drawing 474 (see *Spatial analysis, under 3.2.2. Conservation records and visual observations*), which highlights the different proportions between the pre-1681 building and Gafà's Baroque reconstruction, offers a rare opportunity to determine the dimensions of the pre-Baroque structure.

Through archival research, additional scaled plans were identified. When superimposed onto Drawing 474, they aligned well with the depiction of the old Cathedral, enabling verification of the plan's accuracy (Fig. 36.). Observations confirmed that most of the plans aligned when scaled, further validating the accuracy of Drawing 474. This drawing also includes a scale in *canne Maltesi* (see *Glossary of terms*).

To ensure accuracy, actual measurements of the current building were taken and compared with those derived from the historical plans. This comparison allowed for the extraction of the following dimensions for the old Cathedral, based on these historical plans (Fig. 37.).

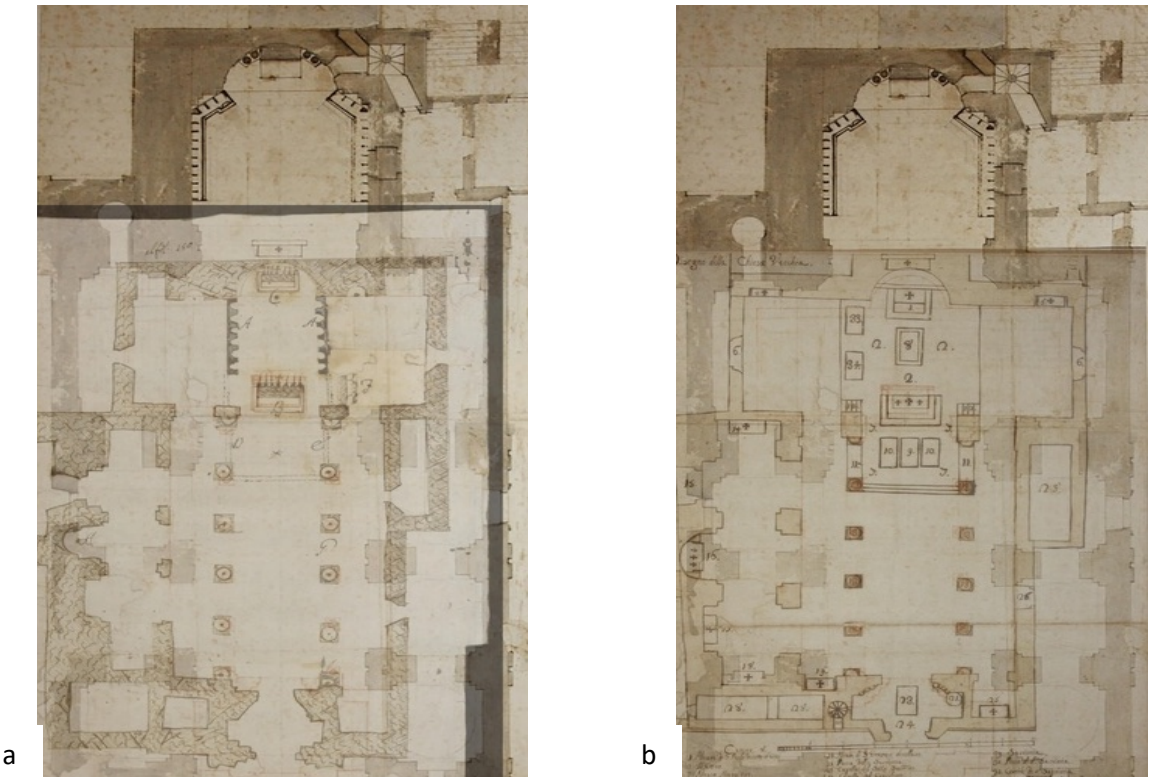


Fig. 36. Scaled overlay of archival plans registered to Drawing 474 (reference plan). (James Saliba, 2024)
(a) Drawing 637 aligned over Drawing 474, and (b) Drawing 752 aligned over Drawing 474, to assess plan congruence and verify the suitability of Drawing 474 for dimensional extraction.

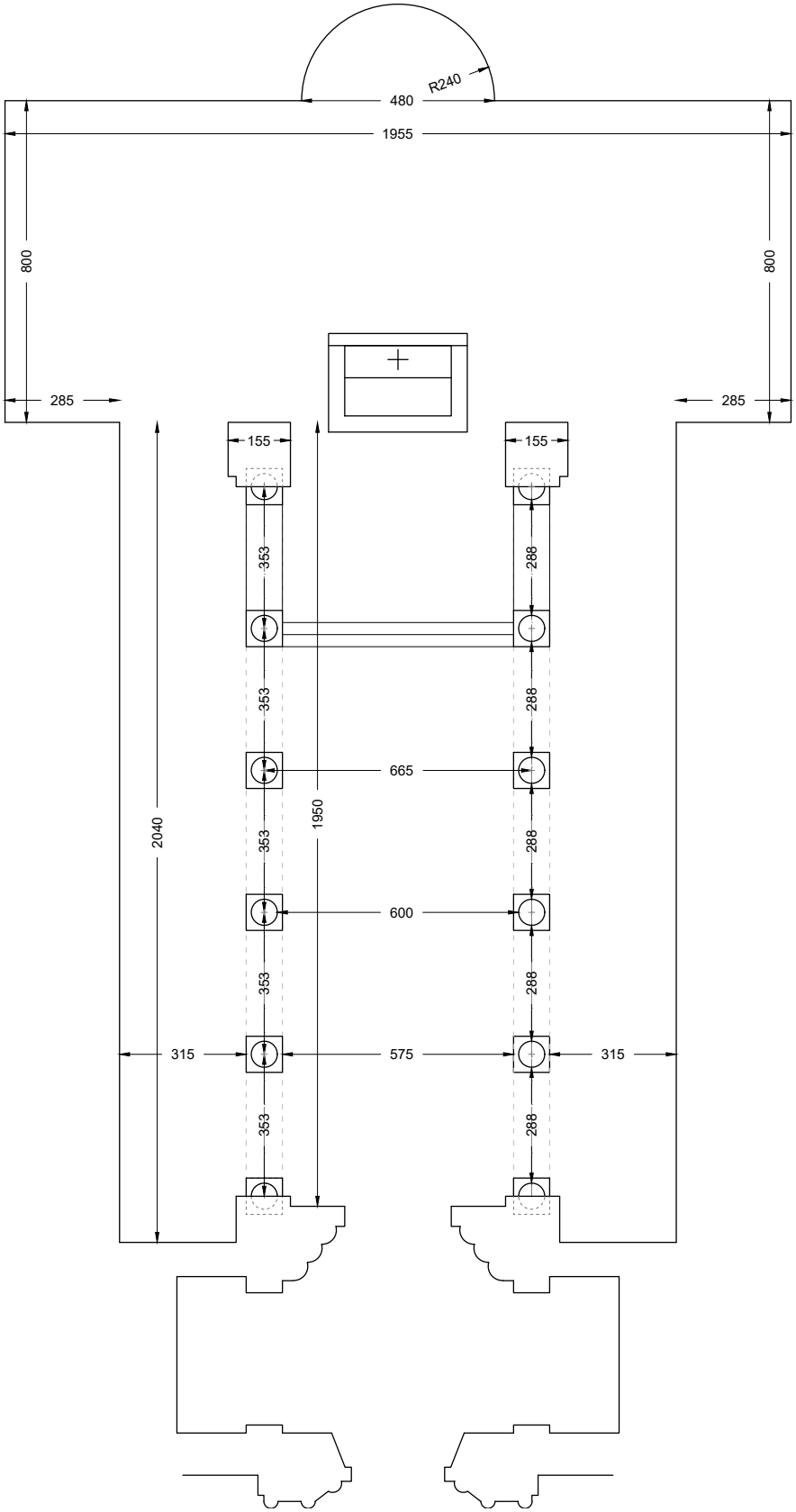


Fig. 37. Plan of the pre-Baroque St Paul's Cathedral (Mdina) after the 1626 spatial modifications, extracted and redrawn from MCM, Drawing 474. The drawing isolates the footprint of the earlier cathedral phase and records the principal internal dimensions (as scaled from the original), providing the metric baseline used for the spatial and distribution analyses discussed in Section 4.4.

(James Saliba, Bruno Ambrosio, 2024)

4.4.2. Distribution

The distribution of the choir stalls plays a crucial role in understanding not only the physical space they occupied, and the seating capacity determined by their configuration, but also the broader organization of liturgical spaces. Their arrangement offers valuable insights into the evolving symbolic and functional roles of these areas within the Cathedral, revealing how spatial arrangements were influenced by shifting liturgical practices and social dynamics over time (see *7.3. Relocations and reverence*).

All plans depicting the choir stalls before their 1682 relocation to Gafà's choir area, the stalls are arranged in parallel, with no indication of return seating. The introduction of a 'turn', or 'return' of the end stalls – in this case forming an obtuse 'L'-shape with the main rows of stalls - appears only in the plans depicting the choir stalls after the 1682 relocation. This would suggest that the previous arrangements were likely in parallel. It is, however, important to note that none of the said, pre-1682, plans depict the lower-tier seating, nor the documented number of stalls, suggesting these representations may not be entirely reliable to gain insight into the distibution of the seatings. To address these gaps, a thorough analysis of the documents and plans was conducted, offering deeper insights into the stalls' arrangement.

The archival and spatial evidence outlined above must also be read in light of contemporary liturgical prescriptions governing the disposition of the episcopal choir. The *Caerimoniale Episcoporum* (Clement VIII, 1600, I. 12–14; II. 11), promulgated in the aftermath of the Council of Trent, codified the hierarchical organization of the clergy within the choir and the ceremonial movements associated with episcopal liturgy. These directives, which specify the placement of the bishop's *cathedra* in relation to the altar and the arrangement of clerical seating, provide a normative framework against which the observed spatial modifications gain significance. The alignment of the stalls, their orientation toward the liturgical axis, and the introduction of return seating after 1682 correspond with the ceremonial emphasis on visibility and processional symmetry articulated in the *Caerimoniale*. This correspondence is further supported by the *Acta Caeremoniarum* preserved in the Cathedral Archive (ACM.), which record adjustments to processional routes and clerical seating during pontifical functions (see *7.*3 Relocations and reverence).

Distribution of the choir stalls after the 1626 relocation

Drawing 752 (Fig. 38.), extracted from Misc.60, includes a legend that offers valuable insights into the layout of the old Cathedral before 1682. An inscription on the reverse of this drawing dates the plan to 1700, placing it within the rebuilding period of the Cathedral (1679-1717), with the Cathedral being consecrated in 1702. The choir area, marked (2) on Fig. 38., is shown in the post-1626 position, behind the high altar, while the raised presbytery extends into the first bay of the nave, which was previously occupied by the stalls. The choir area itself is depicted as housing three tombs (8, 33, 34) and two flights of steps (12).

The tomb of Bishop Balaguer de Camarasa (8), who served from 1635 to 1663, was installed after the relocation of the choir stalls, indicating that this area was not occupied by the stalls or a lectern. Meanwhile, the tombs of Bishop Bosio (in office 1538–1539) and Bishop Cubelles (1541–1566) dominate the gospel side, extending from the tribune wall to the steps (12).

In the mid-seventeenth century, Abela (1647, p. 325) observed these tombs, noting that Bishop Cubelles' tombstone (34) showed advanced surface wear, to the extent that its inscription was no longer legible. This observation implies that the slab remained visible within the circulation/choir zone, rather than being covered by stall carpentry. By contrast, Abela records that Bishop Bosio's tombstone (33) had become obscured because it was covered by the timber of the choir stalls. Taken together, Abela's remarks suggest that, while the slab closer to the steps remained accessible (and therefore subject to wear), the slab nearer to the tribune was concealed by the stalls—evidence that assists in approximating the area occupied by the choir stalls during 1626–1682 (see *7.3.2. 1626 Relocation*).

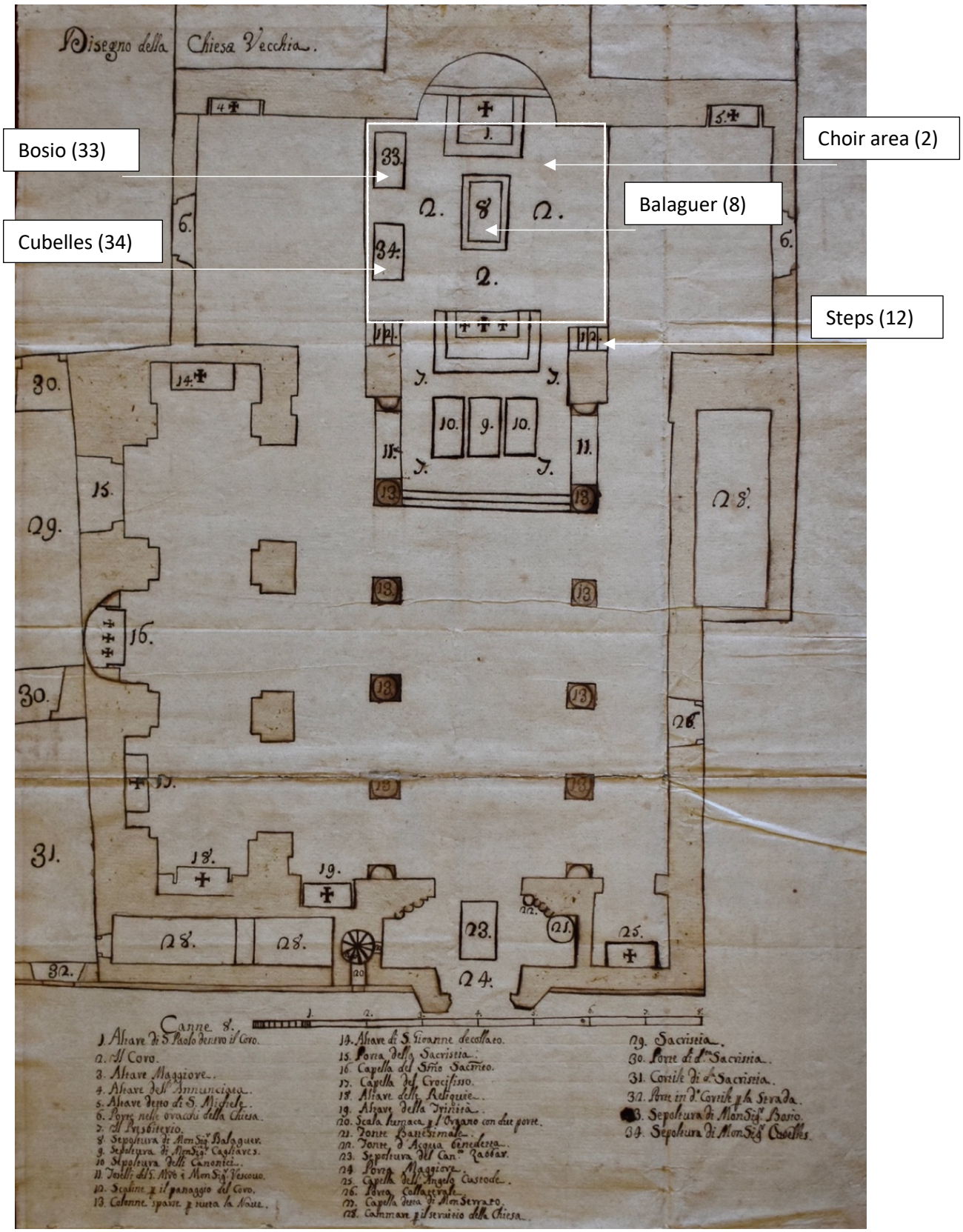


Fig. 38. MCM. Drawing 752 (ex–ACM. Misc. 60, f. 150; dated 1700). Annotated pan of the pre-Baroque Cathedral showing the post-1626 distribution of space, with the raised presbytery comprising the first bay of the nave, and the choir area indicated at (2) with access via the steps (12). The labelled tombs of Bishop Balaguer de Camarasa (8), Bishop Bosio (33), and Bishop Cubelles (34) are shown in relation to the choir zone. Read alongside Abela's mid-17th-century observations, the configuration assists in approximating the area occupied by the stalls between 1626 and 1682 (see 7.3.2.). (James Saliba, 2024)

Distribution of the choir stalls after the 1682 relocation

The plans which ilustrate the choir stalls after the 1682 relocation are the only ones to accurately map out the area occupied by the stalls. This is probably due to the already mentioned fact that all the consulted plans were produced after 1682. Yet, notwithstanding their accurate representation of the space occupied, these plans do not provide details in relation to the subdivision of the stalls. The only plan that provides this information seatings is Drawing 474 (Fig. 39.). In this drawing, the upper tier is marked by a bold black line, while the lower tier is delineated by a finer, thinner line. The first seat on the left (gospel side), closest to the tribune, can be identified as the Bishop's stall. This drawing also depicts 13 upper-tier stalls, a number that is also given by Pullicino (1877, p.6) and corroborated by the late 17th-century manuscript quoted by De Piro (2000, p.17) (see *2.2.4. Alterations*).

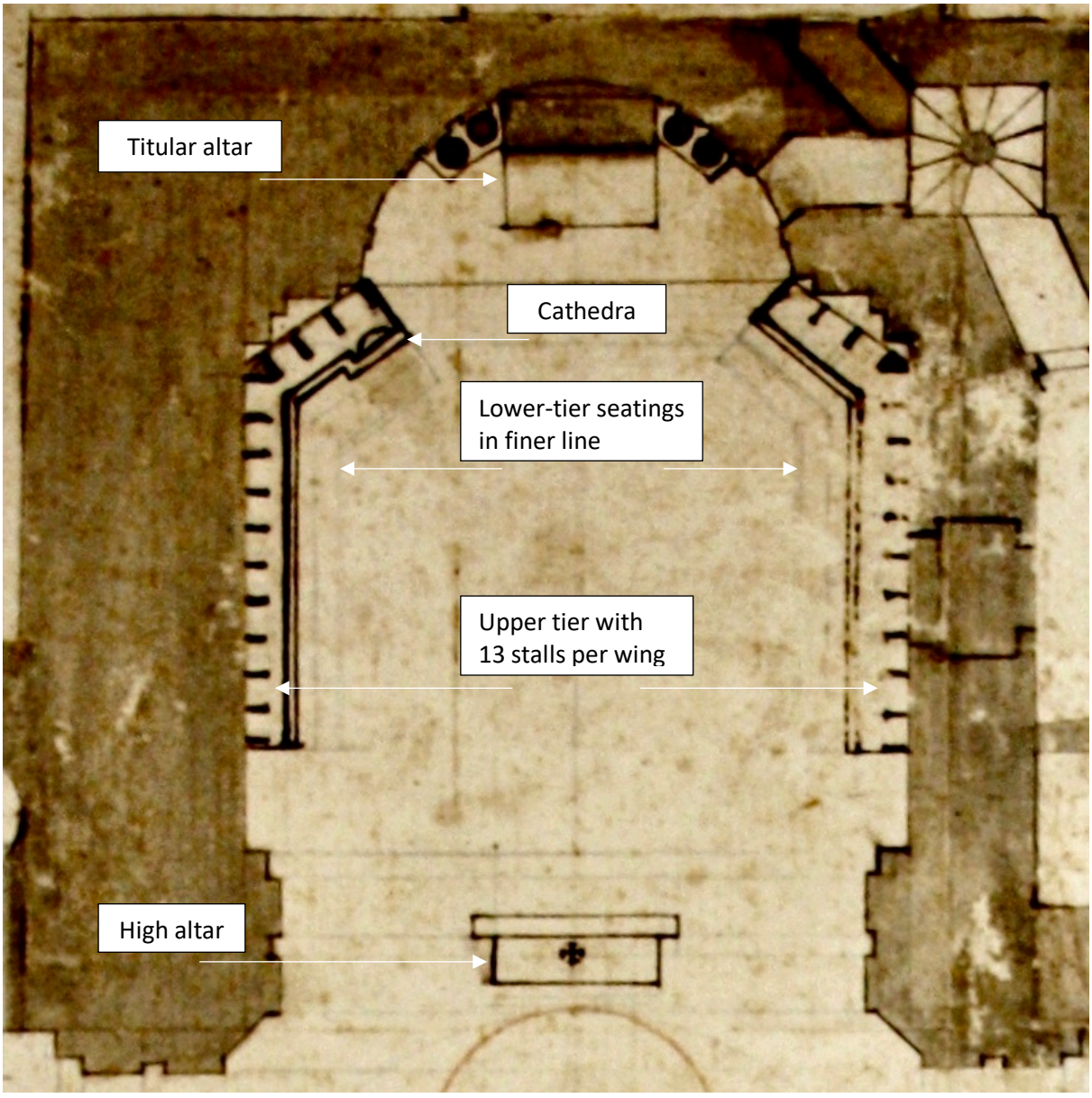


Fig. 39. Detail from Drawing 474. The drawing provides a detailed representation of the post-1682 choir arrangement, differentiating the upper tier (bold line) from the lower tier (finer line), indicating 13 upper-tier stalls per wing, and showing the protruding cathedra on the Gospel side. (James Saliba, 2024)

This latter, previously poorly referenced document, has been identified as being ACM. Misc.173, Tom.3, f.64 (Fig. 40), and, based on its content, appears to have been written after 1685. In addition to the key information cited by De Piro (2000), this document provides new crucial information regarding the configuration of the stalls during the late 17th century, revealing details that had not previously been published.

In addition to the 13 stalls per wing on the upper tier, the document specifies the arrangement of 9 seats for the chaplains on the lower tier, separated by a central passage providing access to the upper tier. The lower tier was positioned on a raised platform approximately one palmo high (c.261mm), while a slightly lower second step facilitated access to the upper tier of canonical stalls.

Further details from the document shed light on the hierarchy and design of the seating during this period. Twelve seats were arranged on each side for the canons, with two elevated seats at either end - one designated for the Bishop and the other for the Cantor. Access to the choir was provided via two steps, each just under one palmo in height. The Bishop's seat stood notably higher than the canons', elevated by an additional two-thirds of a palmo and accessed by three steps. This seat featured a taller kneeler and a damask-covered backrest, signifying its importance. In contrast, the Cantor's seat, located opposite the Bishop's, matched its height but lacked the distinctive embellishments of the Bishop's stall. A uniform cornice encircled the choir stalls, but only the part on the Bishop's stall was gilded, underscoring its significance.

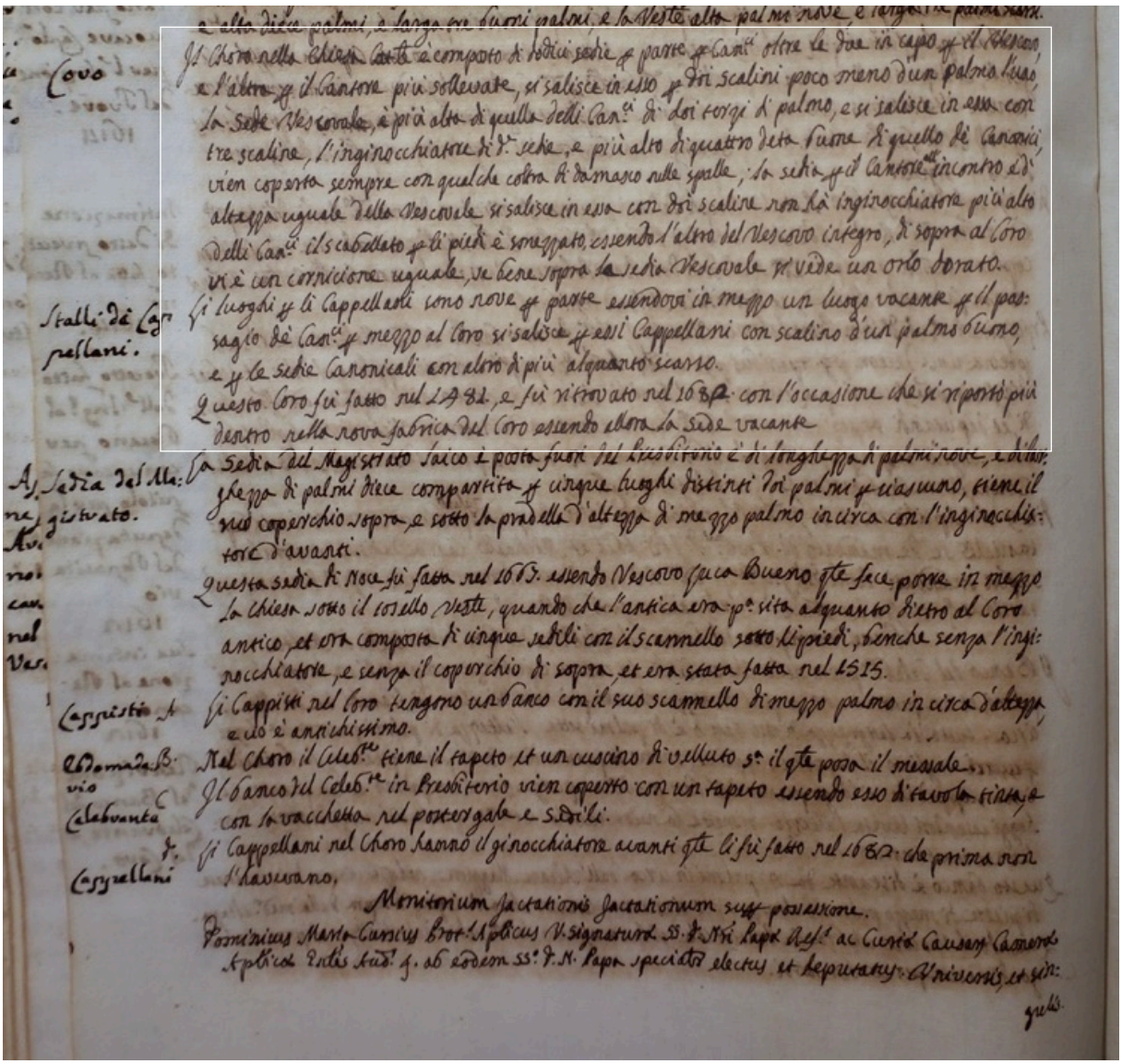


Fig. 40. ACM. Misc. 173, Tom. 3, f. 64. Description of the Cathedral choir, detailing its hierarchical arrangement and fittings: twelve canon stalls per side, with two elevated dignitary seats for the Bishop and Cantor, stepped access and relative seat heights, and differentiated kneeler and footrest configurations; the entry also notes the cornice and the gilded edging above the bishop's stall, and records the disposition of Chaplains' seating. (James Saliba, 2024)

Translation: The choir in the Cathedral is composed of twelve seats on each side for the canons, in addition to two higher ones at the end—one for the bishop and the other for the Cantor. Access to the choir is by two steps, each just under one palm in height.
The bishop's seat is higher than that of the canons by two-thirds of a palm, and one ascends to it by three steps. The kneeler for the bishop's seat is four fingers taller than that of the canons, and it is always covered by a damask cloth on the backreSt The Cantor's seat, opposite the bishop's, is of equal height to the bishop's, with access via two steps. It does not have a kneeler taller than the canons', and the footrest is divided, while the bishop's footrest is intact. Above the choir, there is a uniform cornice, though above the bishop's seat there is a gilded edge.
There are nine places on each side for the chaplains, with a vacant space in the middle for the canons to pass through the choir. The chaplains' seats are accessed by a step of about one palm in height, while the canons' seats have a slightly lower step.

4.5. Resizing

4.5.1. Additional elements

The same document (ACM. Misc.173, Tom. 3, f.64) also reveals that in 1682, kneelers were added in front of the lower-tier seatings (Fig.41.). This feature was a new introduction, which the stalls did not previously have. This discovery suggests that the redesign of 1682 was not solely focused on relocating the choir stalls but also aimed at enhancing the functionality of the space.

This seems to support Pullicino's claims that the spacious design of Gafà's new choir area may have played a pivotal role in accomodating further modifications. Pullicino also claims that the increase in number of stalls must have occurred during this period

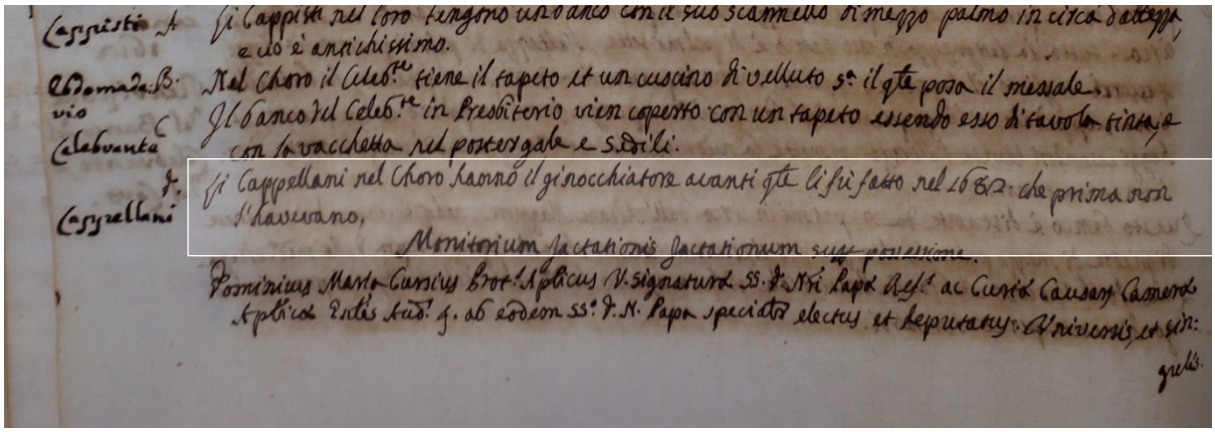


Fig. 41. ACM. Misc. 173, Tom. 3, f. 64. Extract noting the introduction of kneelers in 1682, stating that the chaplains' seats were provided with a kneeler in front "which was made for them in 1682, as they did not have it before," corroborating the documentary evidence for functional modifications undertaken in conjunction with, or shortly after, the 1682 reordering..) (James Saliba, 2024)

Original text: Li Cappellani nel Choro hanno il ginocchiatore avanti quale li fuż fatto nel 1682 che prima non l'havevano.

Translation: 'The chaplains in the choir have the kneeler in front, which was made for them in 1682, as they did not have it before'

4.5.2. Increase in number of seats

While the original contract between the Dominican Friars and the Calachura brothers suggests an initial total of 20 stalls – a number which is also supported by Abela (1647)- the document ACM. Misc.173 (Tom.4, f.64) and MCM. Drawing 474 indicate that, by the time of their recording, the choir stalls consisted of 13 stalls per side on the upper tier, to a total of 26 stalls.

Although no direct evidence of seat additions or removals has been identified, archival research reveals a consistent rise in the number of Canons throughout the period under study, substantiating Pullicino's claim of their growth by the late 17th century.

Ferres (1866, p.86) notes that Mons. Duzina's visit in 1574 recorded 14 Canons serving at the Cathedral. This sets a baseline for analyzing subsequent changes in the Cathedral chapter's size. Significant events were chosen to analyse the fluctuations in the number of Canons during the period under study.

1626: Consecration of the New Altar:

Chapter records (ACM. Delib. Capit. 1624–1654, Tom.2, fol.26) (Fig.23) document the consecration of the new high altar in 1626, revealing that 14 canons, excluding the Bishop, officiated the ceremony. This indicates that the chapter's structure remained stable during this period.

1633: Papal Bull of Urban VIII:

A papal bull issued on 7 February 1633 by Urban VIII allowed for the addition of five new canons (ACM. Misc.173, Tom. 3, f.14) (Fig. 42.), bringing the total to 20. This expansion is corroborated by Abela (1647, pp. 335-336), who states that the decree permitted the addition of five new Canons, to the already existing 5 dignitaries and other 10 Canons, bringing the total number to 20 Canons. The *Miscellania che concerna affari dell vescovo cattedrale e seminario* (ACM. Misc.173, Tom.3, f.9) includes a memorandum listing the names of the newly appointed canons in 1634: Joannes Franciscus Ciantar, Julius Christophorus, Franciscus Cilia, Antonius Testaferrata, and Antonius Fenech.

The presence of these 5 newly appointed Canons is further confirmed through a petition, dating 1636, filed by the newly appointees concerning their rights of seniority. This document confirms that they had already 'occupied their stalls for more than two years'. (ACM. Misc. 173, Tom.3., f.19.). The same archival volume also confirms that, by this time (1636), the Cathedral was officially served by 'twenty Canons amongst which are five dignitaries' In the same Church there are also fifteen Chaplains and twelve Chierici, with stipend and non-transferable ('ammovibili') obliged to serve daily and assist in the divine offices in the choir (ACM. Misc.173 Tom.3, f.20).

1693: post earthquake chapter meeting – decision to rebuild Cathedral

After the earthquake of 11 January 1693, the Chapter met on the 23 January. The relative document lists 26 Chapter members (ACM. Delib. Capit. Tom.3 f.235), indicating a possible increase in the number of Canons between 1633 and 1693.

1722: arrival of Bishop Gori Mancini

When Bishop Gaspare Gori Mancini arrived in Malta, on 13 July 1722, (ACM. Misc.173 Tom.3 f.407), the chapter arranged a public visit for the following day, 14 July at 4pm. All Canons were present except for the Archdeacon Vicar General and the pro-Vicar Canon Nicola Bonamico, who were absent due to unresolved disputes with the Chapter.

The audience hall, though furnished with damask-covered armchairs, lacked enough identical seatings for all the Canons, some had arms while the others had damask covered chairs without arms, creating a disparity. To resolve this, the damask chairs were replaced with uniform leather seated armchairs (ACM. Misc. 173 Tom.3, ff.407-408). A total of 24 chairs were required, including one for the Bishop indicating that the chapter had 26 Canons in 1722, supporting the need for at least 13 upper-tier stalls per side during this period.

These fluctuations reflect the Cathedral's increasing prominence and the administrative changes driven by external ecclesiastical decisions. The growth in the number of Canons likely prompted the enlargement of the choir stalls, reaching 13 upper-tier stalls at some point between 1636 and 1693, as presented in Table 2, below. A reduction in the number of Canons seems to have occurred in later years. Ferris (1866, p.85) notes that in 1866, the Cathedral had 24 Canons, a number corroborated by Pullicino (1877, p.13) who states that upon their dismantling, the choir stalls included 12 upper-tier stalls reserved exclusively for the Canons (including the Bishop).

Year	Event	Reference	Number of canons
1574	*Mons. Duzina visit*	*Baseline of recorded canons before period of study*	*14*
1626	*Consecration of new altar*	*Number of canons that officiated*	*14* *(15 including Bishop)*
1633	*Papal bull of Urban VIII - nominated in 1634*	*Number increased to 20*	*20*
1636	*Petition by 5 new canons*	*Confirms 5 new canons had occupied their stalls for 2 years*	*20*
1693	*Post earthquake chapter meeting*	*Further increase to 26 canons recorded*	*26*
1722	*Arrival of Bishop Gore Mancini*	*Chapter meeting confirms 26 canons*	*26*
1866	*Ferres: Cathedral had 24 canons (Pullicino confirms)*		*24*

Table 2. Changes in number of Canons as recorded through archival research.

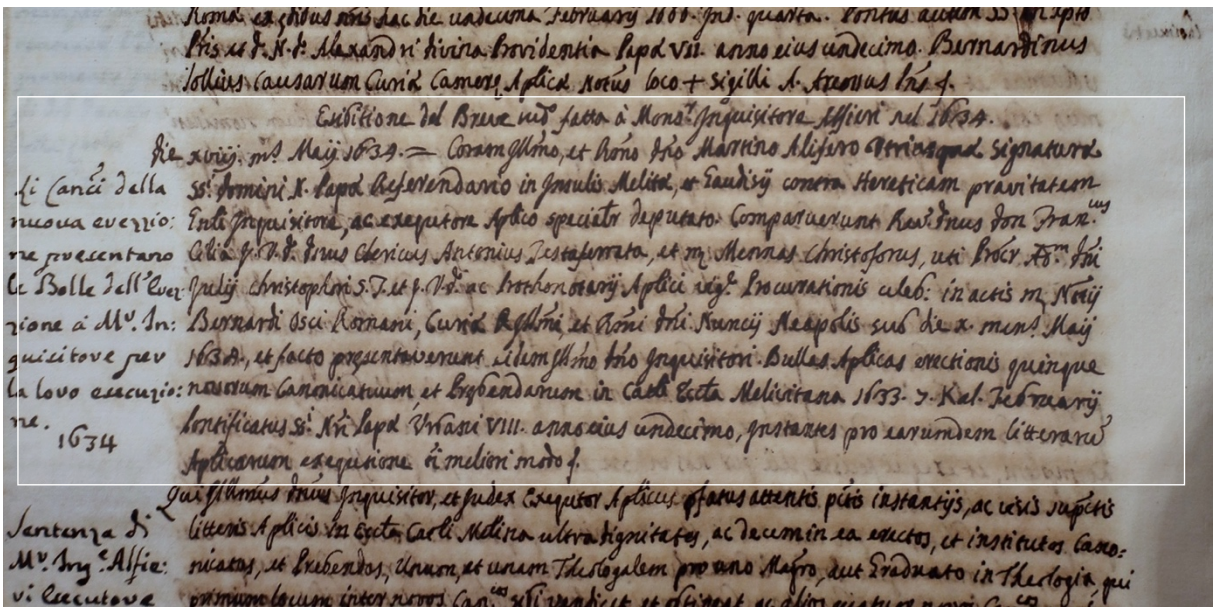


Fig. 42. ACM. Misc. 173, Tom. 3, f. 14.,The extract provides archival evidence for the Chapter's expansion during the 17th century and, by implication, contextualises the subsequent pressure on choir seating capacity and the later enlargement of the stall ensemble. (James Saliba, 2024)

4.6. Changes in Decorative Treatment

No new archival information has been uncovered regarding alterations being carried out on the frame profiles, carvings, or inlays of the choir stalls. However, notable discoveries have emerged concerning a gilding intervention in 1712. According to ACM. Reg. Delib. Capit. Tom.4 (f.60r) (Fig. 43.), a unanimous decision was made in 1709 (or possibly 1711) to gild the cornice of the choir to match the Baptismal font (Fig.34). The Giornale della Cattedrale Tom.5 (f.291, 14 March 1712) records a payment of 107:10 - scudi and tari -for the gilding of the organ screens, including 3 scudi for the painter's work on the frieze of the choir, and 152:11 scudi for the gold and its mordant application in the choir (Fig. 44.).

Although it remains unclear whether these entries refer specifically to the choir stalls or more broadly to Gafà's recently constructed choir area and its fittings, the 1712 payment record is nonetheless significant because it aligns with the dated inscription on the Assumption panel, transcribed as *"MDCCXII DEAUR"* (1712; indicating gilding). Taken together, the documentary and material evidence supports the likelihood of an early-eighteenth-century gilding campaign affecting the choir ensemble, even if the precise element(s) treated cannot yet be identified (see *2.2.2.3 Completion and installation*; *2.2.3 Alterations*).

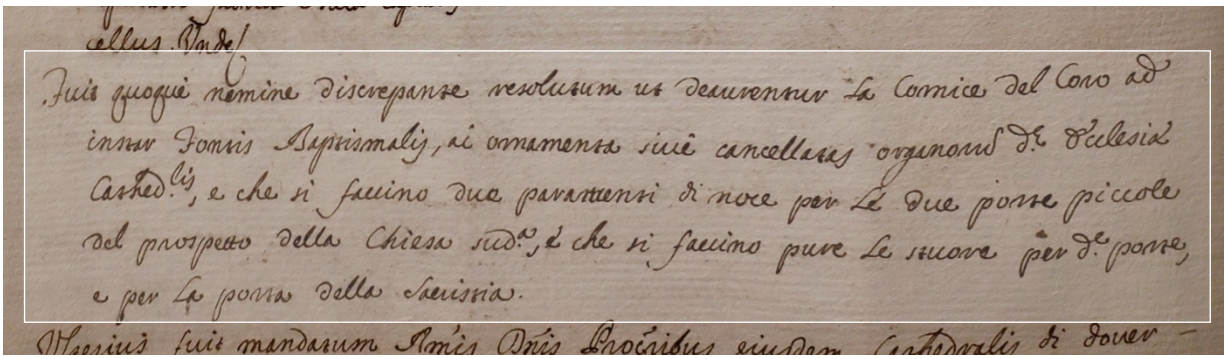


Fig. 43. ACM. Reg. Delib. Capit., Tom. 4, f. 60r.
Extract from the Cathedral Chapter deliberations recording a unanimous resolution (dated 1709, or possibly 1711) to gild the cornice of the choir "ad instar Fontis Baptisimalij" (to match the baptismal font). The entry provides documentary evidence for an early-eighteenth-century decorative campaign associated with the choir area. (James Saliba, 2024)

Original text: Fuit quoquè nemine discrepante resolutum ut deaurentur la cornice del Coro ad instar Fontis Baptisimalij, ai ornamenta sivi cancellatas organurus de Ecclesia Cathedralis is, e che si faccino due paramenti di noce per le due porte piccole del prospetto della Chiesa suddetta, e che si faccino pure le ... per dette porte, e per la porta della sacristia.
Translation: 'It was also unanimously resolved that the cornice of the choir should be gilded in the style of the baptismal font, as well as the ornaments or organ screens of the cathedral church, and that two..'

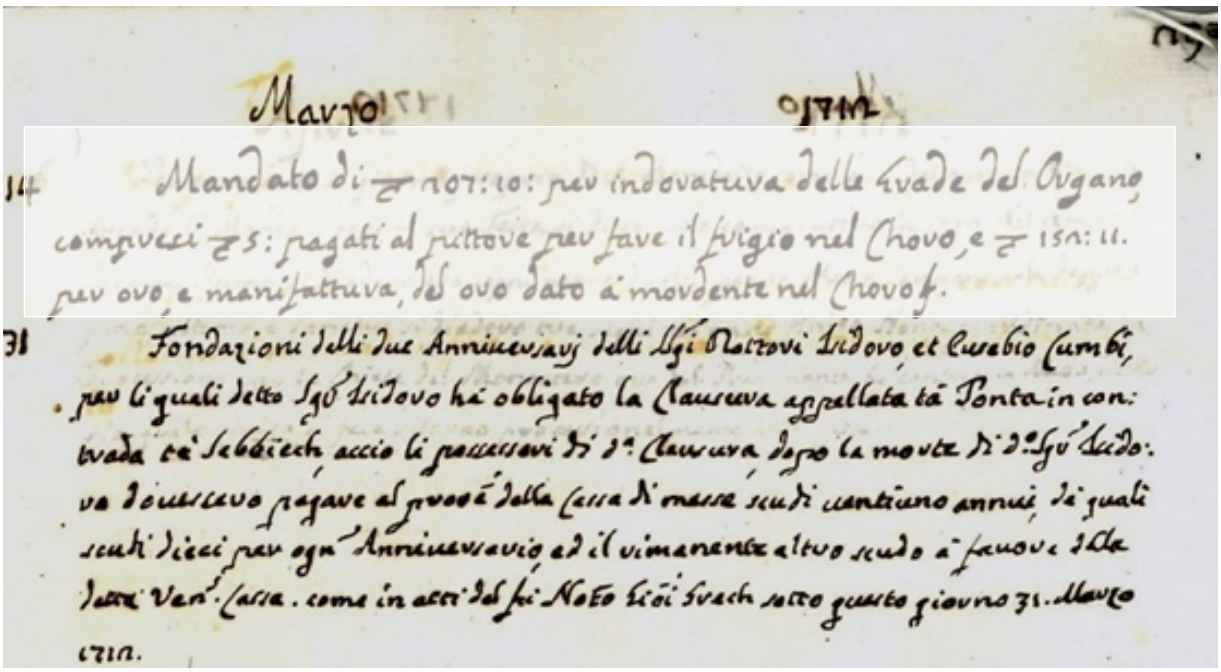


Fig. 44. ACM. Giornale della Cattedrale, Tom. 5, f. 291 (14 March 1712). Payment order recording expenditures for a gilding campaign, including the gilding of the organ screens and payments for work and materials associated with mordant gilding "in the choir" (amounts given in scudi and tari). (James Saliba, 2024)

> *Original text:* Mandato di 107:10: per indoratura delle Grade del Organo, compresi 5: pagati al pittore per fare il frigio nel Choro, e 152:11 per oro e manifattura, del oro dato a mordente nel Choro.
> *Translation: 'payment order' of 107:10 for the gilding of the Organ screens, including 5: paid to the painter for doing the frieze in the Choir, and 152:11 for gold and craftsmanship, of the mordant gilding in the Choir.*
>
> *Note on currency – first number denotes ammount of scudi whilst the second number (after the ':') indicates the amount of tari.*

4.7. Alterations Outside of Period of Interest

Other alterations identified through this research fall beyond the period in focus. These include an alteration to the number of steps leading to the Bishop's stall, which were increased from three steps to five in 1764 due to physical constraints of Bishop Bartholomeo Rull. (ACM. Misc. affari vescovo Tom.3, f.357-358), and a proposition to conduct repair works on the choir stalls in 1775 (ACM. Delib. Capit. Tom.9, f.139). Further research on these aspects is a desideratum.

5. RESULTS – Conservation Records and Visual Observations

5.1. Introduction

This section examines the surviving choir-stall fragments, providing insight into the original design, craftsmanship, and subsequent alterations. It clarifies aspects of the ensemble that have remained poorly understood and establishes a baseline for discussing the principal changes, particularly those occurring between 1625 and 1725.

5.1.1. Fragments – General description

A total of 160 fragments were recorded and grouped into 14 categories based on typology. Each category contributes evidence for construction and later modification, and was further subdivided according to the fragment's position, composition, and workmanship.

Category	*Category typology*	*Amount studied*
A	***Dorsal and Backside Panels***	***24***
B	***Friezes***	***3***
	B.1. Cityscapes	*2*
	B.2. Geometric and Architectural	*1*
C	***Certosina panels***	***4***
	C.1. Walnut support	*2*
	C.2. Other species	*2*
D	***Dignitary stalls***	***4***
	D.1. Full sides (internal)	*2*
	D.2. Top part (external)	*2*
E	***Stall sides***	***12***
F	***Armrests***	***10***
	F.1. Upper-tier	*9*
	F.2. Lower-tier	*1*

Category	*Category name*	*Amount studied*
G	***Seats***	***14***
H	***Solomonic columns***	***11***
	H.1.	*7*
	H.2. Laterals	*4*
I	***Acanthus leaves***	***23***
	I.1.	*19*
	I.2. side ends	*2*
	I.3. differing carving style	*2*
J	***Pedestal base***	***1***
K	***Canopy carvings***	***54***

Table 3. Categorisation of the studied fragments.

5.2. Original Form – Reconstructing the 15th-Century Choir Stalls

The visual observations and metric analysis of the fragments offered valuable insights into the design of the choir stalls, providing a deeper understanding of their craftsmanship, functionality, and symbolic significance. While the scope of this study does not permit an exhaustive exploration of all aspects related to the original configuration, design, and manufacturing of the stalls, a base understanding of their initial form is essential to contextualize the alterations they underwent over time. To this end, some key observations and findings are presented here.

5.2.1. Dignitary stalls

The original configuration of the Mdina choir stalls included two dignitary stalls, one on each side of the choir. The dignitary stalls' fragments (**Cat. D**.) indicate that these stalls were distinguished by elaborate carved motifs: the Bishop's stall featured a zoomorphic design, while the Cantor's stall displayed a floral motif intertwined with grape clusters. The dignitary stalls fragments suggest that these stalls were embellished with inlaid motifs on their external faces. Evidence includes a checkerboard banding on a fragment from the Bishop's stall (**D.2.1**, Fig. 45.) and a recessed area, seemingly for the insertion of inlay decoration, in the same position on a fragment from the Cantor's stall (**D.2.2**.).

One armrest from the dignitary stalls was identified during this study (on **D.2.1.,** Fig. 46.). It also featured a recessed slot likely intended for inlaid banding that probably extended along the missing portion of the armrest However, due to the limited evidence available, it cannot be confirmed whether such inlays were exclusive to the Bishop's stall or also appeared on the Cantor's.

*Fig. 45. Bishop stall fragment **D.2.1**. with a checkerboard inlay banding on its extrenal face.* The tarsia decoration is assembled on parchment/paper, consistent with the original technique observed on other toppo inlaid fragments (friezes, **Cat. B**). (James Saliba, 2014)

*Fig. 46. Bishop stall fragment **D.2.1.** with armrest* (external side, internal face). The armrest presents a recessed slot (yellow arrow) likely intended for inlaid banding that probably extended along the missing portion of the armrest On its back end it presents a mortice joint recess (black arrow), presumably for the attachment of an inlaid frieze below the dorsal panel, as observed for the other stalls. (James Saliba, 2014)

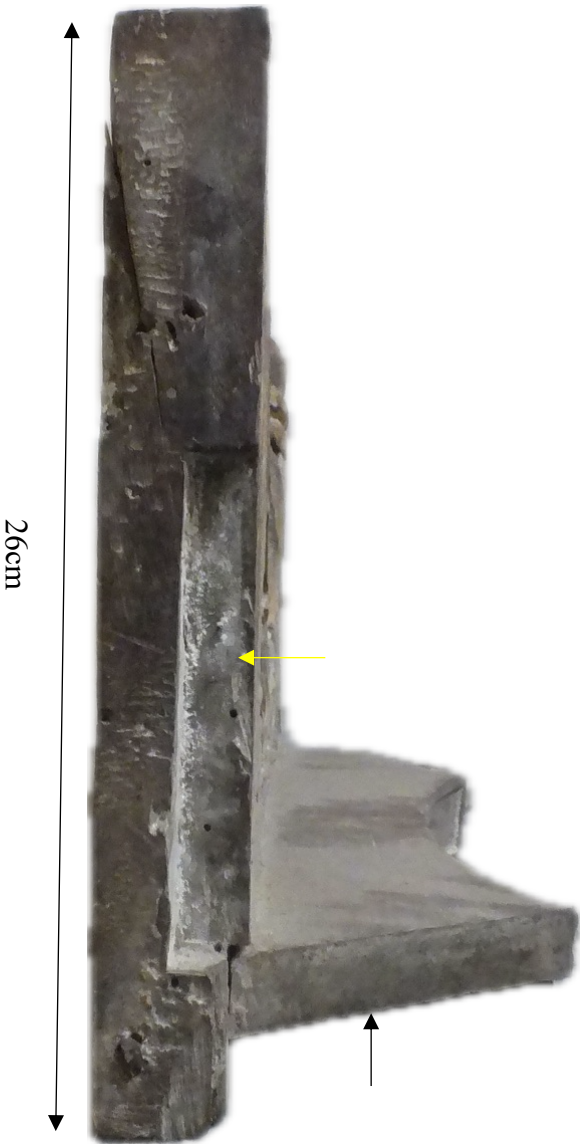


*Fig. 47. Bishop's stall. External side fragment **D.2.1**., back view*, revealing mortice joint (yellow arrow) for probable attachment of inlaid frieze, and half-lap mitre joint (black arrow) for attachment of armrest continuation, now missing. (James Saliba, 2014)

Additional inlaid motifs adorned the internal upper sections of the dignitary stalls' sides. Mortise joint recesses on fragments from the dignitary stalls further suggest the presence of an inlaid frieze running along the back of each stall (Fig. 47.), situated beneath the inlaid dorsal panel, (see *5.2.2 Framed Decorative Friezes in the Choir Stalls*). A similar recess for frieze positioning on the Cantor's stall was found filled with a composite of glue and sawdust containing a dark-coloured particulate, possibly applied during a subsequent alteration. The front ends of the dignitary stall sides were ornamented with Solomonic columns, like those associated with the lower-tier seating (Figs. 48.–49.). This design element created a deliberate visual continuity while emphasizing the elevated status of these stalls (see *5.2.4. Rank and Hierarchy*).

The external appearance of the dignitary stalls remains uncertain. Pullicino (1877) noted that the "**Alllegory of Malta**" and "**Orpheus**" panels adorned the external sides of the dignitary stalls. Today, the "**Orpheus**" panel retains its position in the current choir stalls. However, these placements may have resulted from later modifications (see *5.3.2. Resizing*). Further research is required to confirm the original position of these two panels.

The dorsal panels of the dignitary stalls are believed to depict ***God the Father and Archangel Gabriel*** on one side, and the ***Holy Ghost*** **and** ***Mary*** on the other. Together, these panels form an **Annunciation scene**, likely intended to be viewed as a continuous narrative, further underscoring the symbolic and artistic significance of these two prominent stalls.

Fig. 48. Internal side of Bishop's stall **D.1.1.** (James Saliba, 2014)

Fig. 49. Internal side of Cantor's stall **D.1.2.** (James Saliba, 2014)

5.2.2. Upper and lower tiers

Stall sides

The decorative differences between the upper- and lower-tier stalls were further emphasised by the differing designs of their stall compartments. Fragments identified as forming the sides of the canons' stalls in the upper tier (**Cat. E**; Figs. 50.–51.) exhibit a side cut-out terminating in a carved floral motif. Additional decorative elements include a moulded column with pedestal and a five-sided capital in the lower section.

In contrast, the stall sides of the lower tier appear to have followed the design logic of the dignitary stalls, likely consisting of fully enclosing timber side panels, now missing. Another significant difference lies in the design of the armrests: those associated with the upper tier were more contoured in profile (Fig. 52.), suggesting an intention to provide improved ergonomic support for the occupant. A partial reconstruction of the lower tier compartmentalisation is nevertheless possible through analysis of associated decorative elements and fragments. These include the Solomonic columns (**Cat. H**; Fig. 53.), which appear to have adorned the frontal edges of the stall sides and to have been fixed directly to them. Further evidence is provided by the acanthus leaves (**Cat. I**; Fig. 54.), positioned above the armrests and marking the seating division between adjacent occupants. Taken together, these complementary fragments suggest that the lower-tier stalls were compartmentalised by solid, enclosing side panels, comparable in concept to the surviving dignitary stalls (Fig. 55.).

Macroscopic examination of exposed timber surfaces (colour, grain, and visible pore structure), undertaken during cataloguing, indicates that these associated elements were manufactured in walnut (*Juglans* sp.); confirmatory identification through wood anatomy (thin-section microscopy) would strengthen this attribution.[6]

Comfort

Observations indicate that the backs of the upper-tier stalls were originally designed with a 6-degree incline on their vertical axis, as evidenced by surviving upper-tier stall sides and dignitary stall fragments (**Cat. E & D**, respectively). The lower part of the seating was counter-angled, allowing for an extended floor area. The seats were positioned at a height of 510 mm above the floorboard, while the highest point of the armrests reached 1082 mm.

[6] Wood species identification was undertaken by macroscopic assessment of exposed surfaces (colour, grain and pore visibility) during cataloguing; no thin-section microscopy was carried out within the scope of this study.

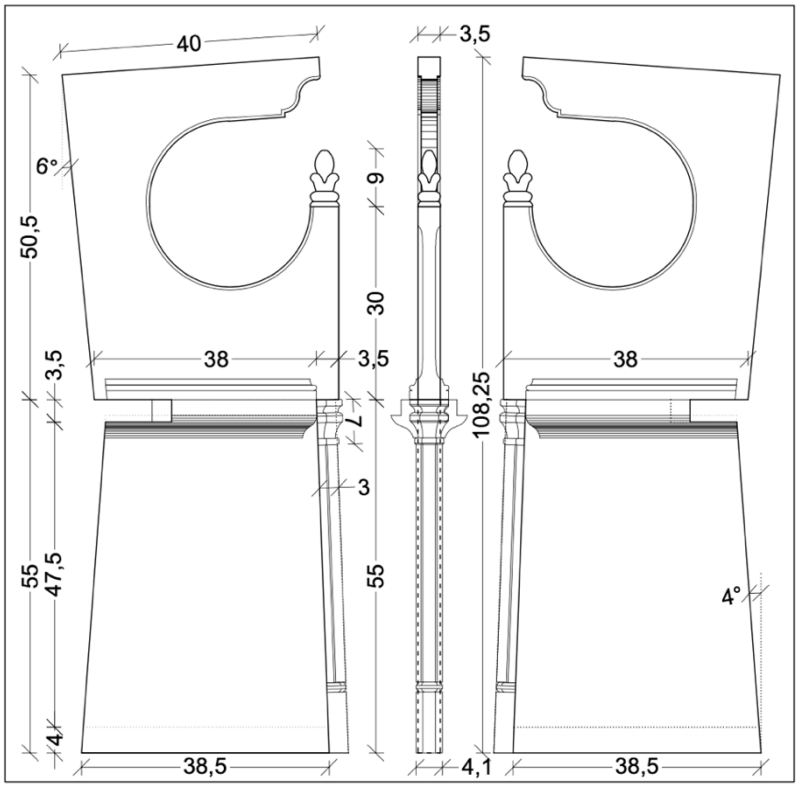


Fig. 50. Average dimensions and reconstruction of upper-tier stall sides (Cat.E.)
(conservation records: James Saliba, Bruno Ambrosio, 2016)

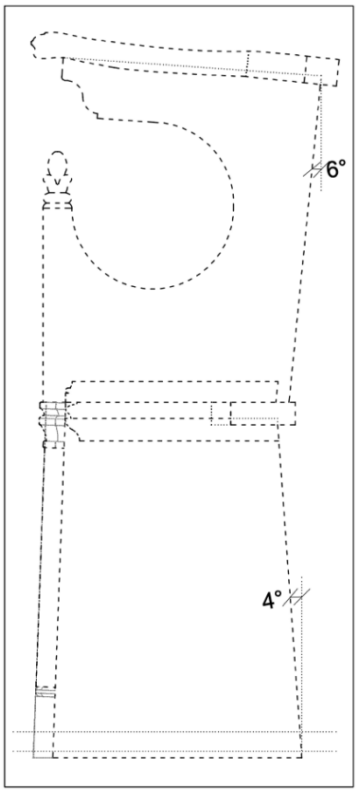


Fig. 51. Hypothetical assembly of upper-tier stall
as indicated by the remnant fragments. (conservation records: James Saliba, Bruno Ambrosio, 2016)

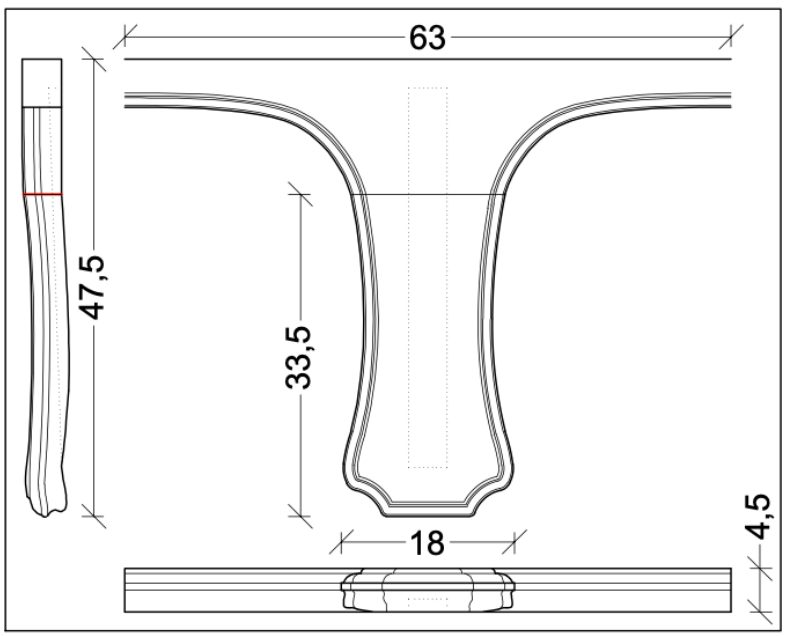
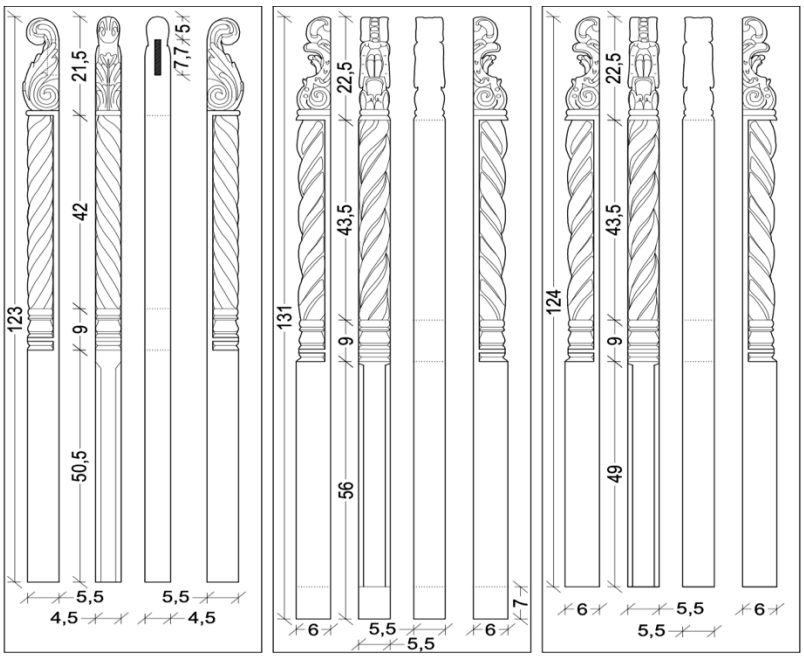


Fig. 52. *Average dimensions and reconstruction of upper-tier armrests (Cat. F.1.)* (conservation records: James Saliba, Bruno Ambrosio, 2016)



a b c

(a) **H.1.** Solomonic columns at stall dividers present a mortice joint for the attachment with acanthus leaves type (a).

(b)- H.2. Solomonic columns without mortice joints and more elaborate carvings, seemingly for attachment to Certosina panels (**Cat. C**)

(c)- Same as (b) but truncated, possibly during 19th-century dismantlement.

*Fig. 53. Three types of solomonic columns (**Cat. H.)*** identified during the project (conservation records: James Saliba, Bruno Ambrosio, 2016)

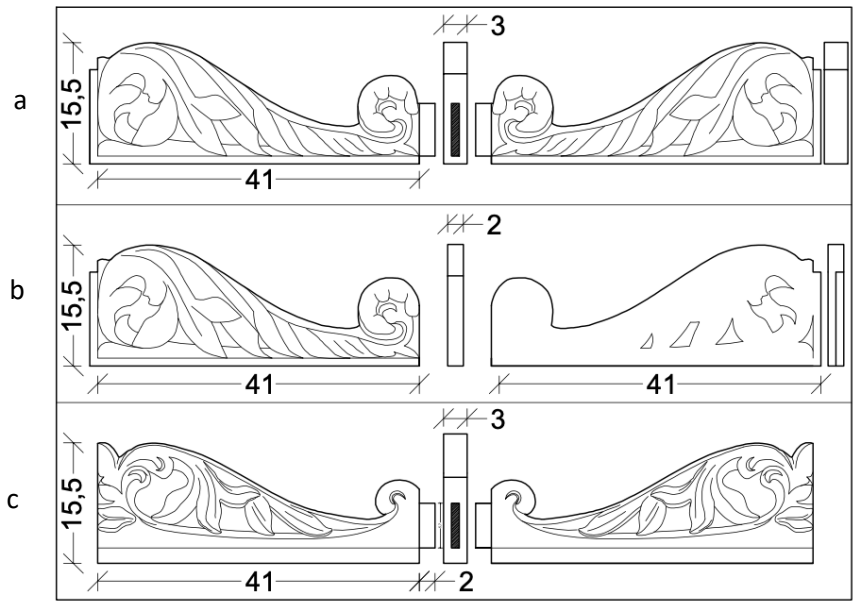


Fig. 55. Three types of 'acanthus leaves' (Cat. I) (conservation recor James Saliba, Bruno Ambrosio, 2016)

I.1. majority of original elements

I.2. original side ends – half cut and without tenon

I.3. possible later addition – differing in both carving style, detail, and construction (**P21** & **P24**)

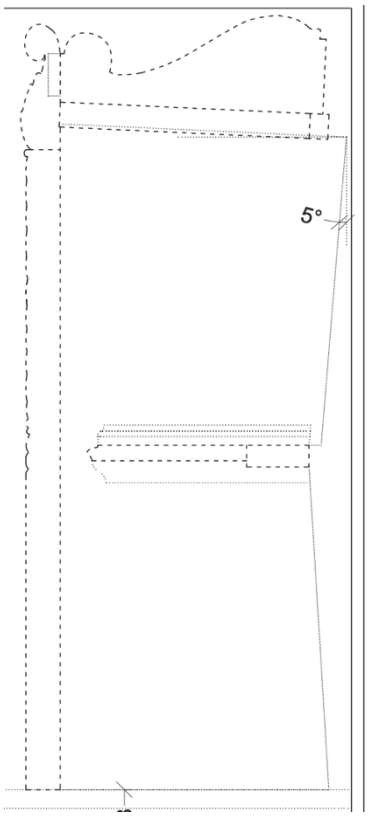


Fig. 54. Hypothetical assembly of lower-tier stall as indicated by the remnant fragments. The back inclination and height of seat are hypothetical due to scarcity of evidence. and backs. (conservation records: James Saliba, Bruno Ambrosio, 2016)

Prayer desk

The evidence of the surviving joinery suggests the presence of a prayer desk in the upper tier, which would be typical of such furniture. Markings observed on the *certosina* (**Cat.C**) **side panels C.2.1.** and **C.2.2.**, Figs. 56.–57. respectively) indicate the presence of a desk. However, it remains unclear whether these markings correspond to the original prayer desk or reflect modifications introduced during a later alteration.

While material evidence supports the existence of a prayer desk in the upper-tier stalls, archival research reveals that prayer desks were absent from the lower tier until at least 1682 (see *4.5.1. Additional elements*). This distinction underscores the functional and hierarchical differences between the two tiers.

Fig. 56. Certosina panel C.2.1., suggesting the position of these panels on the end sides of the lower tier, the inclination of the lower-tier armrest and the inclination of the upper-tier bookrest (below). (James Saliba, 2014)

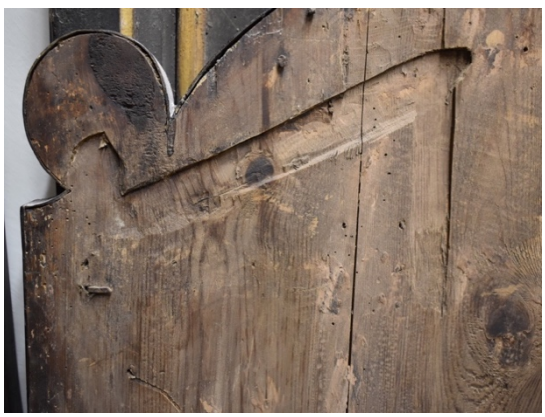


Fig. 57. Detail of backside of certosina panel C.2.2. suggesting the presence, shape and inclination of a prayer desk linked to the upper tier (right). (James Saliba, 2014)

Framed decorative friezes in the choir stalls

Framed decorative friezes (**Cat.B**) ran horizontally along the choir stalls, positioned above the armrest back rail and, in the case of the upper tier, beneath the inlaid dorsal panels. These friezes appear to have featured distinct designs for the upper and lower tiers.

Lower tier

The frieze on the lower tier depicted a cityscape (Pullicino, 1877, p.26) (**B.1.1.**, Fig. 58.), probably imbued with theological symbolism, representing the *City of God* as described in St Augustine's writings. The frames for these cityscape inlays on the lower tier (Fig. 59.) were wider than those on the upper tier. Evidence from two surviving fragments reveals that the original frame (Figs. 60.– 61.) included an inlay banding, as indicated by a slot designed for its insertion. This feature aligns with other original frames and *toppo* inlays identified in other parts of the stalls. However, most of these frames were replaced during later interventions. The profile and dimensions of the original frame can be reconstructed from the surviving fragments.

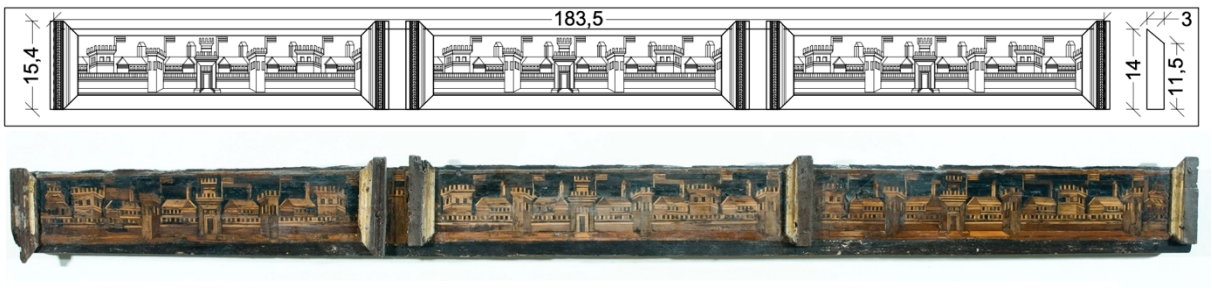


*Fig. 58. Cityscape frieze **B.1.1.** before the 2018 intervention.*(conservation records: James Saliba, Bruno Ambrosio, 2016)

Fig. 60. Original lower-tier frieze frame with slot for toppo technique inlay banding. (James Saliba 2024)

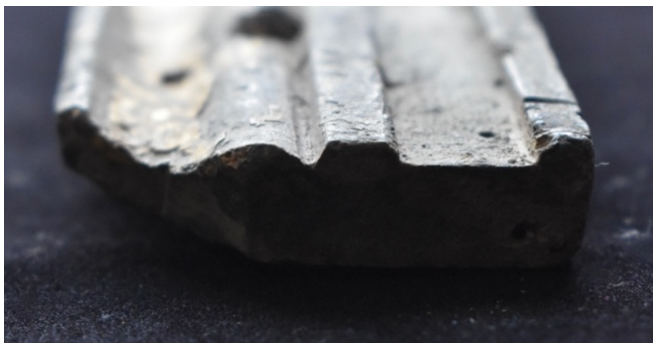


Fig. 61. Profile of original lower-tier frieze frame.(James Saliba, 2024)

Upper tier

The upper-tier frieze (**Cat. B.2**.) (Fig. 62.) showcased geometric inlays and architectural motifs, including depictions of staircases and trompe l'oeil protruding beams. In contrast to the inlays on the dorsal panels, which were directly embedded into the main panel board, these inlays were first assembled separately on parchment before being transferred to their designated support. This manufacturing process is evidenced by parchment pieces recovered from fragment **B.2.1**. (Fig. 63.).

These inlays on the upper-tier frieze were interspersed with inlaid pedestal bases (**Cat. J,** Fig. 64.–65.). These pedestal bases likely supported five-sided column shafts that extended upward to the elaborately carved canopy dividers. These canopy dividers attributed to the 15th-century choir stalls have been repurposed in the 19th-century choir stalls currently installed in the Cathedral.

The friezes in the upper tier were bordered by a thin moulded profile along their top and bottom edges. Unfortunately, no intact examples of this moulding survive, leaving much of their original detailing uncertain and limiting the potential for accurate reconstruction.

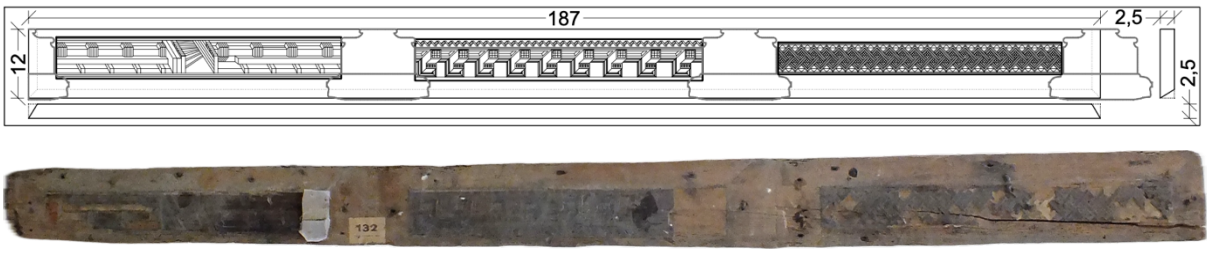


Fig. 62. Geometric and architectural frieze, **B.2.1**., before the 2018 intervention. (conservation records: James Saliba, Bruno Ambrosio, 2016)

Fig. 63. Parchment used for the transfer of inlay decoration, as part of the 15th-century manufacturing process, recovered from fragment **B.2.1.** architectural and geometric frieze, currently conserved at the Mdina Metropolitan Museum. (James Saliba, 2024)

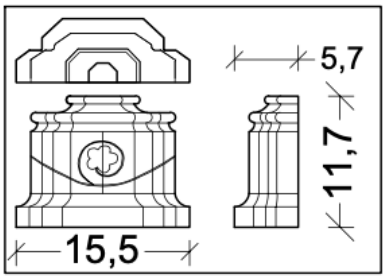


*Fig. 64. The single surviving fragment of pedestal base elements (**Cat. J.**)*. The white arrows indicate inlaid stringing whilst the yellow arrow indicates a floral motif. The presence of such decoration underscores the extent of the inlay decorationas a unifying feature of the choir stalls in origin. (conservation records: James Saliba, Bruno Ambrosio, 2016)

Fig. 65. Rear view of pedestal base fragment (J.1.) in previous figure. This fragment presents a central etched marking line (yellow arrow) similar to the ones marked on the geometrical frieze support.

5.2.3. Insights into stall widths

Valuable information regarding stall widths may be derived from the geometric frieze support, which retains original manufacturing markings that allow reliable measurements. This frieze (**B.2**.**1**.) spans the width of three stalls and features precisely etched lines marking the center-to-center alignment of the column bases and pilasters delineating each stall (Fig. 66.). These markings would have probably aligned with the beams in the underlying structural framework of the choir stalls.

The original center-to-center spacing of the upper-tier stalls has been measured at 630 mm, a dimension that appears consistent across the three stalls covered by this frieze. However, since only one fragment of this type has survived, it remains uncertain whether this measurement was uniformly applied to the rest of the upper-tier stalls.

Supporting evidence for this consistency across the upper-tier stalls comes from the width of the original panel lumen observed on the restored inlaid panels, as well as the dimensions of the recovered seats. These elements seem to support the hypothesis of uniformity, with the dignitary stalls exhibiting slightly wider center to center dimensions (670mm), as indicated by the wider panel lumen—and consequently a wider seat—compared to the rest of the upper-tier stalls (see *5.3.1. Reduction of Panel Lumen*).

In contrast to the reliable data provided by the original markings on the geometric frieze, the architectural friezes (lower tier) have undergone frame replacements, rendering them unsuitable as definitive markers of the stalls' original dimensions. Similarly, while the remaining armrest from the lower tier (**F.2.**) might offer clues through its continuity of shape, the fact that only one such element survives limits its representativeness and reliability as a basis for broader conclusions about the lower-tier stalls.

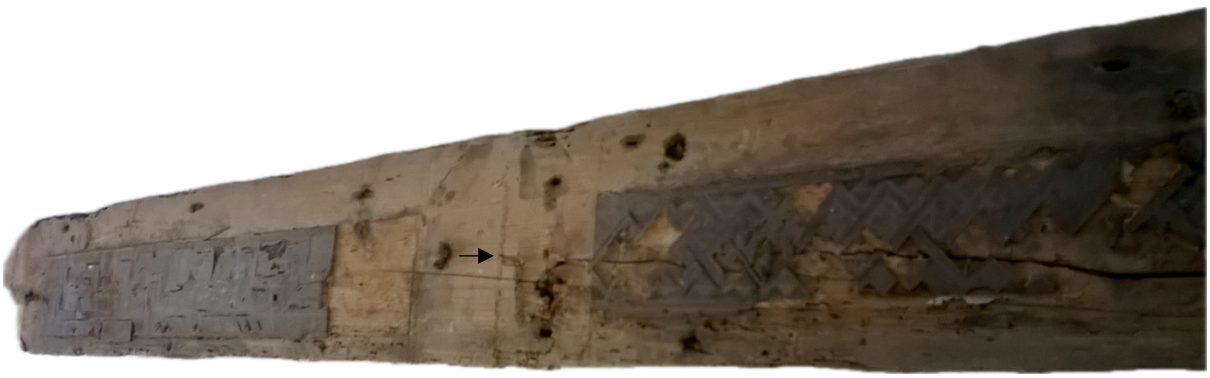
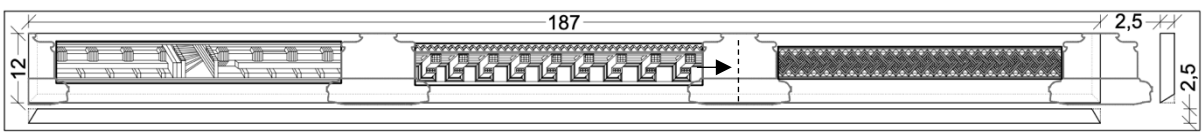


Fig. 66. Centre-to-centre marking line pertaining to original manufacture (indicated by the black arrow), on upper-tier frieze, **B.2.1.** (conservation records: James Saliba, Bruno Ambrosio, 2016)



5.2.4. Rank and hierarchy

The hierarchy and ranking order of the choir stall occupants was reflected in their assigned seating arrangement. Beyond decorative differences, one of the primary indicators of rank was the height at which individuals were standing.

The dignitary stalls, occupied by the Bishop and Cantor, were distinguished from the Canons' stalls in the upper tier by being elevated on a raised platform. This platform created a height difference of approximately 175mm between the dignitary seats and those in the upper tier. Evidence for this elevation is found in original marking lines on the dignitary stall sides and the seating joints on both sides of these fragments (see *Figs. 48.–49.*). This measurement aligns with archival evidence from Misc.173 Tom.3, f.64, which notes that the Bishop and Cantor's seats were elevated by two-thirds of a palmo over the Canons' seats.[7]

Similarly, one of the certosina panels (**C.1.1**., Fig. 67.), identified as being positioned at the terminal ends of the lower-tier seating sub-groups, provides valuable insight into the height of the raised access platform required to reach the upper tier.

This height was measured at 240mm, a dimension that closely corresponds with archival evidence describing the height as slightly less than a palmo (Misc.173, Tom.3, f.63) in the late 17th century. This consistent alignment in height measurements between the observed original manufacturing, and those recorded in historical sources from later periods suggests that the seating and standing heights and proportions remained unaltered until the late 17th century.

*Fig. 67. Fragment **C.1.1.** lower-tier end panel.* The undecorated band at the base is indicative of the height of step leading to the second tier seatings. (James Saliba, 2014)

[7] palmo denoted as 261.255mm (Gyllenbok, 2018)

5.2.5. Missing components

No evidence has been found for several components of the Mdina choir stalls, including kneelers, the structural anima, lower-tier stall sides, seat backs, backside ornamentation, floorboards, or the choir's cornice. Some of these elements are specified in the original contract, others are integral to the structure and must have existed, while the presence of others is inferred from markings on surviving fragments. Their absence highlights the need for further investigation to better reconstruct the stalls' original configuration more comprehensively.

Misericords

A notable feature of traditional choir stalls is the misericord—a small ledge situated on the underside of the seats (Fig. 68.), designed to provide some support for occupants during prolonged standing (see *Glossary*).

Although the whereabouts of the original misericords from the Mdina choir stalls are no longer known, their former presence is strongly suggested by markings on surviving seat fragments, indicating points of support and attachment.

Of the 14 seat fragments analyzed, 7 exhibit a distinct V-cut (Fig. 69.), 4 consist solely of the rear portion of the seat, and 3 retain part of the central frontal section (Fig. 70.). The latter fragments display attachment evidence that strongly supports the original inclusion of misericords, underscoring their functional and artistic importance in the original design.

Misericords in the Medieval and early modern period were often embellished with carving and often provided room for creative inventiveness and at times with playful meanings from the artisan. Given the intricate carving evident in other elements of the choir stalls—particularly the elaborately carved canopy dividers—it is likely that the misericords were also richly ornamented, reflecting the same high level of craftsmanship and artistic detail characteristic of the stalls.

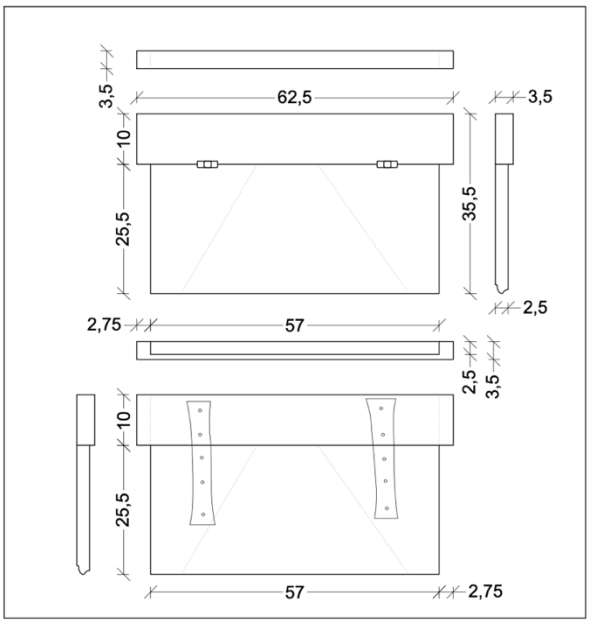


*Fig. 68. Average dimensions extracted for seatings(**Cat.G**.)* (excluding the dignitary stall seat fragments)

Fig. 69. Removal of misericords after 1876. Seat fragments **G.4.** (a) and **G.7**. (b) are two of the seven seat fragments that display a distinctive V-cut on the seating surface. This V-cut appears to have been a deliberate methodological approach for the removal of the misericords. By employing this technique, the section of the seat to which the misericord was attached could be sawn off while avoiding contact with the metal hinges. (James Saliba, 2014)

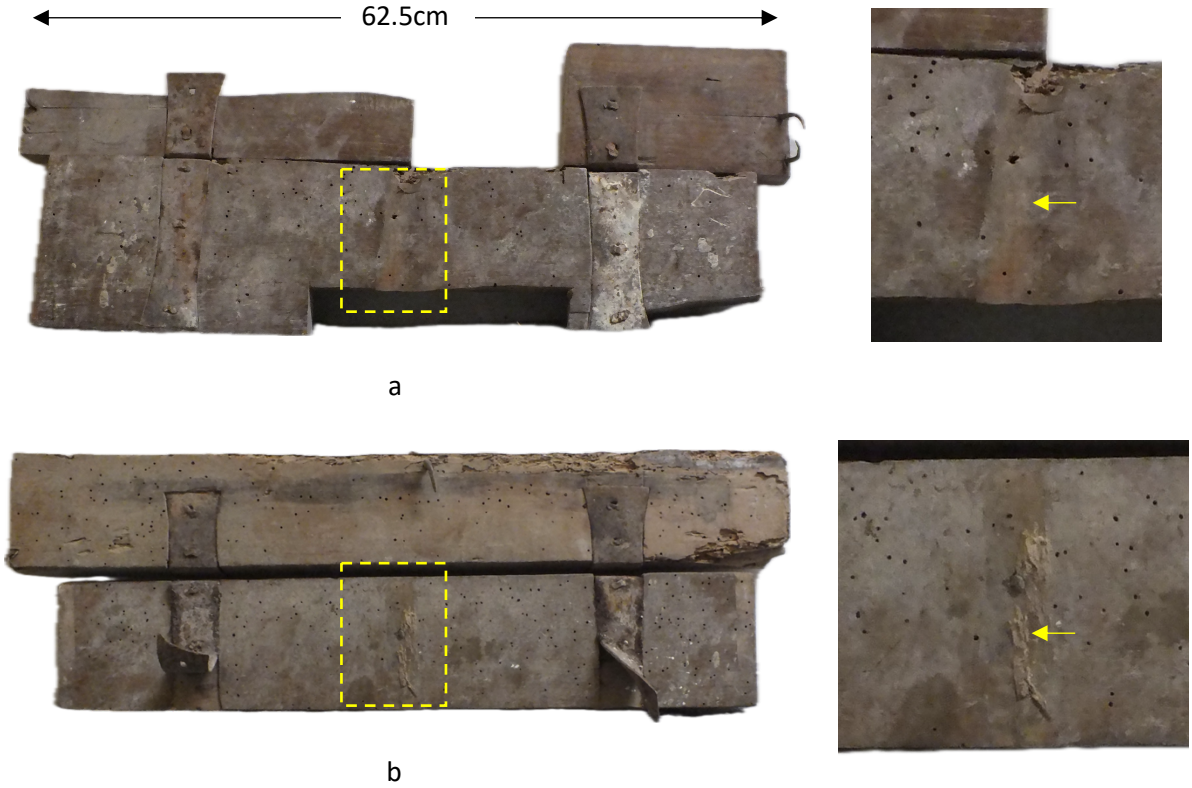


Fig. 70. Markings indicating previous existance of misericords Indicated in yellow. (James Saliba, 2014)

G.5. Markings suggesting the previous attachment of misericord support.

(b) **G.3.** Markings suggesting the previous attachment of misericord support

Hypothetical reconstruction based on the observed measurements

The study of the surviving fragments enabled a hypothetical reconstruction of the choir stalls based on the recorded measurements (Figs. 71.–73.).

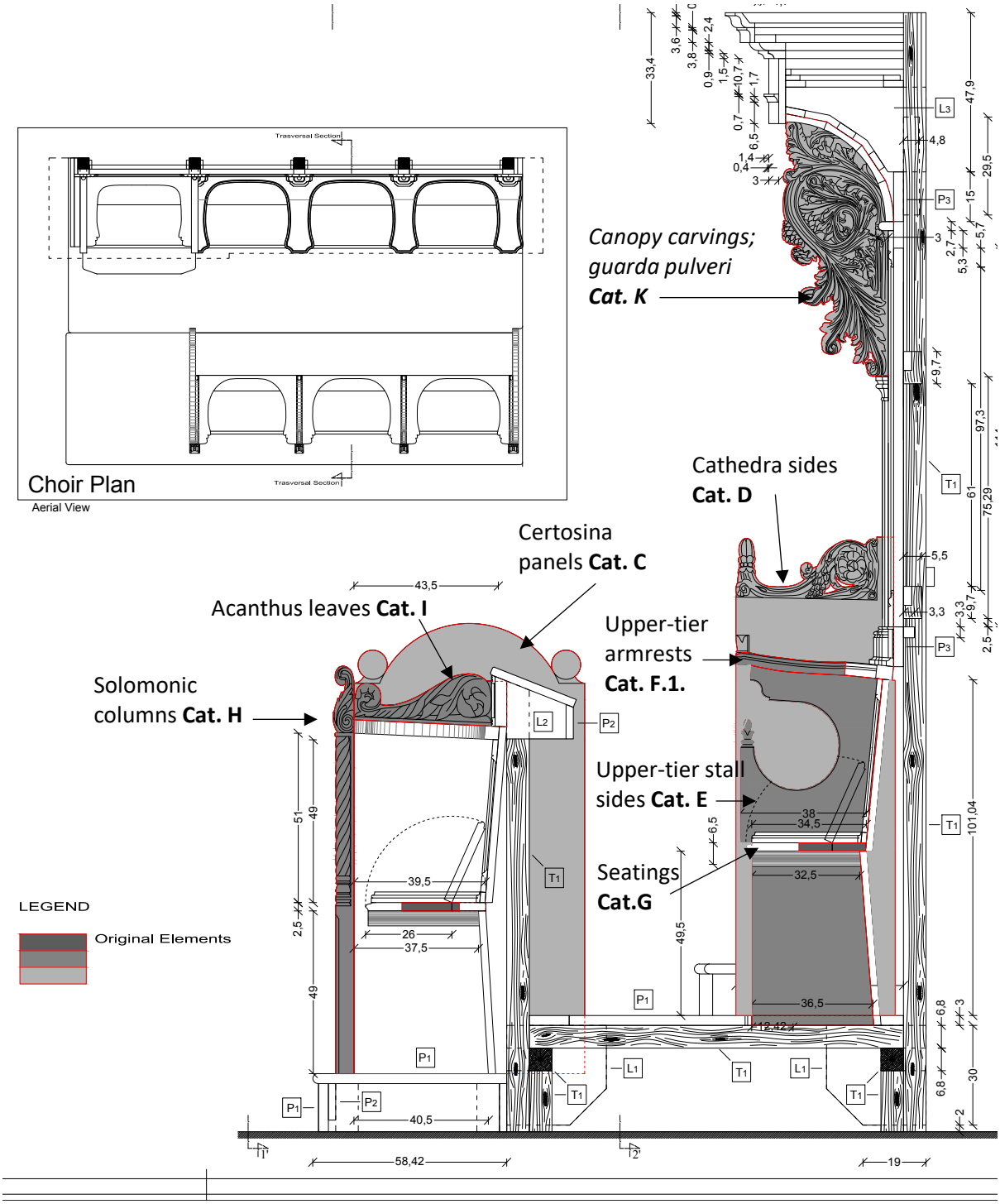


Fig. 71. Hypothetical reconstruction, section view, based on the recorded measurements. The original fragments are marked in red (except for the central canopy divider which might have been introduced during the resizing of the stalls and therefore cannot be attributed with certainty to the original manufacturing of the stalls). (conservation records: James Saliba, Bruno Ambrosio, 2016)

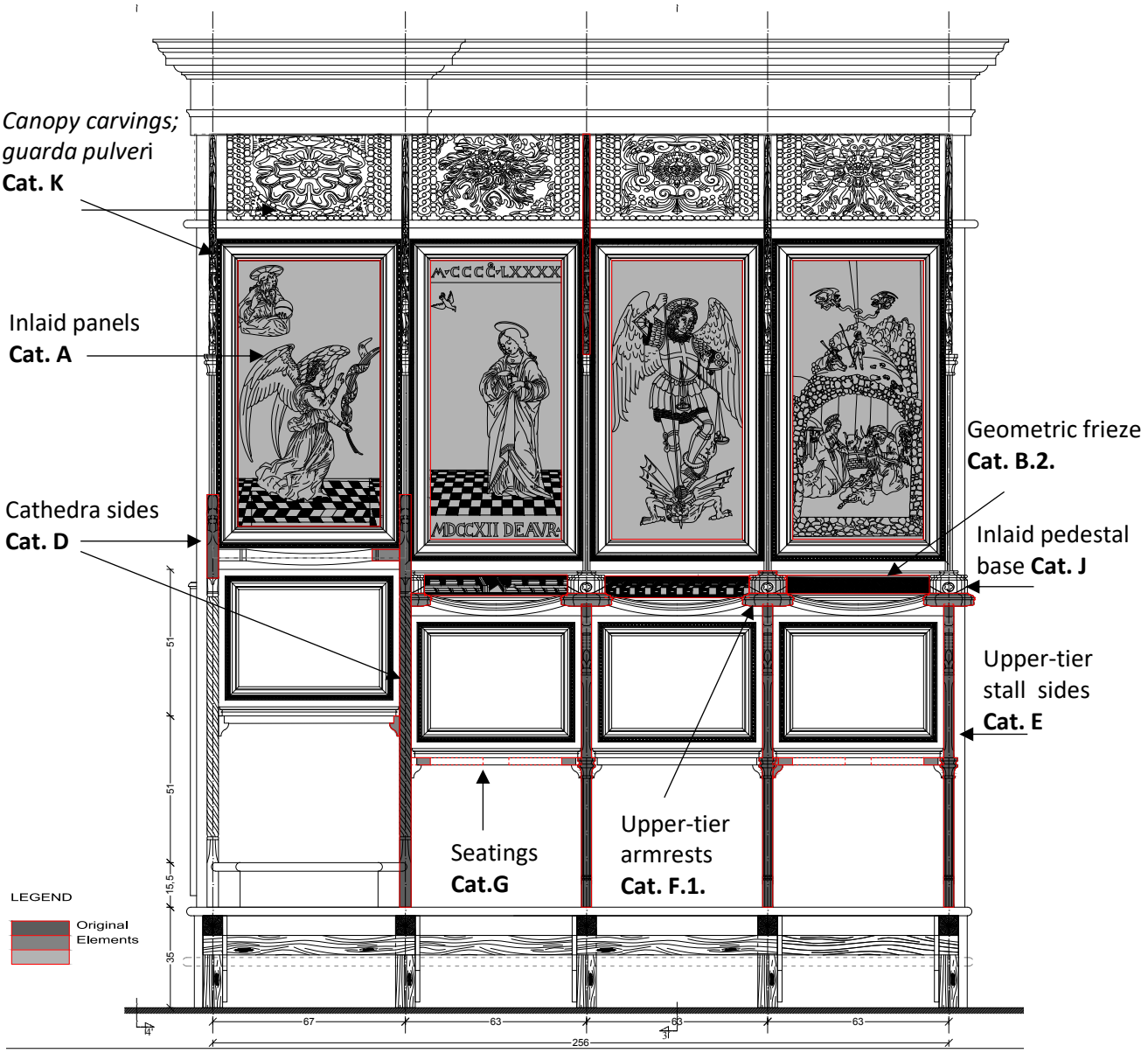


Fig. 72. Hypothetical reconstruction of the upper tier. based on the recorded measurements.

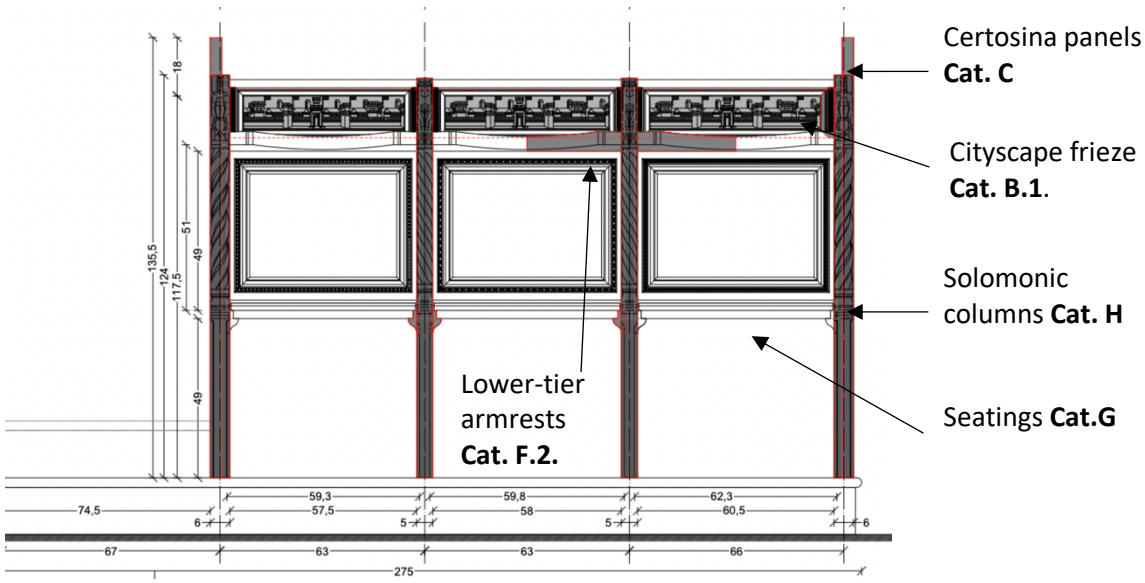


Fig. 73. Hypothetical reconstruction of the lower tier based on the recorded measurements. (conservation records: James Saliba, Bruno Ambrosio, 2016)

5.2.6. The choir stalls' original configuration

Evidence from some fragments suggests that the original arrangement of the choir stalls may not have adhered strictly to a parallel configuration. Instead, there are indications that the stalls may have incorporated return seating since their inception. This alternative arrangement, potentially forming a closed chancel within the nave, merits further exploration.

One notable stall side fragment, (**E.10.,** Fig. 74.), features more ornate detailing along its cutout border, implying that it belonged to a stall with a distinct position, such as an end or possibly corner stall. The stall is more ornate only on one of its sides. The joinery on the opposite, non-ornate side, further distinguishes this fragment from the rest, as it presents angled joinery slots which are more like those on the dignitary stall sides than to those on the stall sides pertaining to the upper-tier seatings (Fig. 75.).

Additional support for a non-linear configuration comes from an armrest with an angled slot. This armrest, **F.1.9.** (Fig. 76.), has been attributed to the original construction of the stalls based on its manufacturing details, which align with those of the original fragments. However, it exhibits a carved slot on its underside set at an 18-degree angle—distinct from other armrests, which have slots aligned perpendicularly to the back-rail (Fig. 77.). Notably, the slot on armrest **F.1.9.** shows no signs of later modification.

Further compelling evidence is found in the '**Alllegory of Malta**' panel, which bears marks suggesting the possible past attachment of hinges (Fig. 78.). The markings indicate the attachment of three rectangular elements, secured by three square shanked nails each, spread along the outer side of the panel in equidistant manner. Intentionally carved pockets in these areas appear to have been created to accommodate a protruding pivoting system, strongly implying the attachment of hinges, concealed beneath the panel frame.

These combined findings suggest the possibility that the stalls were not originally aligned in parallel configuration, underscoring the need for further investigation into the potential spatial and functional configurations of the choir stalls at the time of their construction (see *7.3. Relocations and reverence*).

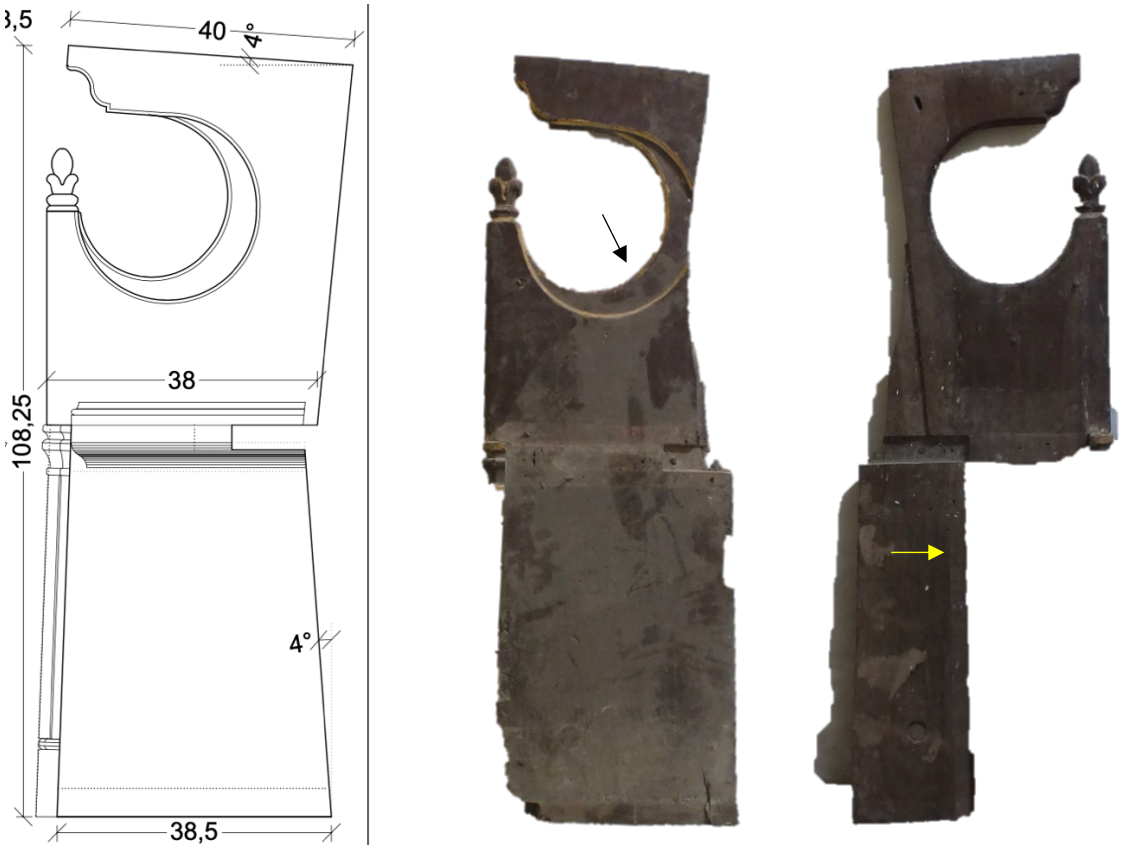


*Fig. 74. Upper-tier stall side **E.10**.* presenting a more elaborate stepped cutout (black arrow) on one side, and different joinery grooves (yellow arrow) on the opposite side.

(conservation records: James Saliba, Bruno Ambrosio, 2016)

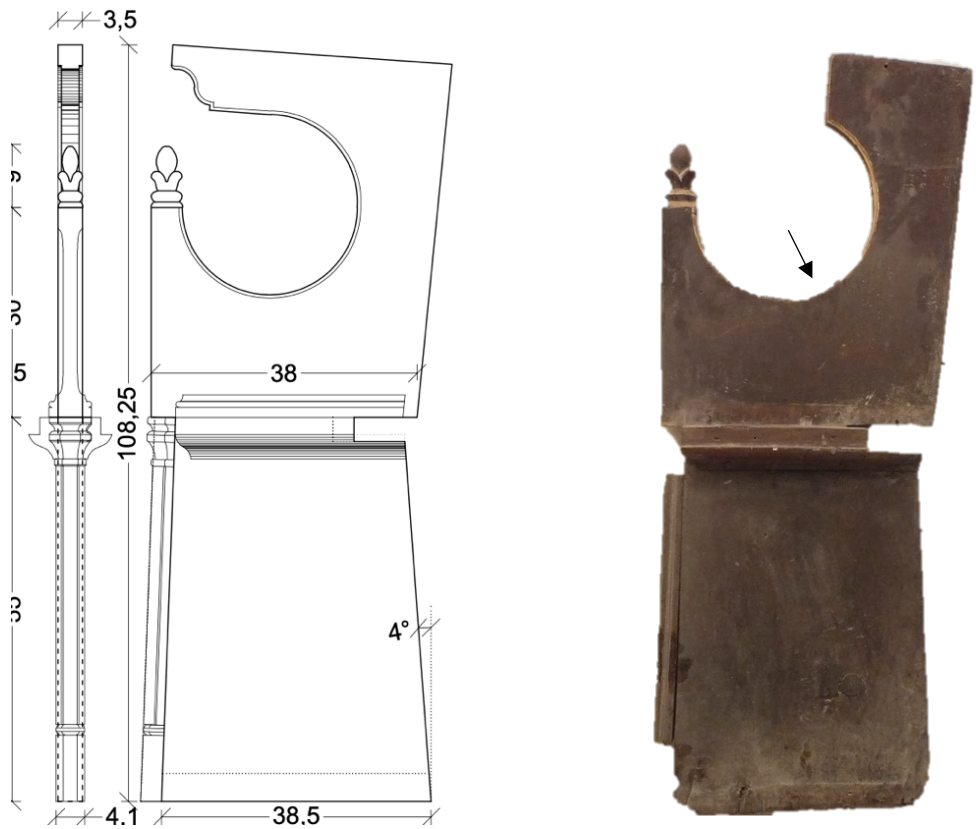
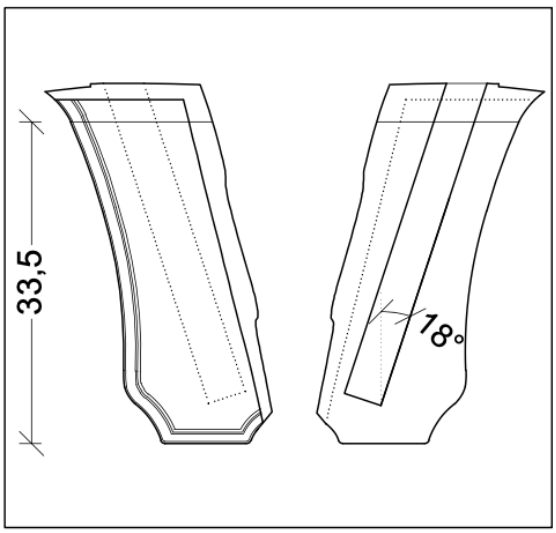


*Fig. 75. Upper-tier stall sides (**Cat.E**.), generally presenting a single cut out* (black arrow)
(conservation records: James Saliba, Bruno Ambrosio, 2016)

*Fig. 77. Bottom side of armrest **F.1.9.*** revealing joinery groove for the attachment of stall side originally set at an 18-degree angle to the vertical axis. (conservation records: James Saliba, Bruno Ambrosio, 2016)

*Fig. 76. Bottom side of armrest **F.1.5.*** showing joining groove along its central axis, as per the majority of armrests (conservation records: James Saliba, Bruno Ambrosio, 2016)



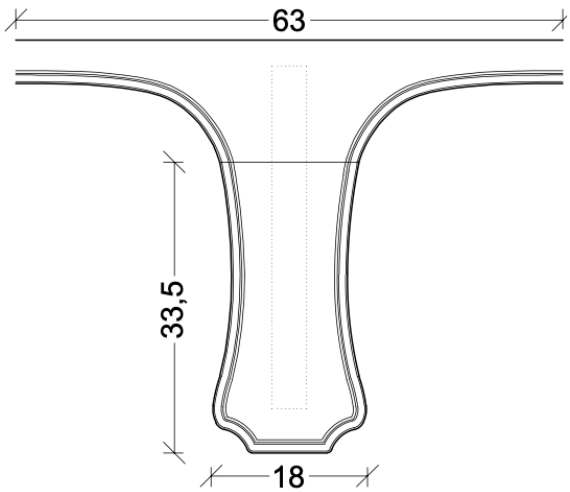


*Fig. 78. Residual hinge attachment marks on the **Allegory of Malta** panel.* The equidistant marks on the panel indicate the prior attachment of rectangular elements secured with three square shank nails. Intentionally carved out pockets in these areas suggest accomodations for a protruding pivoting system. These features strongly suggest the possibility that hinges were once attached and concealed beneath the original 15th-century panel frame. (James Saliba, 2015)

5.3. Alterations

Five of the 24 inlaid panels were restored during the 2018 restoration project (see *3.2.2. conservation records,* and *1.3. Positionality of researcher*), providing crucial evidence for understanding the artefact's history and evolution. These panels are:

Archangel Gabriel and God the Father (Annunciation scene)

St Mary/Annunciation panel (Annunciation scene)

St Michael

Nativity

Alllegory of Malta

5.3.1. Replacement of frames on panels

A major modification to the choir stalls was the replacement of the original inlaid frames with other less ornate frames. Their presence on all the panels, apart from the Adam and Eve panel, which was found on the back in 1876, suggests that these frames were added during, or after the enlargement of the choir stalls by the addition of three stalls per wing. These later-added frames on the panels (Fig. 79.) represent a significant aspect of their historical modifications, offering valuable insights into their evolving design. According to Galea-Naudi and Micallef (1996, p.38) (see *2.2.3. Form – original design*), the panel depicting **Adam and Eve** retains its original frame (Fig. 80.), suggesting that the other frames are later additions (Fig. 81.). However, the authors do not delve further into this observation.

During the restoration process, the removal of these later-added frames confirmed that they were introduced during a significant restoration effort and were not part of the original stalls. This discovery provides physical evidence supporting the hypothesis proposed by Galea-Naudi and Micallef.

Further analysis during the restoration revealed additional evidence indicating that the frames were added sometime before 1712, as shown by an inlaid date discovered on one of the panels. This finding not only confirms the non-original nature of the frames but also provides a clearer timeline for their introduction, offering a deeper understanding of the artefact's complex history.

Fig. 80. ***St Margareth*** *panel with its later-added frame replacement. (James Saliba, 2024)*

Fig. 79. ***Adam and Eve*** *panel still retaining its original frame. (James Saliba, 2024)*

a

b

Fig. 81. Detail of added frame on ***St Apollonia*** *panel (a) and inlay banded* ***Adam and Eve*** *panel frame (b). (James Saliba, 2024)*

Manufacturing and installation of the frames

A notable difference in manufacturing techniques distinguishes the added frames from the original fragments, providing further confirmation that they belong to a distinct phase in the life-history of the choir. The added frames were designed with material efficiency in mind, with their mouldings shaped on wood supported by wooden wedges (marked 1 in Fig. 82.). These wedges were first nailed to the inlaid panels, providing the required inclination and creating a hollow underside for the frames. The frames themselves were then secured to these wedges with nails. This application method is distinct from the original construction techniques observed.

Further examination revealed that the frames were made from a coniferous wood species, differing from the hardwood used for the manufacturing of the other fragments forming the upper tier. This choice of material marks another deviation from the original craftsmanship. Furthermore, tool marks on the backs of the frames offer additional clues to their later origin. The regularly spaced and uniformly oriented sawing marks on the backs of the added frames (Fig. 83.) indicate the use of reciprocating equipment, such as a mechanized frame saw, in stark contrast to the irregular hand tool marks observed on the original fragments (Fig. 84.).

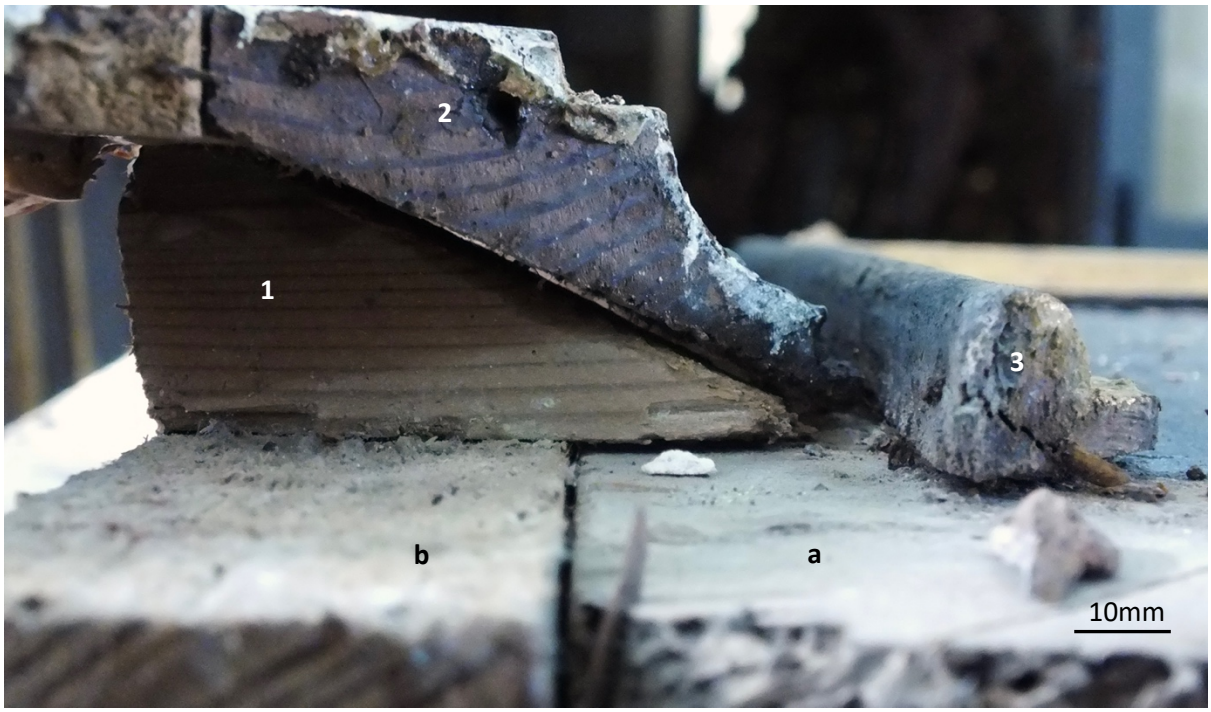


Fig. 82. Section view of later added frames revealing their method of assembly (James Saliba, 2016)

The frame profile sits on top of nailed wedge, effectively saving on material. A separate decorative moulding strip is nailed in front, completing the frame profile. Another feature that can be observed is the additional wood, added to the original walnut panel for elongation. The two alterations seem to have been carried out duting the same intervention. All the timber used in these alterations was coniferous, differing significantly from the original.

(a) Original panel (b) Additional wood, added later for panel elongation
(1) Supporting wedge (2) Frame (3) Separate moulding strip

Fig. 83. Detail of the regular saw marks on back side of the Nativity panel's added frame, suggesting the use of reciprocating equipment. (James Saliba, 2024)

Fig. 84. Detail of the Irregular sawing marks left from original milling, on the back side of the Adam and Eve panel (inset). (James Saliba, 2024)

Reduction in panel lumen

The replacement of frames significantly reduced the visible area, or *lumen*, of the panels, a detail that was confirmed during the 2018 conservation project when some of the frames were removed. The underlying panels provided valuable insights into the positioning of earlier frames (Figs. 85.–86.).

Notably, mitre cut marks on the panels indicated that the 45-degree angles of the original frames had been cut directly in place (Fig. 87.). Furthermore, the original distance between the internal edges of the frames was markedly greater than the width afforded by the later additions. This disparity was also evident in the finishing layers, as portions of the original panels, concealed by the added frames, seemed to lack the subsequent layers of finishes applied after their coverage.

The reduction of the panel lumen also obscured parts of the inlaid decoration that were originally intended to remain visible. A striking example is the depiction of Archangel Gabriel's wings, which appeared truncated by the added frame, altering the visual integrity of the design.

Fig. 85. ***St Michael*** *dorsal panel after removal of the added frame.* The white arrow indicates the panel lumen allowed by the added frames, whilst the yellow arrow indicates the original width of the panel lumen. The mitre cut mark, left during original installation is indicated by the black arrow. (James Saliba, 2016)

Fig. 86. ***St Michael*** *panel with added frame and reduced panel lumen* (a), and restored original panel lumen after the 2018 intervention (b). (James Saliba, 2014 & 2024 respectively)

*Fig. 87. Evidence of panel lumen reduction on **St Michael** panel. (James Saliba, 2016)*

(1) & (2) (yellow arrows) – indicate the position where two sides of the frames (bottom and right) joined at a 45-degree angle on the **St Michael** panel.

(1) mitre cut saw marks left from original manufacturing
(2) the white dotted line indicates the position where the added frames would meet.

(a), (b), & (c) (black arrows) – indicate varying levels of finishing material accumulation.

(a) bare wood, never treated, suggesting the area was never meant to be visible
(b) treated wood, likely presents coatings that had been applied till the replacement of frames and reduction of panel lumen.
(c) treated wood, significantly darker, likely presenting more coatings than (b)

Reduction of panel lumen

The reduction of the panel lumen significantly diminished the legibility of the inlay and influenced later repair decisions. This is clearly illustrated by the ***God the Father and Archangel Gabriel*** **panel** (Figs. 88.–89.).

Repairs to the flooring inlay can be stratigraphically attributed to a phase after the frames were added and the lumen reduced. Where the later frame concealed the original surface, the dark-wood *tarsia* survives in its carved pockets in the walnut support, preserving a carefully calculated vanishing point and the intentional use of linear perspective. By contrast, the exposed portion was later repaired using a parquetry technique that neither reproduces the original *tarsia* nor follows its perspectival logic, thereby weakening the intended illusion of depth. A further intervention is visible in the lower flooring, where a band of tiles appears to have been lifted and re-adhered with the reverse face exposed (Fig. 90.). Collectively, these repairs demonstrate a progressive divergence from the panel's original design and artistic intent.

Fig. 88. **God the Father and Archangel Gabriel** panel, with restricted panel lumen as allowed by the later added frames. (James Saliba, 2014)

Fig. 89. **God the Father and Archangel Gabriel** panel restored to its original panel lumen width after the 2018 intervention. (James Saliba, 2024)

Fig. 90. Graphic rapresentation of ***God the Father and Archangel Gabriel*** *panel indicating interventions on the flooring inlay.* (conservation records James Saliba, Bruno Ambrosio, 2016)
Dark grey: surviving 15th-century inlaid floor – with darker wood tarsia encased in the walnut back panel – retained where protected by the later-added frame (i.e., beneath the reduced panel lumen).
White: replacement of the floor pattern following the replacement of frames and the reduction of the panel lumen; the repair is executed in parquetry and differs from the original *tarsia* technique.
Light grey: subsequent intervention to flooring area.

Impact of panel lumen reduction on original date and implications for chronology

The reduction of the panel lumen significantly affected the visibility of the original date at the top of the **Virgin and Holy Ghost panel** (Annunciation scene). A portion of the inscription, specifically a Roman numeral "X," was obscured by the later-added frames. This alteration led to the misinterpretation of the date as "1480" instead of the intended "1490," a misunderstanding perpetuated by several authors (see *2.2.2. Completion and Installation*).

Dating the intervention

The original inlaid date inscription was later gilded, but the gilding covered only the portion visible after the panel lumen was reduced, leaving the obscured "X" untouched. This selective gilding provides strong evidence that the reduction of the panel lumen predated the gilding intervention (Fig. 91.).

Further supporting this sequence is the gilded inscription “MDCCXII DE AUR” located at the bottom of the panel, which likely refers to a gilding intervention in 1712 (see *2.2.3. Form: Other Sources – Gilding*). This inscription remains fully visible within the adjusted panel lumen created by the added frames. Archival records corroborate its association with the 1712 gilding work (see *4.6. Changes in Decorative Treatment*).

Stratigraphically, the alignment of the “MDCCXII DE AUR” inscription within the reduced panel lumen confirms that the frames were installed prior to 1712. Additionally, the gilding of the original date inscription, confined to the visible portion, further substantiates that the panel lumen reduction and the addition of the frames occurred before the 1712 intervention.

Chronological Sequence of Alterations

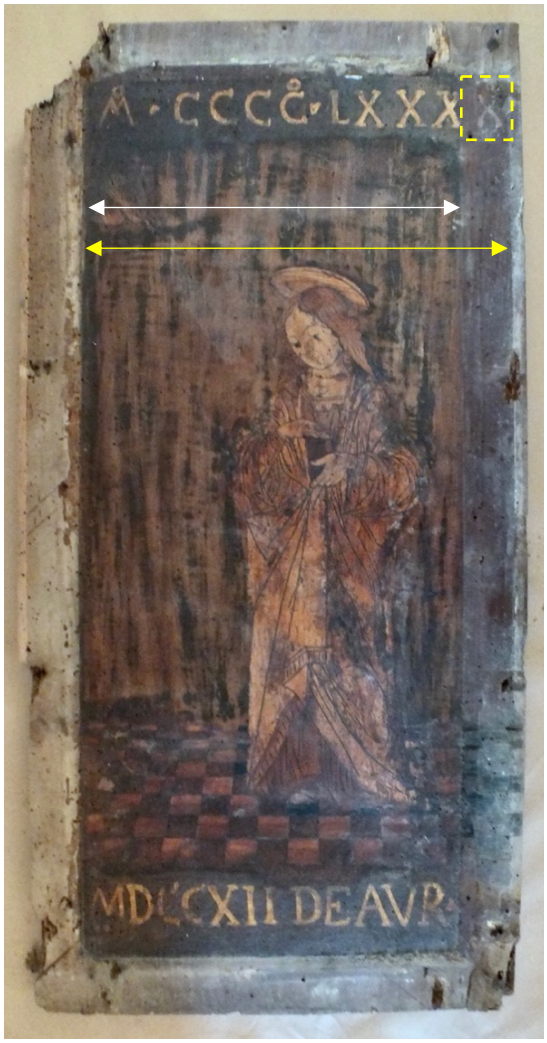
The stratigraphy of interventions suggests the following sequence:

- The original inlaid date was created, marking the panel's initial completion.
- Later frames were replaced, reducing the panel lumen and partially obscuring the original date.
- The gilding intervention of 1712 was executed, consistent with the reduced panel lumen.

These findings emphasize the significant impact of the panel lumen reduction, not only on the physical appearance of the artifact but also on its subsequent interpretation.

a

a



b

b

Fig. 91. Uncovering the original date.

The images marked:

(a) Illustrate the panel before the removal of the later added frames

(b) Illustrate the panel following the removal of the added frames.

White arrows – indicate the allowed panel lumen after the addition of the replacement frames

Yellow arrows – indicate the original panel lumen

The inlaid roman numeral 'X', concealed by the addition of the replacement frames is highlighted by the yelow square (James Saliba, 2016)

Reuse of original frames as repair material

Frames exhibiting similar manufacturing techniques and inlay banding to those found on the **Adam and Eve** panel have been identified as repurposed repair materials for the dorsal panels (Figs. 92.–93.). The methodology of these interventions suggests they were carried out in the same period (Fig. 94.) with the addition of decorative frames to the fronts of the panels (see *5.3.2. Resizing*). This indicates that the inlaid frames—possibly originating from either the front or back—were reused during a significant restoration effort aimed at addressing structural deficiencies.

Notable evidence of this practice has been observed on the reverse sides of the **St Leonard/Anacoreta panel** and the **Mary Magdalene/St Helen panel**.

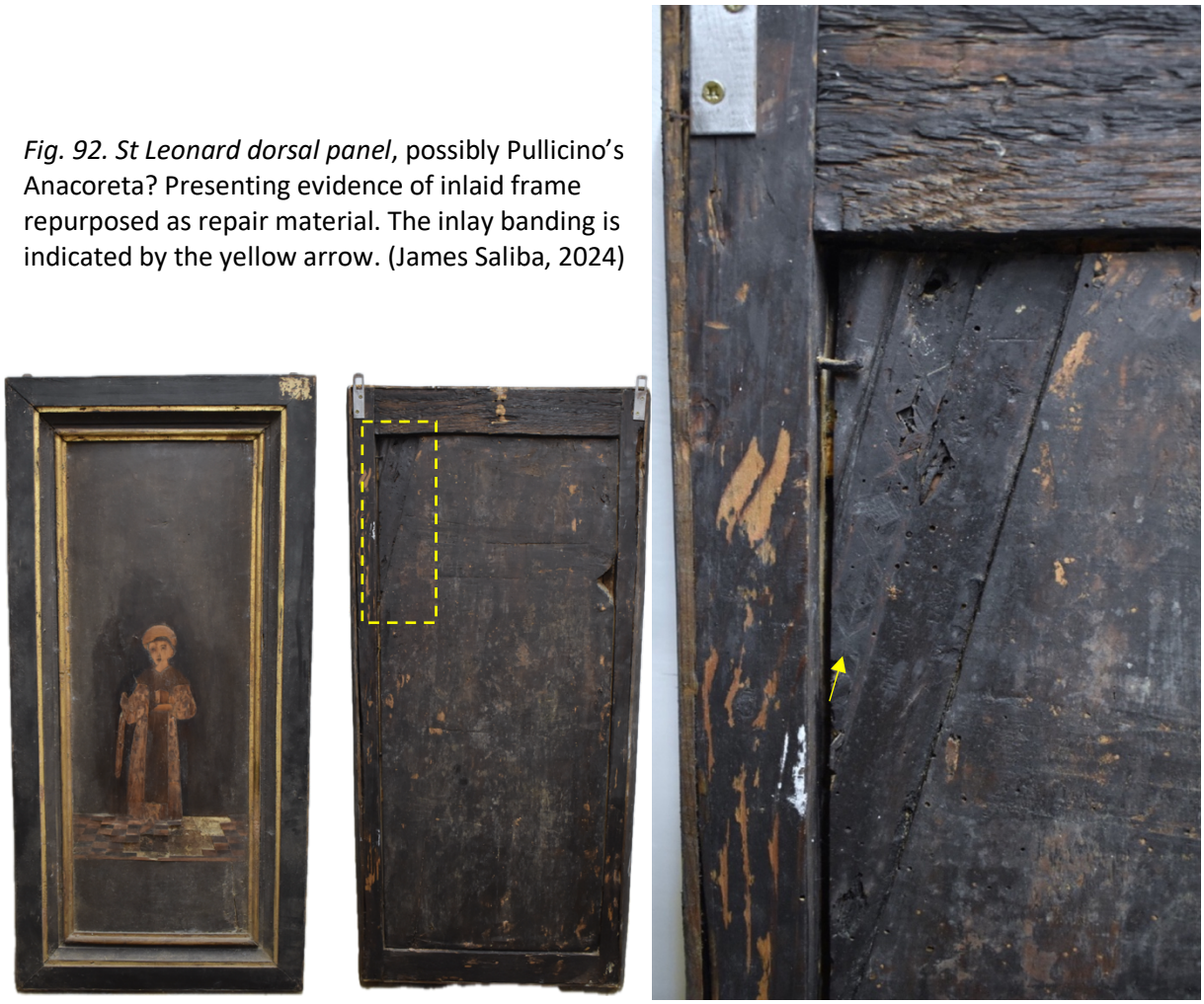


Fig. 92. St Leonard dorsal panel, possibly Pullicino's Anacoreta? Presenting evidence of inlaid frame repurposed as repair material. The inlay banding is indicated by the yellow arrow. (James Saliba, 2024)

Fig. 93. Inlaid frame used as repair material to support patchwork and additional strips on **St Mary Magdalen/StHelen** dorsal panel.

(James Saliba, 2024)

Yellow arrow: inlaid frame
Black arrow: patchwork nailed to original panel with square shank nails
White arrows: additional strips of wood on sides

Fig. 94. Recovered 15th century frames that had been reused as repair material. The frames, manufactured out of solid walnut feature a central 'toppo' technique inlay banding.

(a) Frame fragment as recovered (b)Frame fragment after cleaning.

Inset – detail from Adam and Eve panel original frame with toppo technique. (James Saliba, 2024)

5.3.2. Resizing

Alterations to the inlaid panels and evidence of resizing

Alterations to the inlaid panels appear to have taken place prior to the 1712 gilding intervention. Notably, additional wood has been observed on some panels, which does not correspond to the original manufacturing. This added material seems to have been introduced concurrently with the installation of the replacement frames mentioned earlier.

A striking example is the **Alllegory of Malta panel**, which was documented in the late 19th century on the external side of the Cantor's stall (Pullicino, 1877, p. 16). This panel exhibits a deliberate elongation achieved by adding wood at both its top and bottom (Fig. 95.). This additional wood is aligned and is supported by the wooden wedges used to secure the replacement frames, strongly suggesting that the panel elongation and the frame additions were executed together as part of the same intervention.

*Fig. 95. Elongation of **Allegory of Malta** panel*

, (occupying the external side of the Bishop/Cantor stall in the 19th century. (James Saliba, 2016)

Yellow arrows: mitre joint saw marks indicating original panel lumen
White arrows: positions of later added frame supporting wood wedges
Black arrows: additional wood strips for panel elongation.

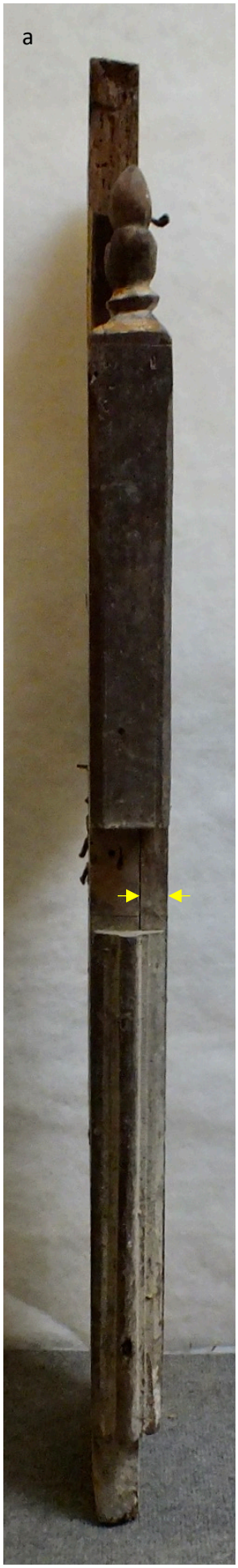
Additional wood on upper-tier stall side

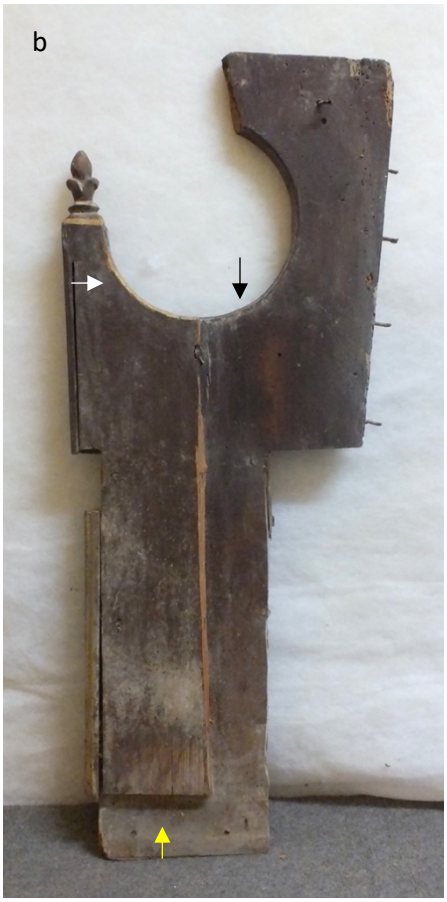
One particularly intriguing element is fragment E.2. (Fig. 96.), a stall side from the upper tier that appears to have undergone a modification prior to 1712. This side featured an additional plank of wood, increasing its thickness. The addition is clearly a later intervention, as the concealed area of the original side displays the same carved concave profile decoration around the edge of its cutout as the exposed face. This consistency indicates that the original surface was initially complete and unaltered.

Macroscopic analysis identified the added wood as deriving from a coniferous species, similar to the material used for the replacement frames, but distinct from the original, which in this case has been identified as walnut. Although it is conceivable that the thickness of this fragment was adjusted during its initial manufacture or installation, this seems less likely due to the significant divergence in timber species used for the addition.

The date of the modification can be deduced from the gilding on the outer surface of the added plank. Both sides of the now-enlarged fragment were adorned with gilded decoration. However, while the gilding extends to the cutout edge of the added plank, the concealed edge of the original element remains ungilded.

These observations suggests that the additional plank was introduced before 1712.





b- altered face of **E.2.**
yellow arrow – indicates the additional wood plank (coniferous)
white arrow - indicates gilding detailing on the added wood
black arrow – indicates the non-gilded but refined concave carved profile of the cutout

c- opposite face of **E.2.** (walnut)
white arrow - indicates gilding detailing the concave carved profile of the cutout

(a) Frontal view of **E.2.**
yellow arrows indicate the thickness of the added wood plank

*Fig. 96. Stall side **E.2.** revealing different decorative details and joining system compared with other stall-side fragments within **Category E**.* (James Saliba, 2015)

Acanthus leaf fragments (Cat. I, I.21. and I.11.) presenting a different carving approach

Some fragments present a different carving approach. Fragments **I.21.** (Fig. 97.) and **I.11.** (Fig.98.) from the Acanthus Leaf category (**Cat. I**) are suspected to have been additional elements rather than part of the original set. While they generally align with the overall design of other fragments (Fig. 99.) in this category, their carving style is noticeably different, exhibiting less intricacy and elaboration.

A distinctive feature of fragment **I.21.** is the extension on one side of its lower portion, which further sets it apart from others in the same group. Fragment **I.11.** appears to share the same carving style as **I.21.**, reinforcing the notion that these two elements may have originated from a similar context or purpose distinct from the main set.

*Fig. 97. . Acanthus leaf **I.21.** presenting a different carving approach .* (James Saliba, 2015)

*Fig. 99. Acanthus leaf **I.11**. similar carving style to **I.21**., differing from the original.* (James Saliba, 2015)

*Fig. 98. Acanthus leaves **I.23**. and **I.18.** displaying the original carving style and approach.* (James Saliba, 2015)

5.3.3. Relocations

Despite observations suggesting resizing or alterations to the artifact's design and aesthetic qualities, no definitive visual evidence of relocations has been identified. This absence is likely due to the fragmented condition of the stalls and the loss of key structural anima members, which would typically provide clear indicators of such movements.

However, the intact condition of fragment joints strongly suggests that the Mdina choir stalls were constructed in a modular fashion, a common practice also documented in historical sources. Modularity in such structures often involved a base unit comprising one to six stalls, repeated to achieve the desired number of seats (Glover, 2017). This method allowed flexibility in assembly and stability while minimizing signs of relocation or alteration.

Preservation of assembly integrity

Typically, the removal and reassembly of elements would leave visible marks, such as additional nail holes or misaligned joints. However, the absence of such evidence on most salvaged fragments indicates that many components remained undisturbed throughout their lifespan. This hypothesis is supported by the presence of original 15th-century nails in several fragments, with no additional nail traces or realignment marks.

Moreover, the dowelled joints connecting the upper-tier armrests to the back rails provide further proof of modular construction. These components were assembled using mortise-and-tenon joints, secured with wooden dowels. Remarkably, many of these dowels remain intact, suggesting that these connections were not disrupted during the stalls' various relocations and alterations, up until the late 19th-century dismantling.

Segmentation of decorative friezes

The segmentation of decorative friezes also suggests the possibility of modular construction. Two friezes span lengths corresponding to three seatings each, while another fragment differs in length. This systematic segmentation reflects a deliberate and organized design approach, using modular construction. The possible modular construction of the Mdina choir stalls would have allowed that relocation or reconfiguration did not require complete disassembly of the structure. This design approach highlights the ingenuity of the craftsmen, achieving a balance between structural integrity and adaptability.

5.3.4. Implications of the observations

Although limited in number, the fragments of the choir stalls provide a unique opportunity to gain deeper insight into the original form of the stalls, as well as the structural and aesthetic adjustments made to specific components during subsequent modifications. The broader implications of these combined observations are further explored in *Chapter 7. Discussion*.

6. RESULTS – Stratigraphic Analysis

6.1. Introduction

Visual observations have confirmed that, except for the **Adam and Eve** panel, all other surviving panels had their previously inlaid frames replaced during later alterations (see *Section 5.3., Alterations*). The study further indicates that inlay functioned as a unifying design element of the original ensemble, supporting the hypothesis that the stalls were initially finished with a clear coating to enhance the natural tone and grain of the wood.

However, most fragments—including the Solomonic columns, acanthus leaves, stall sides, and added frames—exhibit a thick reddish-brown layer on surfaces that would have been visible when assembled. This coating, which obscures the wood grain (Fig. 100.–102.), likely represents a later decorative treatment applied during the stalls' active use, possibly following replacement of the original frames. A similar darkened coating is present on the dorsal panels; in some cases, it almost fully covers the background, while in others it survives only in depressions created by uneven planing, indicating later abrasion intended to reveal the inlaid decoration beneath.

Archival records further indicate that gilding was introduced as a later enhancement to unify the choir stalls and other artefacts from the old Cathedral, with oil gilding documented in March 1712 (see *Section 4.6, Changes in Decorative Treatment*).

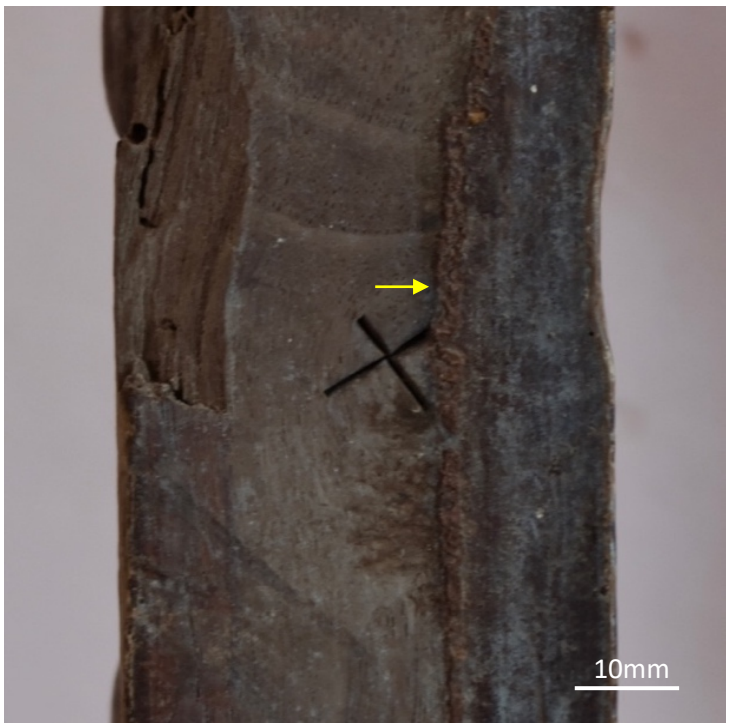


*Fig. 100. Reverse side of Solomonic fragment **H.1.7**.,* showing a chiseled Roman numeral *'X'*. On the right, the natural grain and color characteristic of European walnut are clearly visible. On the left (indicated by the yellow arrow), a thick accumulation of red paint is visible, applied to the exposed surface of the fragment prior to its dismantling. (James Saliba, 2016)

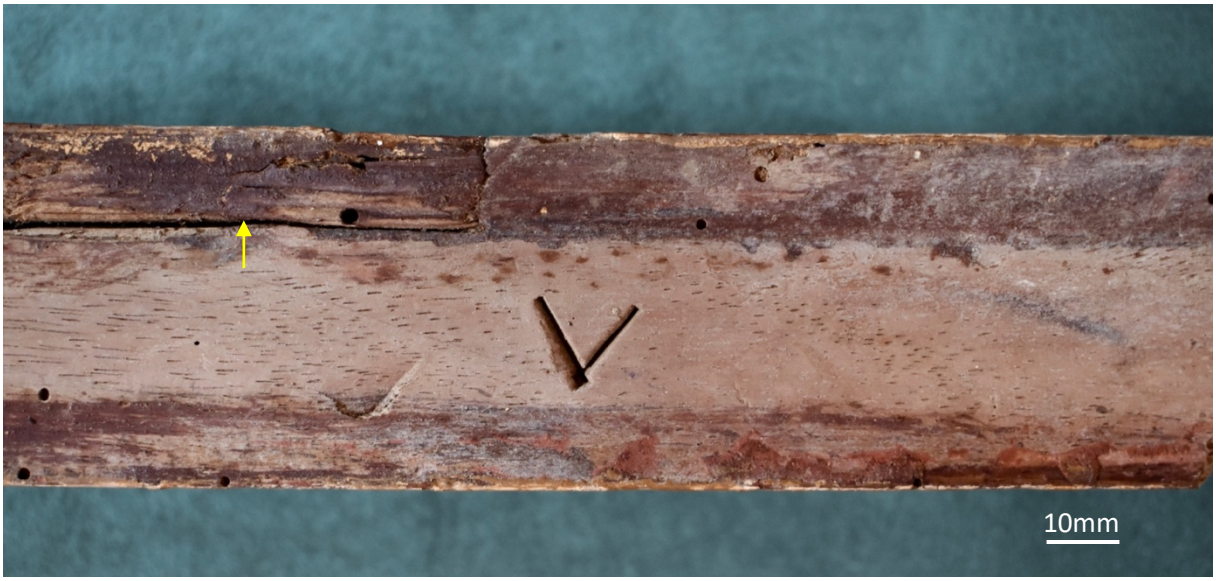


Fig. 101. Reverse side of Solomonic fragment ***H.1.5****.*, revealing the treatment with red paint on the exposed sides of the back, including repair works carried out with timber of different species, indicated by the yellow arrow. (James Saliba, 2024)

Fig. 102. Detail of an original 15th-century frame from the lower-tier frieze, revealing non-original application of grain obscuring finish. (James Saliba, 2024)

The white arrow indicates the bare wood (European walnut) on a splintered area of the frame profile
The yellow arrow indicates the reddish grain obscuring coating.
The area marked ‘a’ & ‘b’indicates the slot designated for the insertion of ‘toppo’ inlay banding. This slot reveals that part of the inlay (or inlay parchment) was still in place upon the last application of this coating, suggesting its non-original application.

A stratigraphic analysis was conducted to examine the layering of finishing treatments applied to the choir stalls over time. This study aimed to uncover the chronological sequence of decorative interventions and provide insights into the evolving appearance of these elements. Three samples were selected, each representing a distinct component of the choir stalls, chosen for their historical and material significance:

Solomonic Columns: Dating back to the 15th century, these original elements remained visible until the dismemberment of the choir in the 19th century. They were expected to preserve most of the finishing layers applied throughout the centuries, offering a valuable timeline of decorative practices across multiple periods.

Added Frames: Introduced during the 17th century, these later additions are not part of the original structure. They were presumed to lack the earlier finishing layers present on components predating their installation, offering insights into decorative changes introduced during their integration.

Adam and Eve Panel: Unique among the fragments, this panel retains its original 15th-century frame, a rare survivor amidst widespread frame replacements. According to Pullicino (1877), by the 19th century, the panel was positioned at the back of the choir stalls, facing the wall. Unlike most other components, the panel and its frame exhibit no evidence of gilding or the red and brown finishing layers. The wood grain remains exposed, likely because its placement against the wall—possibly after the 1626 or 1681 relocations—shielded it from subsequent decorative treatments. This suggests that a sample from this panel would primarily reveal the earliest finishing layers, devoid of later modifications.

Sample label	Type of element	Presumed period of manufacturing
CSM02_SC	Solomonic Column	15th century
CSM03_AF	Added Frame	17th century
CSM04_AEP	Adam and Eve Panel	15th century

Table 4. Stratigraphic samples: identifiers, source, and presumed manufacturing periods.

This exploratory investigation provided valuable insights into the potential sequence of redecorative events that shaped the choir stalls over time. A full report of the analyses conducted can be found in *Appendix B*, and the methodology is detailed in section *3.2.3, Stratigraphic Analyses*.

6.2. Comparison of Observed Stratigraphy Across the Three Samples

Table 5. Stratigraphic sequence as observed across the three samples

Layer	Description	Presumed	Solomonic column	Added frame (lifted sequentially)		Adam and Eve panel
			CSM02_SC	CSM03_AF_a	CSM03_AF_b	CSM04_AEP
12.	**Vis –** Thin metallic shiny layer only a few microns thick	Gold leaf	**X**		**X**	
11.	**Vis –** Ochre layer with small white transluscent inclusions and brown inclusions some of which are large. **UV –** Dull dark ochre layer. The layer presents different shades with more fluorescence in the central part The large brown inclusions appear red. Yellow inclusions also observed.	Oil size	**X**		**X**	
10.	**Vis** – white layer with white, yellow, and orange inclusions. Some of the orange inclusions are much larger **UV** – fluoresces bright white. The yellow inclusions appear orange whilst the orange inclusions appears red.	White preparation layer, probably oil based. Subsequent re-gilding event.	**X**		**X**	
9.	**Vis** – Darker red layer with small black inclusions and larger transluscent inclusion **UV** – The layer appears darker under UV. The large transluscent inclusions present a bright white fluorescence	Darker red layer, possible later redecoration falling outside of period of intereSt	**X**			
8.	**Vis** – Thin metallic shiny layer only a few microns thick	Gold			**X**	
7.	**Vis** – Light yellow layer with white and amber colour inclusions, some of which appear transluscent. No differentiation in strata could be observed within this layer under visible light	Oil size, presumed March 1712 gilding event			**X**	

	UV – Dull light brown fluorescence with red inclusions and light fluorescent inclusions & top -Darker brown layer with fluorescent and small red inclusions					
6.	**Vis -** Dark brown layer of seemingly brittle nature. **UV -** fluoresces in white under UV	Varnish layer for **5.**	**X**	**X**		
5.	**Vis –** Light red layer with darker red and black inclusions. Other inclusions appear white in colour and with different texture. The layer appears compact but presents several cracks. **UV** - appears as a dark red layer with black inclusions. The white inclusions exhibit white fluorescence, while some of the cracks display yellow fluorescence.	Light red pigmented layer, redecorative event after addition of frames	**X**	**X**		
4.	**UV** – This thin layer only a few microns thick is observeable only under UV and it luminesces in bright greyish-white	Possibly a finish for **3.** or a grounding for **5**. Material characterisation and comparison with **2**. are strongly reccommended		**X**		
3.	**UV** – Dark brown/black layer which seems to partially stain the cell wall of the tracheids on the outer part of the wood substrate	Dark layer - possibly stain or isolation material		**X**		
2.	**UV** - Bright white layer with slightly greyish transluscent parts and some areas having light amber fluorescence	Waxes or natural resin, possibly later treatment or coating	**X**			**X**
1. A.	**UV** – Wood substrate, with clear visibility of tracheid structure.and pits.	Wood – not impregnated		**X**		
1. B.	**UV** – material impregnating the wood cells with bright yellow to amber fluorescence closer to the surface, and subdued amber-brownish fluorescence deeper into the sample	Wood – impregnated	**X**			**X**

6.3. Observations

6.3.1. Wood impregnating residue – Possibly original finish

Solomonic Column (CSM02_SC) and Adam and Eve Panel (CSM04_AEP)

The stratigraphy of the bottom layers in samples **CSM02_SC** (Solomonic column) and **CSM04_AEP** (Adam and Eve panel), both originating from 15th-century fragments, reveals significant similarities. Both samples contain a fluorescent material impregnating the wood cells, which fluoresces in a yellow to amber hue under UV light, with greater intensity near the surface (yellow arrow in Figs. 103.–104.). This suggests the permeation of an applied substance, likely a drying oil or varnish, intended to enhance the wood's natural appearance. These findings imply that both fragments underwent similar initial treatments.

However, **CSM02_SC** displays additional stratigraphic layers which are not present in **CSM04_AEP**, suggesting that the Adam and Eve panel may not have received the same subsequent treatments as the Solomonic column. This discrepancy likely indicates that the additional layers were applied after an alteration, such as a relocation, which may have obscured the Adam and Eve panel and thus excluded it from later redecoration efforts.

Added Frames (CSM03_AF)[8]

In contrast, sample **CSM03_AF** (from the added frames) does not exhibit the amber-fluorescent material seen in the 15th-century fragments. This absence supports the idea that the amber-fluorescent material corresponds to coatings applied to the choir stalls prior to the replacement of the frames. Anatomical analysis of **CSM03_AF** (Fig. 105.) reveals clear visibility of secondary cell wall thickenings and pitting, indicative of untreated wood. Additionally, the coniferous wood used for the frames contrasts with the hardwood of the original 15th-century components, reinforcing the notion that the frames were later additions (see *Section 5.3.1, Replacement of Frames on Panels*).

[8] Sample **CSM03_AF** was lifted sequentially and is composed of **CSM03_AF_a** and **CSM03_AF_b**)

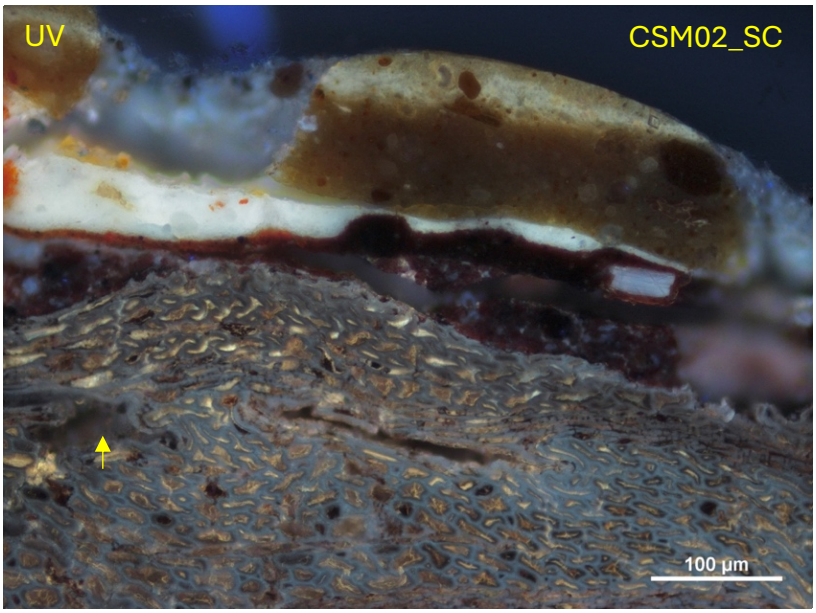


Fig. 105. Micrograph of CSM02_SC at 200x magnification under UV light: the wood cells appear impregnated with a substance that fluoresces in a yellow to amber tone (indicated by the yellow arrow)

(James Saliba, 2024)

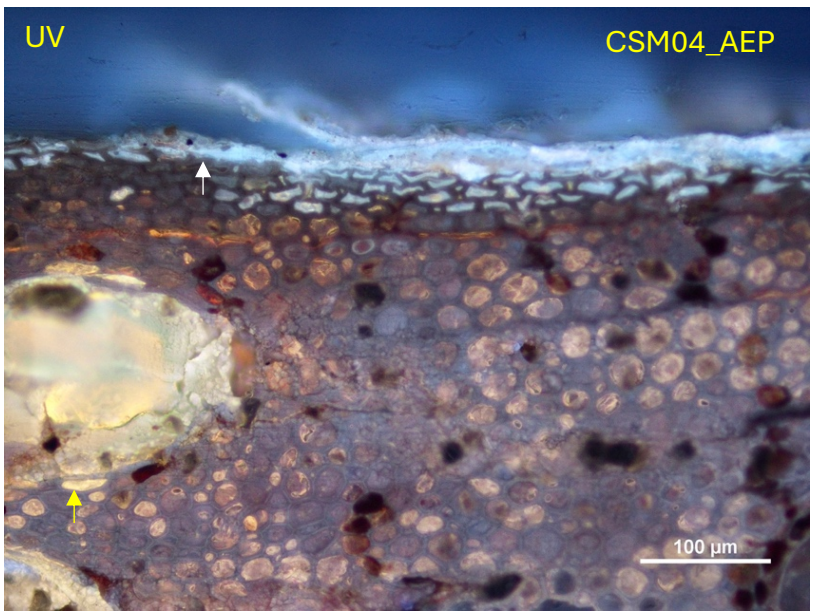


Fig. 104. Micrograph of CSM04_AEP at 200x under UV light: the wood cells are impregnated with a substance that fluoresces in a yellow to amber tone (yellow arrow), and a subsequently applied material which fluoresces in white (white arrow).

(James Saliba, 2024)

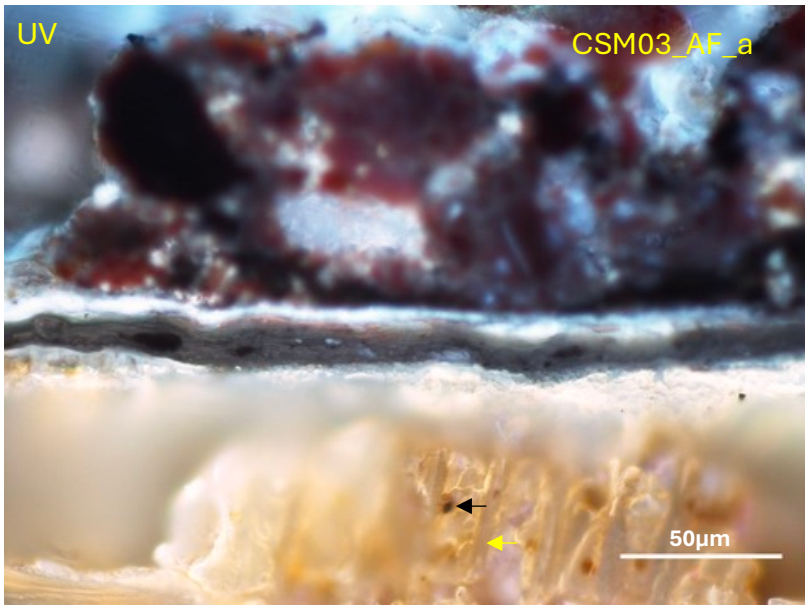


Fig. 106. Micrograph of CSM03_AF_a at 500x under UV light: clear visibility of secondary wall thickenings (yellow arrow) and pittings (black arrow) suggests that the wood was not treated with the same cell-impregnating product as the original fragments.

(James Saliba, 2024)

6.3.2. Redecorations

Red paint and varnish layers

Despite these differences, the stratigraphy observed in **CSM02_SC** (Figs. 106.–107.) beyond the divergence point with **CSM04_AEP** shares similarities with **CSM03_AF**. Both samples show a light red paint layer, and a brown layer with white fluorescence, and a brittle, friable texture, likely indicative of a varnish layer. The similarity of these layers – and their deterioration patterns – across both samples (**CSM02_SC** and **CSM03_AF**) suggests a decorative intervention applied across the stalls, after the late 17th-century replacement of the frames, to address aesthetical coherence (Figs. 108.–109.).

*Fig. 106. Micrograph of **CSM02_SC** at 100x magnification under visible light* revealing the red paint layer (indicated by the white arrow) and superimposed varnish layer (yellow arrow). (James Saliba, 2024)

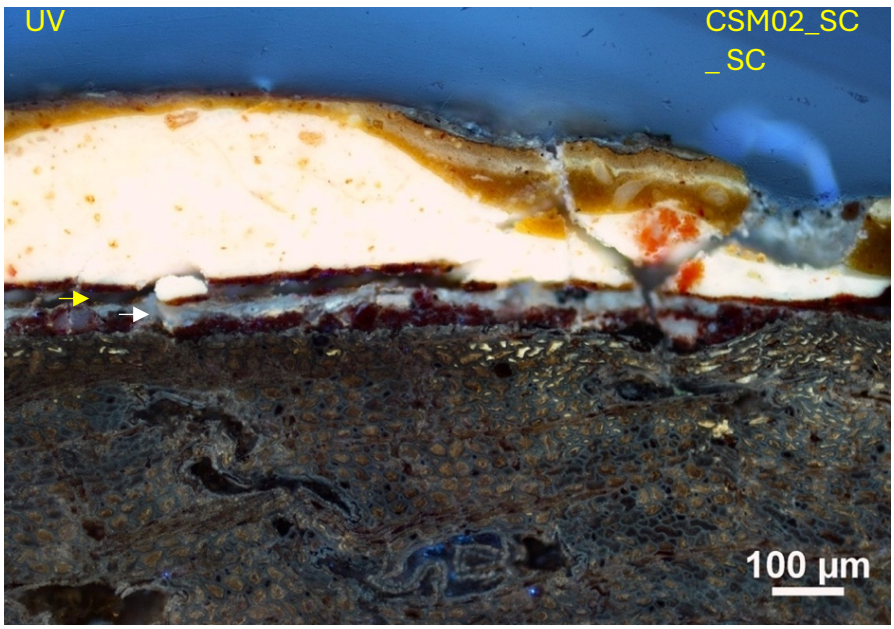
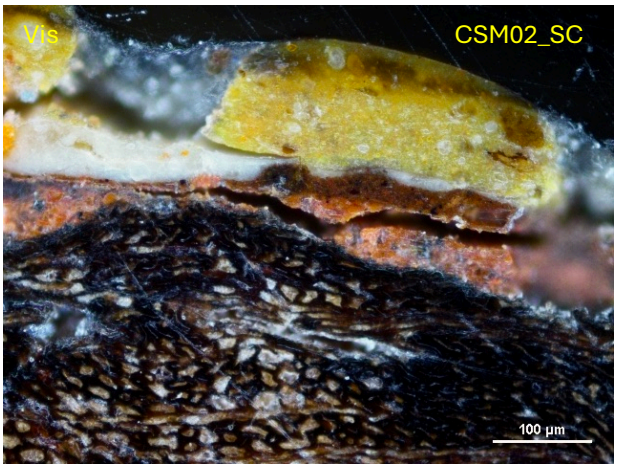
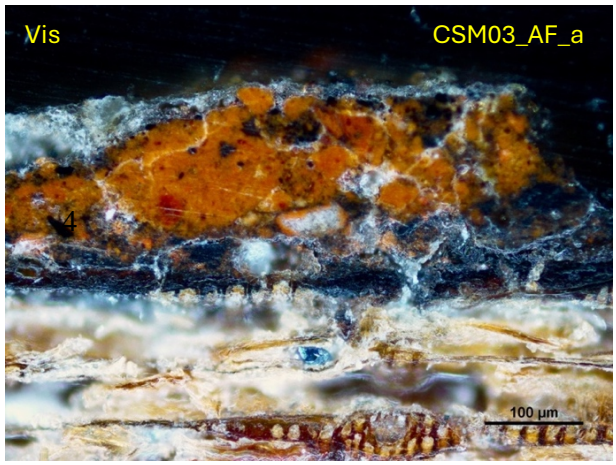


*Fig. 107. Micrograph of **CSM02_SC** at 100x magnification under UV light.* (James Saliba, 2024)



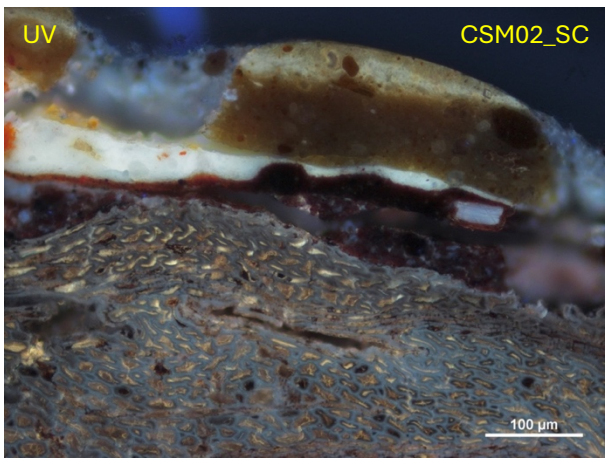
108.a.



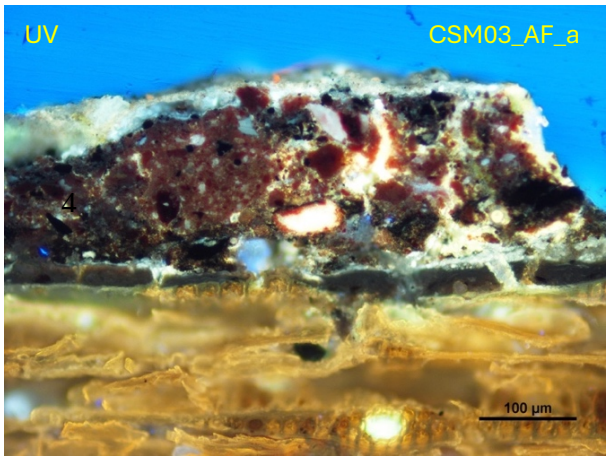
108.b.

Fig. 108. Comparison of red paint layer seen in cross-section on **CSM02_SC** (108.a.) and **CSM03_AF** (108.b.) under visible light.

(James Saliba, 2024)



109.a.



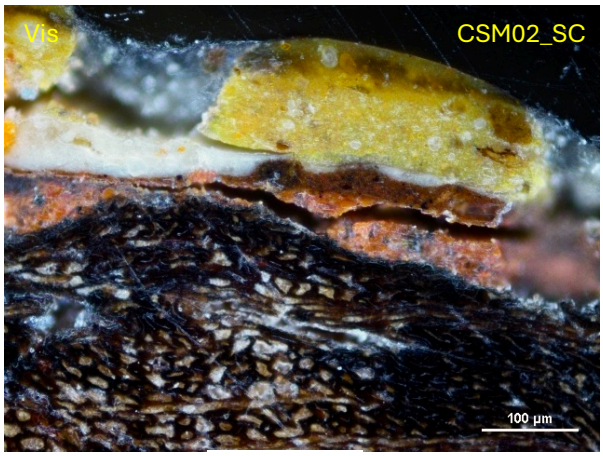
109.b.

Fig. 109. Comparison of red paint layer seen in cross-section on **CSM02_SC** (109.a.) and **CSM03_AF** (109.b.) under UV light.

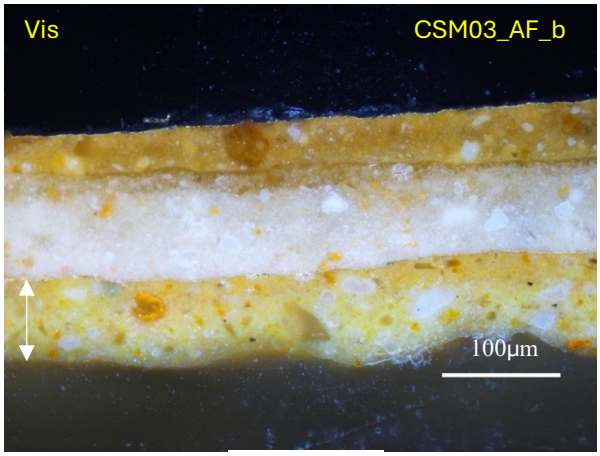
(James Saliba, 2024)

Gilding interventions

The conducted analyses indicate that the gilding was a later introduction, which occurred after the enlargement of the stalls and the replacement of the frames. The combined observations indicate that the 1712 gilding was the first gilding. The absence of layers potentially associated with the 1712 gilding on the Solomonic columns (**CSM02_SC**) (Figs. 110.–111.) suggests that gilding might have been applied selectively. This selective application may reflect functional or economic considerations, underscoring variations in treatment across different sections of the choir stalls.



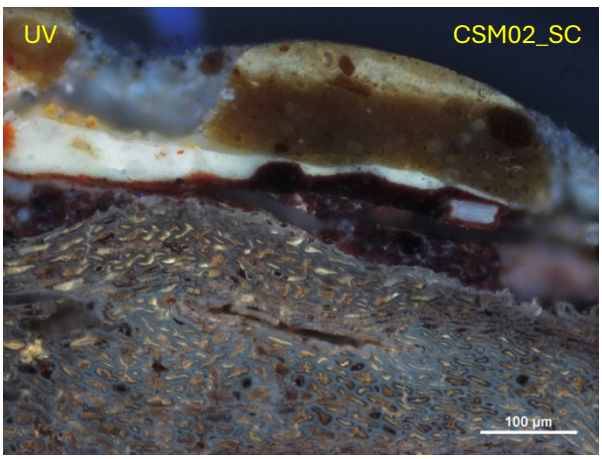
110.a



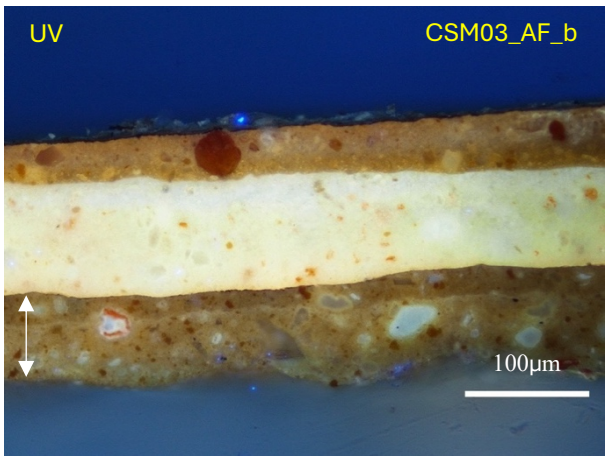
110.b

Fig. 110. Comparison of gilding layers seen in cross-section on **CSM02_SC** (110.a) and **CSM03_AF_b** (110.b) under visible light. The layers associated with the 1712 gilding are indicated by the white arrow.

(James Saliba, 2024)



111.a



111.b

Fig. 111. Comparison of gilding layers seen in cross-section on **CSM02_SC** (111.a) and **CSM03_AF_b** (111.b) under UV light. The layers associated with the 1712 gilding are indicated by the white arrow.

(James Saliba, 2024)

6.4. Conclusion

The stratigraphic analysis reveals a complex sequence of treatments and modifications to the choir stalls, highlighting distinct phases of intervention:

Initial Treatments (possibly 15th century): Original components exhibit evidence of a permeating coating and an overlying organic layer, consistent with an early, relatively uniform treatment practice across the ensemble.

Frame Addition (late 17th century): The introduction of untreated, coniferous wood frames, likely incorporated without replicating earlier treatment protocols.

Later Decorative Interventions: Both original and added components show evidence of later coatings applied more broadly across the ensemble, suggesting an attempt to achieve visual integration after the introduction of frames. Further instrumental characterisation is required to confirm the composition of these layers and to refine their chronology.

Selective Gilding (1712): Stratigraphic observations also support the interpretation that gilding represents a later enhancement, applied selectively rather than as part of the earliest finish history.

Overall, these findings demonstrate the value of stratigraphic analysis for reconstructing relative sequences of treatment and alteration, and for framing the choir stalls' evolving "curation" as a materially legible process shaped by functional and aesthetic priorities, and potentially by resource constraints. The results provide a foundation for future research incorporating confirmatory material analysis (e.g., identification of binders, pigments/colourants, and coating types) to strengthen attribution and chronology.

7. DISCUSSION

7.1. Introduction

The results presented in the preceding Chapters (*4.–6., Results*) reveal detailed and previously undocumented evidence about the evolution of the choir stalls between 1625 and 1725. These findings offer new insights into their use and care, as well as the curation choices made during a century of intense architectural and liturgical transformation. This Chapter examines the broader implications of these decisions in relation to the external factors that may have shaped them.

While this study engages with concepts such as preservation and reuse, it does so with an awareness of the risk of projecting modern heritage values onto early Modern practices. The notion of cultural patrimony as an abstract good is largely a post-19th-century construct; in the 17th and early 18th centuries, decisions concerning ecclesiastical furnishings were shaped primarily by liturgical, functional, symbolic, and institutional considerations. The continued retention and adaptation of the 15th-century choir stalls should therefore be understood not as evidence of a conservation ethos in the modern sense, but as historically situated practices which nevertheless resulted in the survival of earlier fabric.

This distinction underpins the discussion in this chapter, where the choir stalls' transformations are analysed as outcomes of early Modern decision-making, rather than as expressions of intentional heritage preservation.

7.2. Reconstructing Origins

The examination of the stalls' original form was essential in establishing a baseline for this research. New light has been shed on previously unclear aspects of the ensemble, allowing for a better-informed understanding and laying solid groundwork for future research. Areas of inconsistencies in previous interpretations, identified in the literature review (see *2.2.3. Form*), are reassessed here considering these findings.

A further point of uncertainty concerns whether the choir stalls, as commissioned, were subject to adjustment or re-fitting at the moment of their installation in the Cathedral. While the contract of works establishes the intended design and components of the ensemble, no documentary or material evidence has been identified that explicitly records modifications undertaken specifically to accommodate their placement within the cathedral space. It therefore remains unclear whether the stalls were installed exactly as produced, or whether minor adaptations were required in response to spatial or functional constraints. This uncertainty is acknowledged in the reconstruction proposed here, which relies on the

combined reading of contractual, archival, and material evidence, while recognising the limits imposed by the fragmentary nature of the surviving record.

Certain features of the surviving material further highlight this uncertainty. The presence of the panel representing the Allegory of Malta—often interpreted as a reference to the Università—raises questions regarding its intended audience and original context, as such imagery appears more readily aligned with the cathedral than with the Dominican convent of Santa Maria della Grotta. While this observation may suggest the possibility of an addition or adaptation following the transfer of the stalls to the Cathedral, no direct evidence currently permits such a conclusion.

Similarly, the discovery of an inlaid date reading 1490 indicates that the choir stalls' completion or final decorative phase post-dates the contractual timeframe envisaged in the early 1480s, allowing temporal scope for alteration or refinement prior to or during installation. These observations do not provide definitive answers, but they underscore the likelihood that the relationship between commission, completion, and installation was more complex than the surviving documentation alone can demonstrate.

Date of Contract: The contract explicitly states 2 January 1481, 15th indiction (see *Appendix A*). However, further research is necessary to determine the calendar system employed and to accurately convert the date to the Gregorian calendar.

Completion Date & Installation in the Cathedral: The discovery of the original inlaid date on the **Virgin and the Holy Ghost** panel, partially concealed beneath an added frame, confirms the completion year as 1490. This find challenges previous interpretations, which suggested completion dates of either 1484 or 1487 (see *2.2.2 Origin – Completion and Installation*).

Stylistic Analysis: The same discovery shifts the completion of the Mdina stalls to a later period than previously thought, aligning them almost contemporaneously with the Syracuse stalls (completed in 1489). If Larina's hypothesis regarding the Calachura brothers' involvement in constructing part of the Syracuse stalls is accurate (see *2.2.3 Form – Bottega or Model?*), this finding suggests that both sets of stalls may have been crafted concurrently by the same artisans. It opens new avenues for investigating late 15th-century workshop practices and artisanal collaborations.

Number of seats: The original contract explicitly specifies 20 upper-tier stalls (see *Appendix A.*). However, the number of seats in the lower tier remains uncertain and is closely tied to the overall distribution of the stalls. While further research is needed to determine the original configuration, an informed hypothesis based on findings from this study suggests that the

original seating arrangement likely consisted of 32 seats – 10 upper-tier stalls and 6 lower-tier seats per wing (see Fig. 112.b.).

Timber species: There are discrepancies in the literature regarding the timber species used in the choir stalls (see *2.2.3. Form – original design*). A reinterpretation of the contract indicates that chestnut was specified for structural components and lower-tier backrests, while walnut was required for the armrests:

> Original text: *Tucti li mizani et li spallery daltu /[25] divinu essiri di lignu di nuchi et li spalleri dabaxu dili segi /[26] minuri cum lu lectu divino essiri di castagna li manganelli di /[27] sediri divinu essiri di nuchi.*
>
> Translation: 'All the central panels and upper backrests /[25] are to be made of walnut wood, while the lower backrests of the minor seats /[26] and the base are to be of chestnut wood. The supports/balusters/handles of /[27] the seats are to be made of walnut.' [9]

Although the specifications may have been altered during construction, remnant fragments confirm that key lower-tier elements, such as Solomonic columns **(Cat.H.)**, armrests **(Cat.F.2.)**, and acanthus leaf decorations **(Cat.I.)**, were crafted out of walnut (see *5.2.2. upper and lower tier*). This finding appears to concur with Abela's 1647 assertion that the entire choir was made of walnut. However, as no stall backs are known to be extant today, it remains possible that the backs of the lower tier were made of chestnut. Nonetheless material analysis confirmed that all recovered elements associated with the original lower-tier seating were walnut, challenging interpretations in previous literature.

Frames: Material analysis confirmed that the frames on the panels are later replacements of earlier, inlaid frames (see *5.3.1 Replacement of Frames on Panels*).

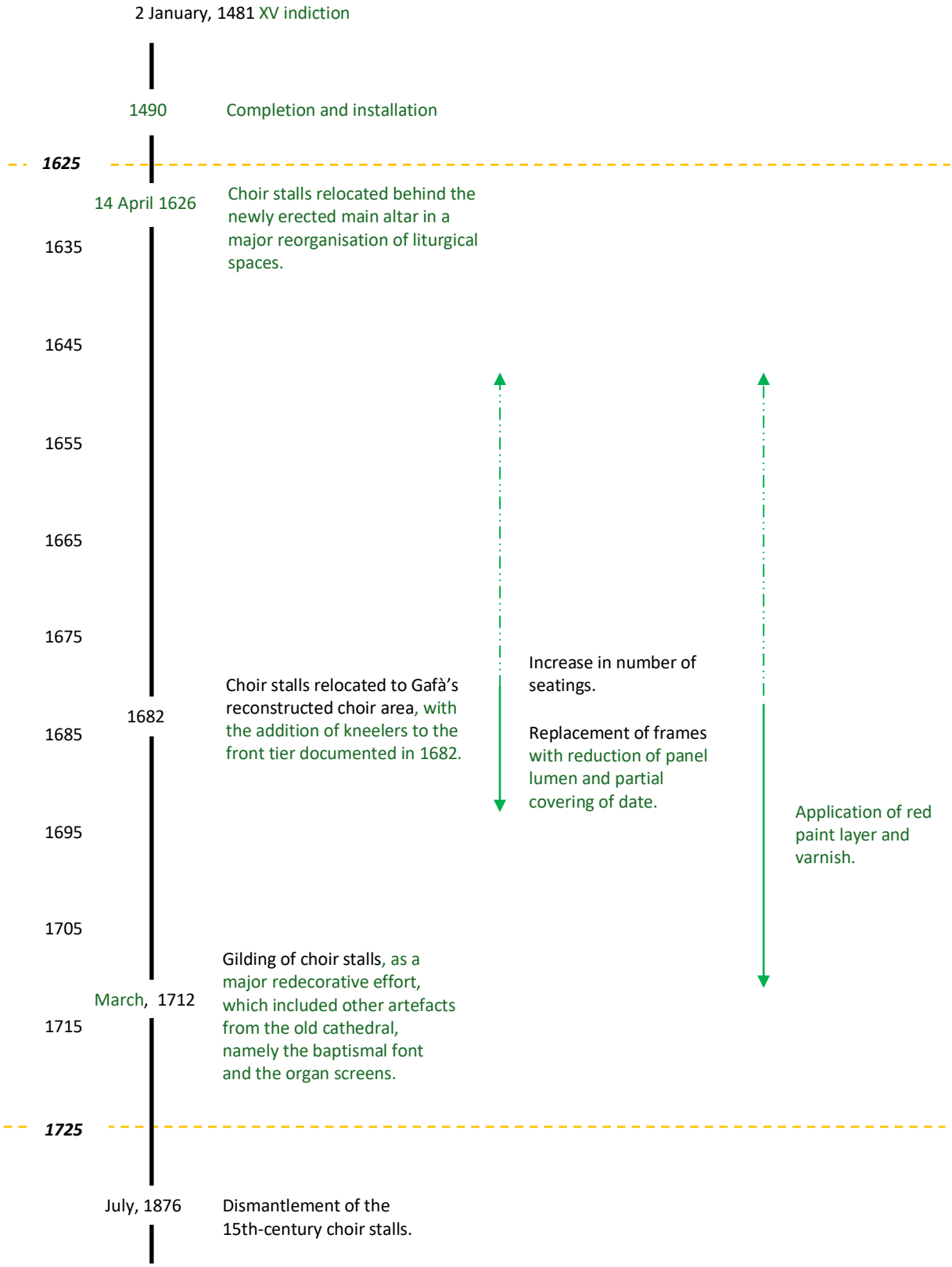
Gilding: Stratigraphic analyses revealed that the gilding scheme was a later addition, applied over pre-existing finishes (see *6.3.2. Redecorations*). Notably, this initial gilding event took place after the replacement of the frames, which likely coincided with an increase in the number of seats. The gilding scheme was subsequently revisited and regilded at a later stage. Whether elements of the dignitary stalls originally had any gilding remains uncertain.

Decorated back side of the stalls: no definitive information relating to the backside of the stalls has been uncovered during this research.

[9] Transcription of contract by Ms Mireia Peris Vicent, interpretation and translation by the present author.

7.2.1. Revised timeline

The original contributions of this dissertation to the artefact's chronology are shown in green in the following diagram.



Timeline 5. Revised chronology of events. Text in green denotes the original contributions of the present research to the artefact's life-history. Green arrows indicate the possible timeframe of occurrence of interventions (on the right side of the arrows), with dashed part representing less certain but possible date range.

7.3. Relocations and Reverence: Tracing the Movement of the Choir Stalls in Liturgical Space

The present study has yielded valuable insights into the history of the choir stalls' relocations, including the identification of a previously undocumented move in 1626 (see *4.3.2. 1626-undocumented relocation*). This section explores the placement and distribution of the stalls within the liturgical space. By analyzing these distributions, it explores how the changing placement and orientation of the stalls reflect broader shifts in symbolic and functional roles within the Cathedral, shaped by the interplay of liturgical practices, architectural developments, and social dynamics over time.

The *Caerimoniale Episcoporum* (Clement VIII, 1600) provides a crucial interpretive key for understanding the ceremonial and theological logic underpinning the successive relocations of the choir stalls. As the normative manual governing episcopal liturgy, it defined not only the sequence of ritual actions but also the spatial relationships between the bishop, clergy, and altar. Its prescriptions for ordered seating, visibility, and hierarchical differentiation reflect a broader post-Tridentine concern for clarity and decorum in worship. Within this framework, the relocation of the stalls after 1626 and again in 1682 can be interpreted as material responses to evolving liturgical expectations — particularly those emphasising processional order and the symbolic centrality of the episcopal throne. As Baldovin observes, *"the architectural articulation of the sanctuary and choir was a direct expression of the ceremonial theology of the post-Tridentine episcopal liturgy"* (Baldovin, 1998, p.63). In this sense, architectural adaptation and ritual practice formed an integrated system of representation: the physical reordering of the choir space mirrored the hierarchical and theological ordering prescribed by the reformed Roman Rite (see also 4.4.2).

Hypothetical drawings of the possible distribution are presented to illustrate the argument. The measurements of these drawings were extracted in accordance with the methods outlined in section *3.2. Data Collection Methods -Spatial analysis*.

7.3.1. Before 1625 - Original configuration and placement of the choir stalls

In 1625, the choir stalls were positioned in the nave, specifically occupying the first bay on the east side of the nave (Fig. 112.) (see *4.3.1. Original position of installation*). While this location is most likely their original position of installation, the possibility that other alterations took place prior to the period under study cannot be ruled out.

The arrangement of the stalls prior to 1625 is debatable, as all existing plans depicting their positioning were produced in later centuries, after the stalls had already been relocated twice (see *4.4.2. Distribution*). These later plans depict the stalls in a parallel configuration. However, the analysis of the original fragments, conducted as part of this research, has revealed the

possibility that they may have initially formed a closed chancel within the nave (Fig. 112.b), (see *5.2.6 The choir stalls' original configuration*).

This hypothesis is partially supported by a specification in the original contract (see *Appendix A*).

> *Original text: Item in omni cantunera di lu cori /[28] chi divi essiri unu ligni pichulu ky sianu in tuctu quactru../[29]*
>
> Translation: 'Moreover, at every corner of the choir/[28], a small piece of wood is to be placed, totaling four in all..' [10]

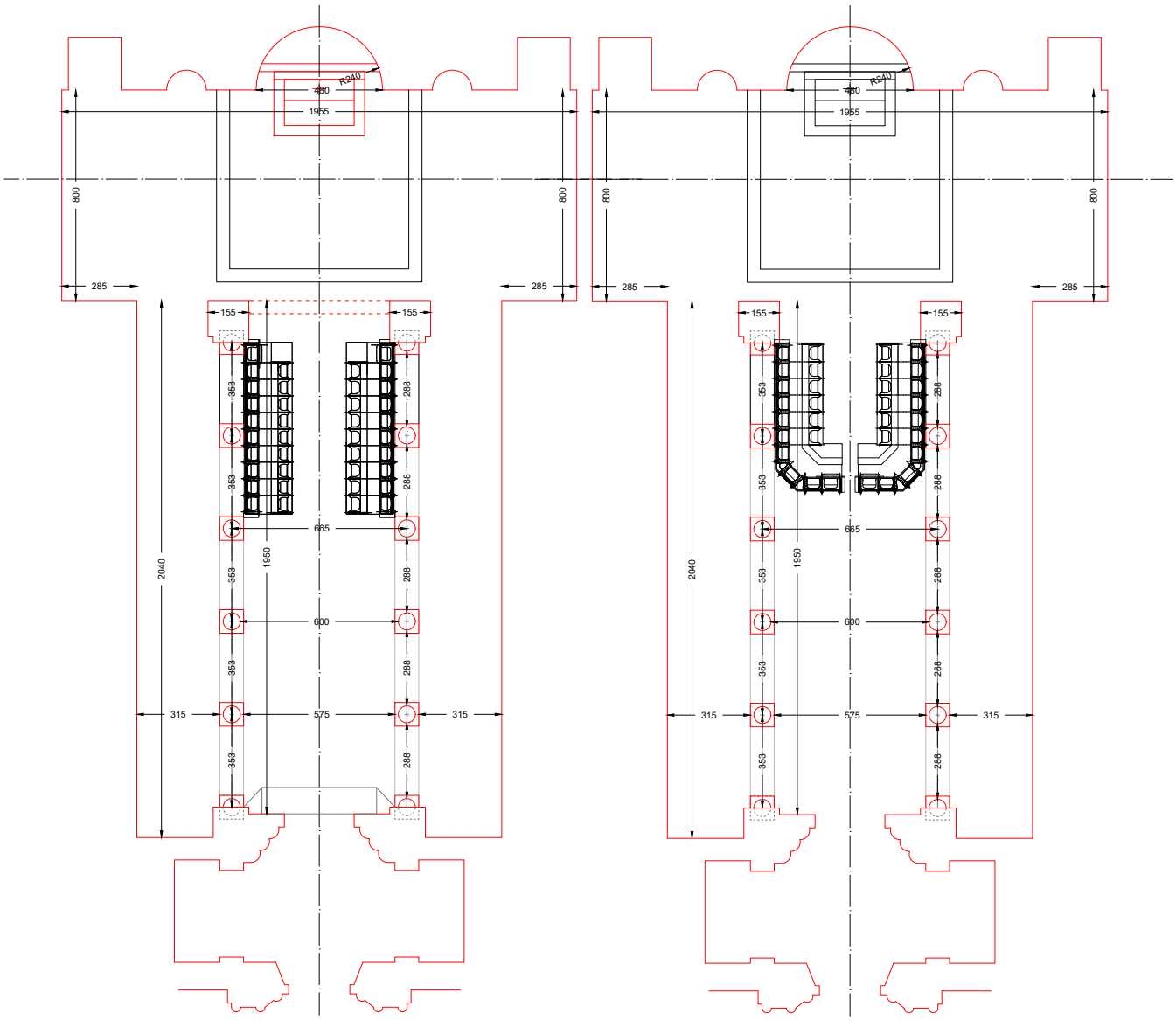
The term *cantunera* appears to refer to "each corner" of the choir stalls. However, the mention of "four" might not indicate literal corners but rather specific elements, potentially denoting the ends of the stalls. This ambiguity underscores the need for further investigation into the original configuration and design of the choir stalls. In both types of arrangement, the decorated back side of the choir stalls would have been visible. The possibility that the choir stalls formed a closed chancel within the nave is a key factor in understanding the subdivision of liturgical spaces within the Cathedral during the 15th and 16th centuries. This configuration carries significant implications for our understanding of liturgical practices on the Maltese islands during this period, shedding light on the functional and symbolic roles of spatial arrangements in the Cathedral's interior.

Another aspect warranting further investigation is the position of the cathedra, the Bishop's dignitary stall. The coexistence of Greek Orthodox and Latin Christian traditions in 12th- and 13th-century Malta is well documented (Fiorini, 2013), and this influence may have persisted throughout the 15th century. The decision to procure chestnut wood from Sicily for the *sancto sanctorum,* in 1535 (Buhagiar & Fiorini, 1996, p.153), suggests an enduring influence of the Greek rite into the 16th century (see *2.1.2: The Evolution of St Paul's Cathedral*). As the choir stalls predate the arrival of the Knights of St John, their spatial arrangement might still reflect earlier Greek or Gallican liturgical traditions. In such contexts, the spaces may have been separated (Pugin, 1851), and the cathedra might have been positioned on the epistle side of the altar (right side when facing the altar) rather than on the gospel (left) side (Misc.47. F.231).

These considerations also raise the possibility that some form of rood screen (or comparable chancel partition) may have been present within the medieval Cathedral, articulating a more pronounced division between sanctuary and choir. While no direct material evidence for such a structure has yet been identified in the surviving choir-stall fragments, the potential implications for reconstructing the cathedral's liturgical topography and the stalls' original disposition are significant. This hypothesis therefore warrants targeted, in-depth

[10] Transcription of contract by Ms Mireia Peris Vicent, interpretation and translation by the present author

investigation, integrating architectural fabric analysis with documentary and comparative liturgical evidence.



(a) (b)

Fig. 112. Hypothetical position and distribution of the choir stalls within the nave of the old cathedral, before 1626

(a) Ten upper-tier stalls arranged in a parallel configuration.
(b) 10 upper-tier stalls in L-shape formation.

(James Saliba, Bruno Ambrosio, 2024)

7.3.2. 1626 - Relocation

The discovery of the 1626 relocation is a key contribution of this dissertation to the timeline of the choir stalls (see *4.3.2. 1626 – a forgotten relocation*). This relocation (Fig. 113.) formed part of a broader reorganization of the Cathedral's liturgical spaces, which included the construction of a new high altar and the enlargement of the presbytery. These changes conform with the widespread post-Tridentine alterations occurring in Catholic churches during the late 16th and early 17th centuries.

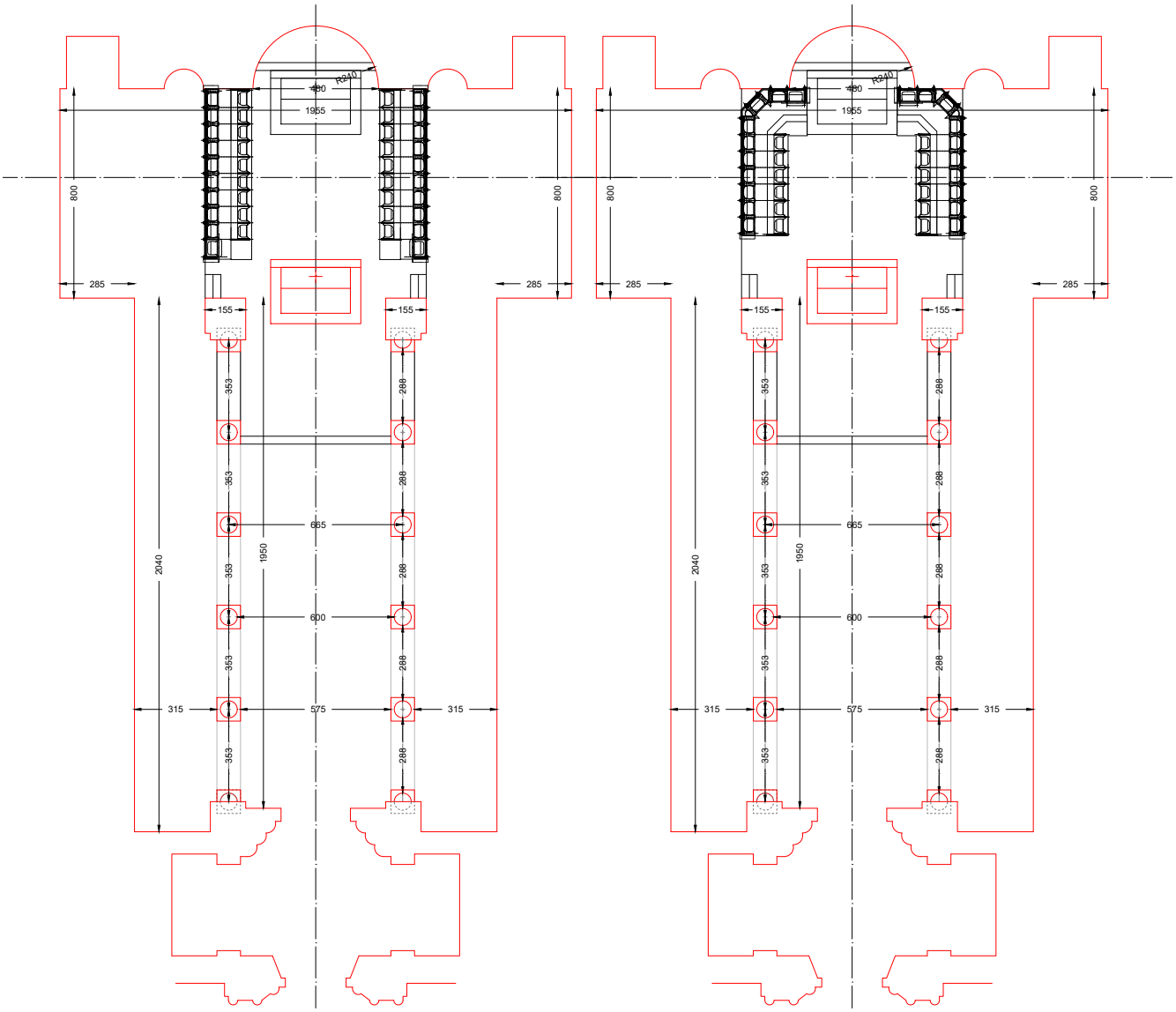
The Counter-Reformation, driven by the Council of Trent (1545–1563), brought significant changes to the distribution of choir stalls in Catholic churches. A central aim of this reform was to enhance the visibility of the high altar and the celebration of the Mass, emphasizing the edification and participation of the laity (Ackermann, 1980). This often led to the relocation of choir stalls from prominent positions in the nave to spaces behind the high altar, frequently within the apse. Such reconfigurations reflected a diminished focus on the communal Office of canons and secular clergy, whose roles became secondary to the visual and liturgical prominence of the altar (DeGreve, 2014). These architectural changes epitomized Tridentine Church design, prioritizing clear sightlines and shallower sanctuaries.

While these transformations were broadly aligned with Counter-Reformation ideals, recent research questions whether they were explicitly mandated by the Council of Trent. Gramotka (2015) suggests that changes, such as the removal of screens and the creation of retro-choir arrangements, were likely influenced by broader cultural and religious priorities rather than direct Tridentine decrees.

Bishop Baldassare Cagliares (1615–1633) exemplified the Counter-Reformation's influence, adhering to Tridentine reforms by convening regular Diocesan Synods (Bonnici, 1969, p.117). The spatial reorganization of the Cathedral during his tenure reflects more than simple redecoration; it underscores the weight of these reforms, even at the expense of commemorating earlier figures. For instance, the gravestone of Bishop Cubelles (1541–1566), as Abela (1647, p.325) records, was concealed beneath the newly positioned choir stalls—a poignant illustration of shifting priorities (see *4.4.2. Distribution after the 1626 relocation*). Read in spatial terms, Abela's contrast between the slab obscured by stall carpentry and the slab remaining exposed implies that the post-1626 arrangement did not consist of simple parallel rows but incorporated a "return" along one side—consistent with an L-shaped configuration within the choir zone. This is illustrated in Fig. 114., which overlays the measured stall footprint onto Drawing 752 and plots the tombs and steps against the inferred stall extent.

This reconfiguration of the choir stalls provides a deeper understanding of the interplay between liturgical functionality and the broader cultural and religious shifts of this period. Nevertheless, the original pre-1626 configuration remains uncertain: if the stalls had already formed an 'L-shape' within the nave (Fig. 112.b.), the relocation would have required reorientation rather than a simple translation toward the tribune. This underscores the need

for further research into the original layout—particularly the position of the cathedra in relation to the altar.



(a) (b)

Fig. 113. Hypothetical position and distribution of the choir stalls after the 1626 relocation. (1626-1682)

The newly consecrated high altar, dated 14 April 1626, is indicated by the red line. Additionally, note the elevation of the presbytery in the first bay of the nave, which was previously occupied by the choir.

(a) Ten upper-tier stalls arranged in a parallel configuration.
(b) 10 upper-tier stalls in L-shape formation.

(James Saliba, Bruno Ambrosio, 2024)

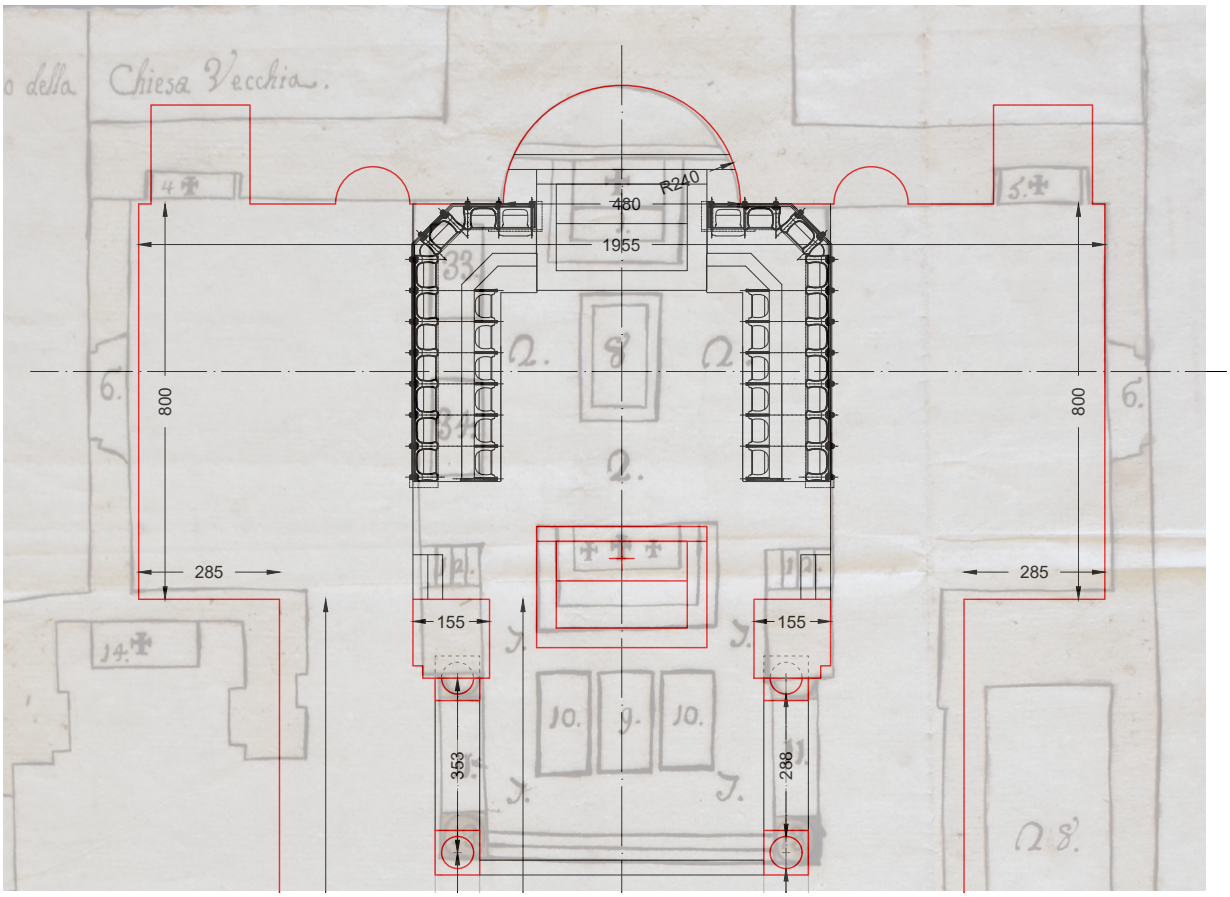
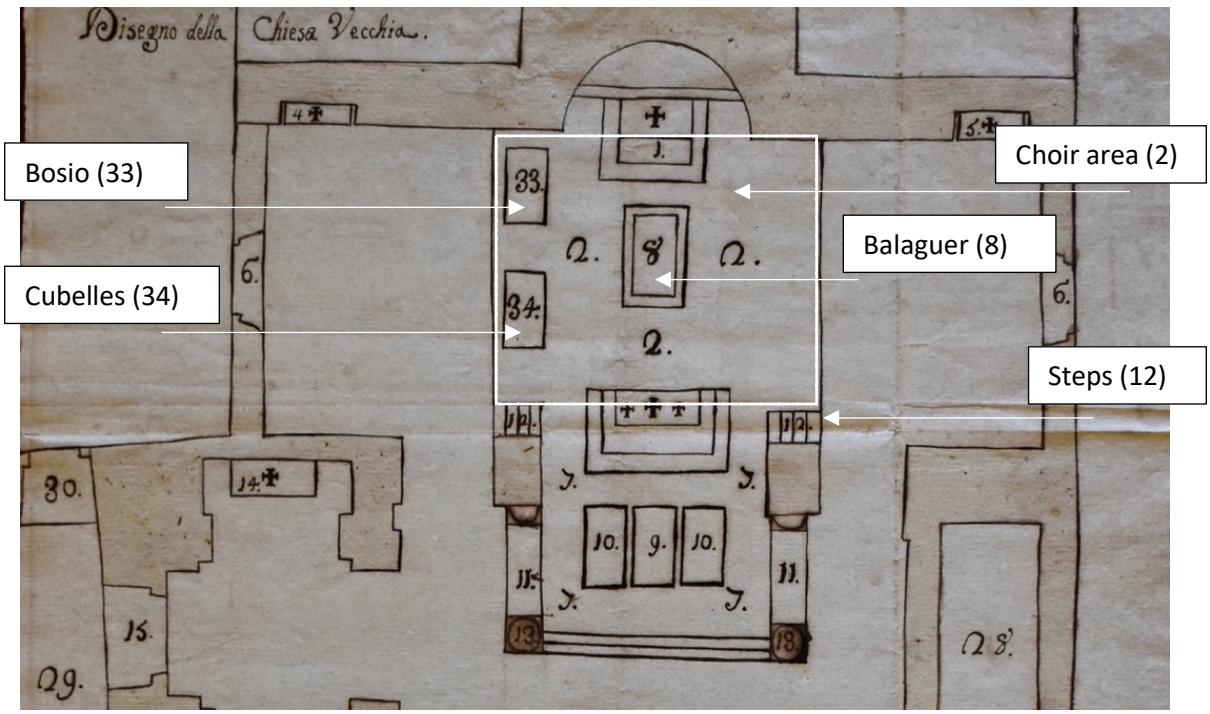


Fig. 114. Super imposition of the old Cathedral plan, along with the reconstructed development of the choir stalls, overlaid on Drawing 752.

The choir stalls are shown in an L-shaped configuration, with the dignitary stalls at the east end, comprising 10 upper-tier stalls and six lower-tier seatings. This arrangement is consistent with Abela's remarks on the visibility of Bishop Cubelles' tomb (34 on Drawing 752) and preserves clearance for access via the steps to the choir area (12). It also accommodates the documented lower tier use by Chaplains, aligning with Abela's reference to twelve Chaplains associated with the choir. (James Saliba, Bruno Ambrosio, 2024)



7.3.3. 1682 - Relocation to Gafà's new choir area & resizing

The stalls remained in their relocated position for approximately 55 years until the late 17th century, when the Cathedral underwent another significant reorganization following the enlargement of the choir area between 1679 and 1682 (see *4.3.3. 1682 – Relocation to Gafà's Choir Area and 4.4.2. Distribution after the 1682 Relocation*). During this phase, the choir stalls were repositioned with their decorated backs facing the wall. As noted by Pullicino (1877), the expanded choir area likely provided the additional space necessary for enlarging the stalls. He narrates that the number of stalls increased to 13 on each side, totaling 26 upper-tier stalls, and suggests that this enlargement likely took place during this period.

While the exact year of these modifications remains undocumented, archival research indicates that an increase in the number of canons – reaching a total of 26 members – occurred between 1647 and 1693. Abela's 1647 account records the choir stalls being used by 20 canons, while the decision to rebuild the Cathedral in 1693 was signed by 26 canons (see *4.5.2. Increase in number of seats*).

Additional documentary evidence supporting this enlargement is found in Misc.173 (Tom3, f.64), a document written after 1685, which records a configuration of 13 upper-tier stalls, against the 10 stalls documented in previous documents. Further evidence lies in Drawing 474, an undated, detailed and carefully scaled plan, possibly attributable to Gafà (1638-1703) (Antista&Cannella, 2023, p.104), which depicts the choir with 13 stalls per side (Fig. 115.). The dimensions for the center-to-center width of the stalls in this drawing align with the measurements retrieved from the surviving fragments, lending credibility to its accuracy (Fig. 116.).

The measurements of the old Cathedral, extracted from the historical plans and the choir stalls centre-to-centre measurements extracted from the observations of the surviving fragments (see *5.2.3. Insights into stall width*) suggest that the 1626 location would not have provided sufficient space for such an enlargement of the choir stalls, reinforcing the argument that such modification took place only after Gafà's late 17th-century redesign of the choir area.

However the exact dating of these interventions, which included the adaptive reuse of the original frames to conduct repair works (see *Reuse of original frames as repair material under 5.3.1*), remains complicated by ambiguities in the historical documentation, the impact of the 1693 earthquake and the subsequent rebuilding of the Cathedral between 1693 and 1702, which introduce an added layer of complexity.

During this nine-year period, liturgical services were temporarily relocated—first to a partitioned area within the nave and later to the newly constructed Carmelite Church (Misc.47, f.239; Buhagiar 215). The fate of the choir stalls during this transitional phase remains unclear, with little evidence regarding their condition or possible relocation.

The new discovery of an addition of kneelers to the lower tier in 1682 (see *4.5.1, Additional elements*), suggests that the enlargement of the stalls - reutilizing inlaid panels from the decorated backside, and possibly requiring additional frames – might have also occurred in 1682.

Visual observations revealed that dimensional alterations to the panels occurred during the same intervention in which the original frames were replaced, clearly indicated by the joinery, such as the frame supporting wedges serving to align the additional wood on the **Allegory of Malta** panel, revealing the adaptation of elements to fit new spaces.

Notwithstanding the uncertainties, it appears that the primary motivation for resizing the choir stalls was functional - the expanding chapter required additional seating, and its growing authority necessitated larger accommodations. This need coincided with the chapter's broader ambitions, as evidenced by the reconstruction of the Cathedral in a more grandiose manner during the same period. The new choir area had already been built and plans for a complete rebuilding of the Cathedral were seemingly in motion (Thake, 1994).

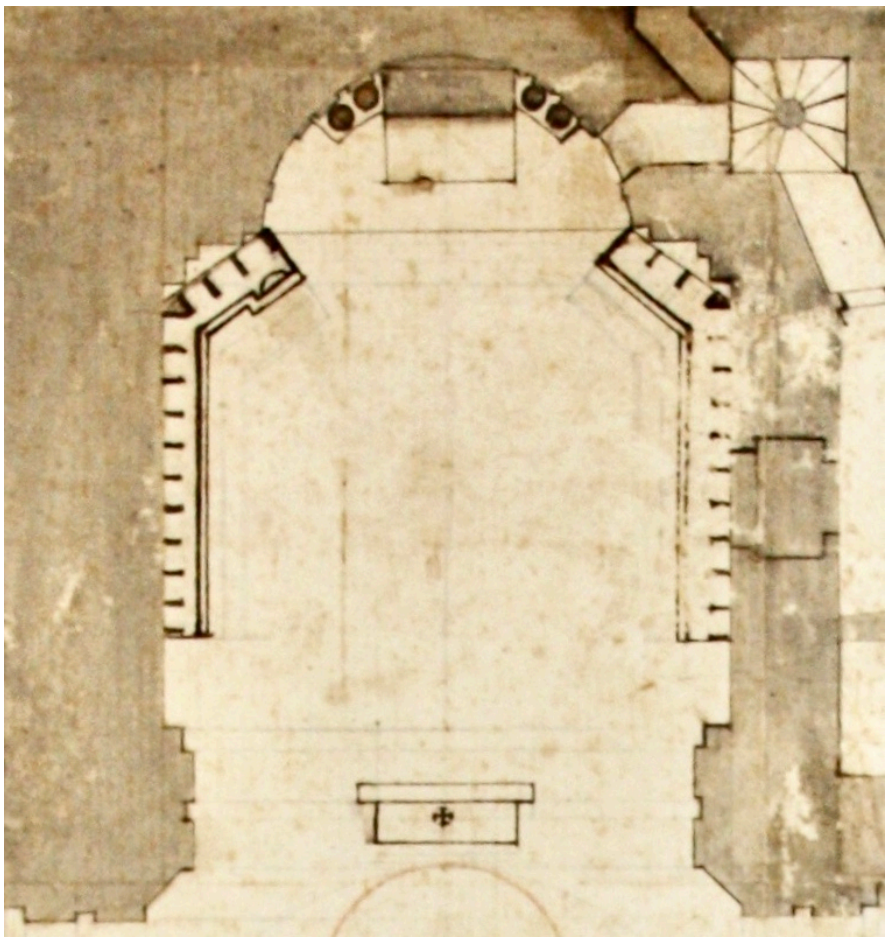


*Fig. 115. Detail of Drawing 474, of unkown dating, illustrating the choir stalls' in the choir area*The stalls seem to be accurately drawn, revealing the lower itier stalls and the protruding cathedra on the gospel side. This drawing reveals the choir as having 13 upper-tier stalls per wing. The distribution of the stalls is also different from the parallel formation layout presented for previous locations of the stalls. (James Saliba, 2024)

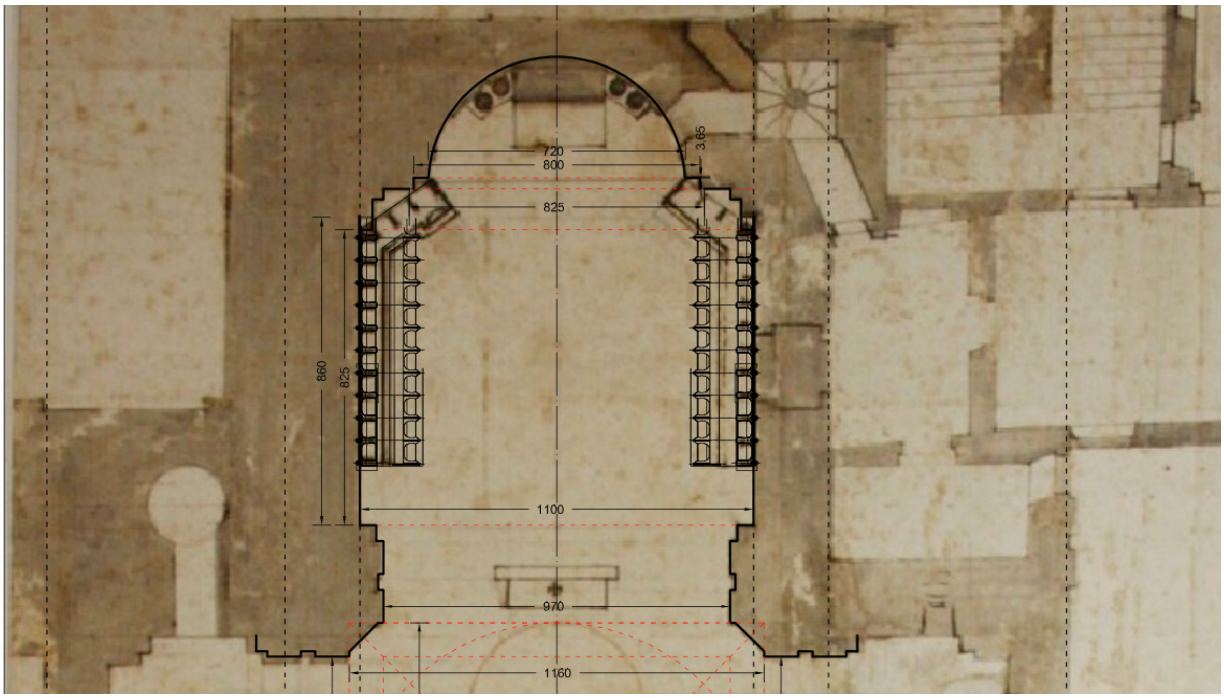


*Fig. 116. Super imposition of the reconstructed choir stalls, over Drawing 474.*The dimensions of the reconstruction are derived from measurements extracted from surviving fragments. The scaled plan presented in Drawing 474 was corroborated by the actual church measurements. Notably, the centre-to-centre dimensions of the choir stalls in Drawing 474 align with those of the hypothetical reconstruction. (James Saliba, Bruno Ambrosio, 2024)

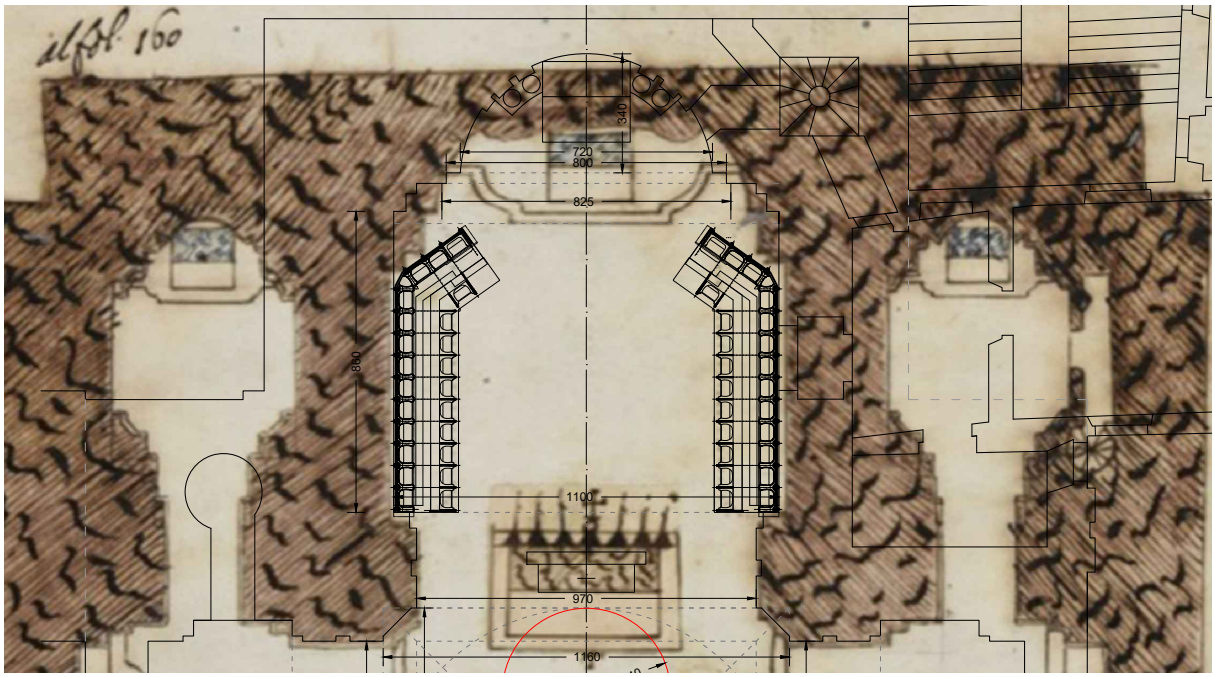


Fig. 117. Overlay of Drawing 474 (of unknown date) and Drawing 639 (dated 1714). The latter, created after the cathedral's completion, reflects the presumed actual measurements. Both plans are scaled, and the choir stalls are depicted with 13 upper-tier stalls per wing, based on dimensions derived from the study of surviving fragments. (James Saliba, Bruno Ambrosio, 2024)

7.3. The Functional and the Symbolic – Conveying Meaning

This section examines the implications of the findings concerning the decorative transformations of the choir stalls during this period. These aesthetic changes likely mirror broader cultural trends, emphasizing the evolving symbolic significance of the stalls and their function as conveyors of meaning within both liturgical and social contexts.

7.3.1. Proportions, design, and symbolism

The late 17th-century resizing of the Mdina choir stalls brought profound changes, reshaping their proportions and altering their aesthetic qualities. Pullicino criticized the "heavy cornice," which may have been elongated or otherwise modified during this period, although no physical evidence of this feature has surfaced in the present research (see *State of the choir stalls in the late 19th century,* under *2.2.3.*). Additionally, the decorative elements on the reverse side of the stalls appear to have been obscured when placed against the wall, further diminishing the original visual and symbolic character of the choir.

Pullicino's accounts, alongside the material evidence of panel adjustments identified in this study, suggest the reutilization of back-side panels to provide additional dorsal panels for the choir's enlargement. This adaptive reuse demonstrates the pragmatic approach taken to address evolving functional needs while underscoring the practical compromises necessitated by these interventions.

However, this enlargement disrupted the original iconographic sequence of the inlaid panels. Allegories such as ***Charity***, ***Abundance***, and ***Justice*** were likely relocated from their intended positions on the reverse side—potentially within a closed chancel arrangement, for the edification of the laity—to areas visible to the clergy. These shifts reflect changing priorities in the theological and cultural scenarios of the period, emphasizing a dynamic interplay between the stalls' original symbolic message and changing practical needs.

Further significant changes to the choir stalls arose from the replacement of the original inlaid frames, with new more plain frames, devoid of any inlay decoration. Though the precise dating for the introduction of these new frames, remains uncertain, it has been observed that they were introduced before 1712 (see *Dating the intervention,* under *5.3.1.*), likely between 1682and 1702[11]. These new frames were identified on the panels that were visible on the front of the choir with a 13 upper-tier stall arrangement, and therefore after the enlargement of the stalls. They may have been part of the choir's enlargement or a response to damages caused by the 1693 earthquake. Regardless, their introduction diminished the aesthetic unity of the stalls.

Original inlay decoration, once a cohesive unifying feature of the Mdina choir stalls (see *5.2 Original Form*), extended beyond the panels and friezes to other structural elements. The introduction of non-inlaid replacement frames altered this cohesive aesthetic, changing the

[11] 1682 Consecration of Gafà's choir area 1702 Consecration of new cathedral.

frame profiles, reducing the panel lumen, and obscuring portions of the inlaid panels, including the original inscribed date of 1490. This concealment led to scholarly misinterpretation in subsequent centuries regarding the stalls' timeline and significance (see *Completion and installation* under *2.2.2., and 7.4. Continuity Amidst Change*).

7.3.2. The 1712 redecoration: Gilding and red paint

The new Cathedral was consecrated in 1702, with significant decorative transformations following a decade later. Archival records and stratigraphic analysis reveal a comprehensive gilding of the choir stalls around March 1712, corroborated by inscriptions on the ***Virgin and Holy Ghost*** panel. This gilding represented a new aesthetic vision rather than a simple refreshment of earlier gilding layers.

While small portions of the stalls, such as the Bishop's dignitary seat (*cathedra*) and *coronetta*, may have had some gilding prior to 1712 (see *4.4.2. Distribution of the choir stalls after the 1682 relocation – ACM. Misc.173, Tom.3, f.64*), the evidence suggests that the gilding introduced at this time marked a significant aesthetic reinvention of previously non-gilded areas.

The identification of a luminous substance within the wood pores (see *6.3.1. Wood impregnating substance*) suggests that the early finishes were intended to enhance the natural beauty of the selected timber species for the manufacturing of the stalls and inlays. The overlay of later gilding and decorative treatments obscured the characteristics of the original timber.

The stratigraphic sequence of events suggest that the application of a red paint, obscuring the wood grain likely occurred after the enlargement of the stalls and the replacement of the frames, further transforming the stalls' appearance. It remains uncertain whether the red and varnish layers were introduced during the 1712 gilding intervention. However, their prominence aligns with evolving Baroque tastes, which emphasized dramatic contrasts and opulent visual effects.

Red and gold became increasingly dominant in early 18th-century furnishings, reflecting broader Baroque stylistic trends. This combination, associated with grandeur, opulence, and ecclesiastical authority, suited the theatrical and ceremonial nature of Baroque interiors. Archival evidence further suggests that the 1712 gilding campaign extended beyond the choir stalls, encompassing other elements within the Cathedral. Payments recorded for gilding the organ screen during the same period and references to harmonizing the cornices of the choir stalls with those of the baptismal font (Fig. 118.) demonstrate a larger coordinated decorative scheme. These findings highlight the broader aesthetic and symbolic objectives of the 1712 campaign, reflecting a desire to align the new Cathedral’s furnishings with the grandeur of Baroque ecclesiastical design while maintaining continuity with artifacts from the old Cathedral.

These findings emphasize the layered history of the Mdina choir stalls, shaped by successive interventions. From their original cohesive design to the later Baroque-inspired reimagining, the stalls encapsulate the evolving interplay between form, function, and meaning, offering insights into the broader cultural and liturgical context of their time, and some of the values behind successive decisions that were taken regarding the curation and continued ude of the choir stalls.

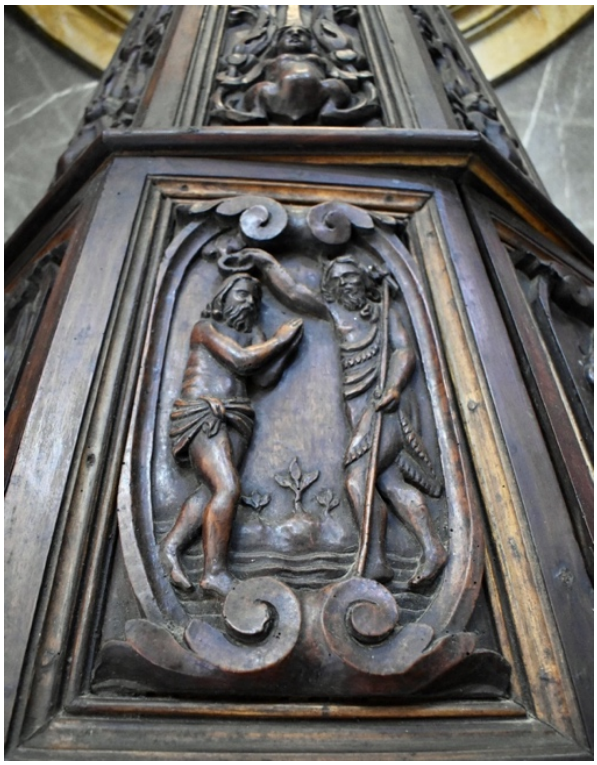


Fig. 118. Detail of the gilded cornices on the baptismal font.(James Saliba, 2024)

Despite the considerable expenses invested in rebuilding and redecorating the Cathedral, the choir stalls were altered rather than replaced. This decision does not appear to have been driven by considerations of cost, because replacing the choir would have represented a modest expense when compared to that of rebuilding the entire Cathedral. It is suggested here that this choice indicates that the stalls were imbued with other significant values. Their symbolic importance likely played a pivotal role, as they represented the chapter's seats of authority, including the Bishop's cathedra. Considering the well-documented power struggles between the Church, the Inquisitor, and the Order during this period (Koster, 1983), the choir stalls—predating the arrival of the Knights of St John—may have served as a reminder and assertion of the chapter's enduring precedence.

Such associations with the longevity of the Church in Malta, and its role in preserving artefacts that convey symbolic meaning, remain evident at St Paul's Cathedral today. Notably, the baptismal font (Fig. 119.), which as already noted appears to have been gilded at the same time as the choir, is a potent symbol of the enduring power of the Church in Malta. Its integration to the right of the main door as one exits the Cathedral, alongside the statue of St Publius (Fig. 120), the first Bishop of Malta (33-112 A.D.), to the left, both serve as poignant reminders of the Church's enduring legacy on the islands.

Fig. 119. Baptismal font (James Saliba, 2024)

Fig. 120. Statue of St Publius(James Saliba, 2024)

7.4. Continuity Amidst Change: Enduring Influence of Curation Decisions

The impact of earlier curation decisions become particularly evident in the late 19th century, when the choir stalls were dismantled and replaced. Pullicino's observations on their deteriorated condition highlight the tension between conservation and modernisation that characterised this period (see *State of the choir stalls in the late 19th century,* under *2.2.3.*). While his criticism is emphatic, the decision to remove the stalls reflects broader priorities that favoured adaptation and renewal over the retention of ageing fabric, echoing comparable choices made during the Cathedral's post-1693 earthquake reconstruction.

In 1876, the original stalls were replaced by a new set crafted by Emmanuele Decelis, which nevertheless retained connection to the earlier artefact. Although reshaped and 'improved' in accordance with 19th-century stylistic sensibilities, the new stalls incorporated selected elements from the 15th-century choir and sought to emulate its perceived original concept as understood at the time.

The selective reuse of earlier components was, however, highly limited and ideologically driven. Contemporary accounts indicate that only the carved canopy elements (*guarda polvere*) and the inlaid Orpheus panel were deliberately salvaged and incorporated into the new ensemble. Pullicino's memoir makes clear that this selectivity was guided less by considerations of historical completeness than by nineteenth-century aesthetic judgement: numerous other surviving inlays and carved elements were dismissed as crude, stylistically inappropriate, or disruptive to visual unity. As a result, those elements that survived were those that could be reconciled with contemporary ideals of medieval form, while others—now recognised as integral to the original design—were excluded or discarded.

In light of the results of this study, it is now possible to argue that functional and aesthetic alterations introduced during the 17th and early-18th centuries—such as the addition of kneelers, the replacement of inlaid frames, and the introduction of gilding—were mistakenly regarded, in the 19th century, as authentic components of the original design and were inadvertently incorporated into the new choir stalls.

The assimilation of these non-original alterations into the evolving identity of the stalls underscores the enduring impact of curation decisions. By responding to shifting artistic preferences and cultural frameworks, such decisions shaped both the material form and the historical narrative of the choir stalls. The continued presence demonstrates how curatorial choices can exert a lasting influence on the interpretation and legacy of cultural heritage.

A focused study of Pullicino's curatorial criteria, Decelis's workshop practices, and comparable nineteenth-century restoration projects would therefore offer a productive avenue for future research into the mechanisms of selective survival and loss.

Fig. 121. 19th-century interpretation of the 15th-century choir stalls design. (James Saliba, 2024)

1876 and beyond

Even after their dismantling, fragments of the choir stalls retained cultural significance and were carefully preserved. One particularly revealing detail is an inscription painted in thick oil paint on the back of the St Apollonia panel, now held in the museum's reserve collection. This inscription reads "2/8/79. E.D. Res^{ti}." While its precise meaning remains uncertain, it may point to a restoration intervention carried out by Emmanuele Decelis in 1879 (Fig.122). Regardless of its exact interpretation, the inscription attests to the continued recognition of the stalls' significance beyond their functional lifespan. It marks the opening of a new chapter in their biography, as fragments that had lost their original function came to be valued, preserved, and recontextualized as historical artefacts – a process that remains ongoing and rich with potential for further study.

*Fig. 122. Inscription on the back side of **St Apollonia** panel* (James Saliba, 2024)

7.5. Main Findings

This study has explored the curation, modification, and reuse of the 15th-century choir stalls at St Paul's Cathedral, Mdina, between 1625 and 1725. By employing an interdisciplinary approach combining archival research, visual observations, and material analysis, the research has provided a comprehensive understanding of both the choir stalls' original design and the major modifications they underwent during this transformative period.

Key findings include the identification of the stalls' original date of completion (1490) and the discovery of a previously undocumented relocation in 1626 as part of a broader reorganization of the liturgical space. This relocation aligns with Counter-Reformation efforts to delineate sacred spaces, reflecting broader ecclesiastical priorities of the time. The original choir stalls were likely configured as a closed chancel, offering valuable insights into early modern liturgical practices.

The surviving fragments, despite their limited number, provided critical information about original manufacturing techniques and decoration. Stratigraphic analyses revealed that the choir stalls were initially finished with clear coatings to enhance the wood's natural grain, while later decorative treatments—such as the application of red paint and gilding—highlight shifting aesthetic priorities. Archival evidence corroborated these findings, revealing also subsequent functional interventions, such as the addition of kneelers in 1682, as part of broader campaigns to adapt the stalls to evolving liturgical spaces and functional needs in a new social and artistic context.

These findings emphasize the complex interplay between preservation, adaptation, and shifting priorities over time. The introduction of gilding in 1712, as part of a larger decorative campaign, and the replacement of frames during the late 17th century reflect changing attitudes toward the reuse and reinterpretation of heritage artifacts. This study highlights how successive curation decisions not only reshaped the physical form of the choir stalls but also influenced their cultural and historical significance.

This analysis highlights how changes in the choir stalls' form and finish can be interpreted as expressions of evolving aesthetic and devotional priorities**,** underscoring the need to consider both tangible and intangible dimensions in heritage studies.

Ultimately, this study provides a foundational framework for future research into the choir stalls and their broader cultural, political, and religious contexts. It invites further inquiry into the untold chapters of their history, illustrating how artifacts like these serve as enduring witnesses to the dynamic relationship between material culture and society.

7.6. Limitations of the Study

This research faced several significant limitations, primarily driven by the fragmented and cannibalized state of the choir stalls, of which less than 10 percent of the original fabric survives. The heavily altered condition of the artefact posed substantial challenges to forming a comprehensive understanding of its original form, manufacturing techniques, and decorative elements. This necessitated reliance on archaeological reconstruction, interdisciplinary methodologies, and comparative analysis which, while effective, can only approximate the original state and context of the stalls.

The scarcity and inconsistency of primary historical sources further compounded these challenges. The literature on the choir stalls presents only limited descriptions and is riddled with inconsistencies and conflicting narratives. Apart from the original agreement between the Dominican friars and the Calachura craftsmen in 1481, no detailed verbal descriptions of the choir stalls exist prior to Giovanni Francesco Abela's observations in 1647. Consequently, much of the historical context before this date remains speculative, reliant on fragmented documentation and inferential reasoning.

Similarly, architectural plans illustrating the choir stalls in the old Cathedral only appear after the reconstruction of Lorenzo Gafà's choir area between 1679 and 1682, a period when the stalls had already undergone two significant relocations. These relocations, combined with successive modifications, obscure their original spatial arrangement and design intent, further limiting the study's ability to produce definitive conclusions about their earliest configuration.

The necessity for brevity imposed by the scope and time constraints of this study represents another limitation. While numerous additional indicators and inferences emerged during the research process, the exploration of these aspects fell outside the study's scope. These unexplored areas offer promising avenues for future research, particularly regarding the broader implications of the stalls' evolution, their role within the Cathedral's liturgical practices, and their interaction with wider socio-cultural transformations.

A further limitation concerns the depth of scientific characterisation undertaken. The material analysis was designed as an exploratory study focused on stratigraphic sequencing, rather than a full technical investigation of timber species, timber provenance, or comprehensive finish identification. Although macroscopic and visual indicators were used to differentiate original fabric from later repairs and additions, the study did not incorporate a larger programme of wood anatomy (e.g., thin-section microscopy), dendrochronology, or broader material screening across a wider sample set. Resource, access, and ethical constraints—together with the necessity to minimise destructive intervention—therefore limited the extent to which the stalls can be situated through materials science within wider Renaissance woodworking practice.

7.7. Recommendations for Further Research

This study identifies several priorities for further research that would strengthen understanding of both the choir stalls and the wider corpus of surviving wooden furnishings associated with the former Cathedral. A comparative programme addressing materials, construction, and surface treatment histories across related wooden artefacts could clarify chronological sequences of intervention, and the stylistic evolution of the Cathedral's interior through successive phases.

Scientific analyses

Further stratigraphic and material characterisation, supported by instrumental techniques such as Fourier-Transform Infrared Spectroscopy (FTIR) and Scanning Electron Microscopy with Energy Dispersive X-ray Spectroscopy (SEM-EDX), would refine the interpretation of coating campaigns, clarify the chronology of decorative interventions, and improve identification of constituent materials and techniques. This would enable a more precise reconstruction of successive surface phases and their relationship to documented episodes of modification.

Comparative analyses with other reused wooden artefacts from the old Cathedral

A focused comparative study of finishes and early treatments across other surviving wooden furnishings from the old Cathedral (including the baptismal font) would be particularly valuable. Additional chemical characterisation of the amber-fluorescent material observed within the wood cells of the original fragments, and comparison with samples from the inlaid panels of the Ortigia choir stalls, could establish whether these residues reflect shared materials or processes, thereby offering further insight into early treatment practices and the possible role of the Calachura workshop in the manufacture of both stall ensembles.

Wood materials and characterisation

Future work would benefit from a structured programme of wood identification and condition mapping across a wider range of components, employing non-destructive and minimally invasive methods where possible. Priorities include:

(i) confirmation of wood species through anatomical identification;
(ii) targeted dendrochronological assessment on suitable elements (where surviving section and growth-ring visibility permit);
(iii) expanded characterisation of the amber-fluorescent impregnating material and related coatings to clarify whether these represent original treatments, later consolidants, or workshop-specific finishing practices.

Comparative typology and technical literature

A dedicated comparative strand is also recommended, drawing on the established literature on Renaissance choir-stall typologies and workshop practice, including technical discussions of structural timbers, decorative woods, and historic surface treatments. This would allow the Mdina fragments to be assessed against Mediterranean and wider European comparanda, strengthening interpretations of the stalls' original configuration, subsequent modifications, and the technical implications of successive surface campaigns.

Archival research

Further exploration of archival sources—particularly for periods beyond the present scope—is required to consolidate a fuller biography of the choir stalls. While this study focuses on 1625–1725, later phases remain insufficiently documented. Alterations identified in Section 4.7 (*Alterations outside the period of interest*) suggest the likelihood of additional post-1725 interventions. Targeted investigation of these later episodes would clarify the sequence, extent, and rationale of modifications that shaped the stalls' subsequent condition and appearance.

Liturgical spaces and distribution of the old Cathedral

Further research into the position and liturgical function of the cathedra within the original choir formation could yield important insights into the persistence (or reconfiguration) of Greek-rite or Gallican spatial traditions in early modern Malta. Relatedly, extending the study of stall distribution across successive relocations could refine understanding of how performative and ritual zones were articulated within the Cathedral over time.

Extending the metric and spatial analysis to other fitted artefacts associated with the old Cathedral—such as the west door, organ balcony, and additional fixed furnishings—may also help to reconstruct a more integrated picture of the building's pre-Baroque artistic and architectural coherence, and its wider civic and ecclesiastical significance.

Finally, confirming the date and authorship of Drawing 474 would strengthen conclusions concerning both the enlargement of the choir stalls and the Cathedral's reconstruction chronology, providing a more secure link between the physical evidence and the building's documented evolution.

Overall, the dissertation demonstrates that the choir stalls constitute a materially layered artefact shaped by successive interventions. The recommendations above indicate specific avenues through which documentary, spatial, and scientific investigation could further refine—and, where necessary, test—the interpretations advanced in this study.

List of References

Primary sources

Dominican Archives Rabat (DAR.)

DAR., Giuliana Antica Tom. 1., f. 47

Mdina Catheral Museum (MCM.)

MCM., *Drawing 636*, (ex–ACM. Misc. 60, f. 146).

MCM., Drawing 637 (ex-ACM. Misc. 60, f. 150).

MCM., Drawing 638 (ex–ACM. Misc. 60, f. 154).

MCM., Drawing 474.

MCM., Drawing 752 (ex–ACM. Misc. 60, f. 150; dated 1700).

Archivum Cathedralis Melitensis (ACM.)

Registrum deliberationum capitularium (Reg. Delib. Capit.)

ACM. *Reg. Delib. Capit.,* Tom. 2. (1624 -1654), f. 26.

ACM. *Reg. Delib. Capit., Tom. 3.* (1651–1703), f. 235.

ACM. *Reg. Delib. Capit., Tom. 4.* (1704 – 1722), f. 60r.

ACM. *Reg. Delib. Capit., Tom. 9.* (1764 – 1771), f.139.

Miscellanea (Misc.)

ACM. *Misc. 47., Miscellanea Decisionum et Aliarum*, (1546 – 1763) ff. 234–238

ACM. *Misc. 170.,* G*iornale della Santa Chiesa Cattedrale dall'anno 1701 sino al 1750. Tom. 5.*, (1701–1750), f.291.

ACM. *Misc. 173.*, *Miscellaneo che concerne affari di Vescovo, Cattedrale e Seminario. Tom. 3.* (1508 – 1758), ff. 9; 14; 19–20; 64; 357–358; 407–408.

Secondary sources

Abela, G. F. (1647). *Della descrittione di Malta isola nel mare Siciliano: con le sue antichità, ed altre notitie: libri quattro.* Per Paolo Bonacota.

Ackerman, J. S. (1980). Observations on Renaissance church planning in Venice and Florence, 1470–1570. In S. Bertelli (Ed.), *Florence and Venice: Comparisons and relations* (pp. 289–307). La Nuova Italia Editrice.

Allen, J. (2022). *Transforming the church interior in Renaissance Florence: Screens and choir spaces from the Middle Ages to Tridentine reform*. Brepols.

Antista, A., & Cannella, M. (2023). A Church that vanished "dentro della nuova, assai piu`magnifica". projects and reconstructions of the Cathedral of Mdina between the Middle Ages and the modern era. *Opus, Annual Magazine of the Department of Architecture (Architectural Heritage Unit), 'Gabriele d'Annunzio', University of Chieti-Pescara*, (7), 91–110.

Appadurai, A. (1986). Introduction: Commodities and the politics of value. In A. Appadurai (Ed.), *The social life of things: Commodities in cultural perspective* (pp. 3–63). Cambridge University Press.

Aquilina, P. (2023). *The Renaissance revival choir stalls and lectern at Mdina Cathedral: Their Maltese and European decorative arts context (1870–1879).* (B.A. Hons. thesis). University of Malta.

Azzopardi, J. (1999). *The Cathedral Museum Mdina -Malta*. Lombard Bank (Malta) Limited.

Baldinucci, F. (1681). *Vocabolario toscano dell' arte del disegno.* Accademici della Crusca.

Bealer, A. W. (2013). *The tools that built America*. Dover Publications.

Bonnici, A. (1969). I vescovi di Malta Baldassare Cagliares (1615–1633) e Michele Balaguer (1635–1663). *Melita Historica*, 5(2), 114–157.

Bosio, G. (1602). *Istoria della sacra religione et illustrissima militia di San Giovanni Gierosolimitano*. Facciotti.

Buhagiar, M., & Fiorini, S. (1996). *Mdina, the Cathedral city of Malta*. Central Bank of Malta.

Buhagiar, M. (2018, September 28). The old Mdina Cathedral choir: Address at the official inauguration of its restoration. *Mdina Cathedral Museum*. https://metropolitanchapter.com/mdina-cathedral-museum/discover-the-museum/old-mdina-cathedral-choir/.

Buhagiar, M. (2004). The historical background to the cult of St Philip of Agira in Malta. In A. Cortis (Ed.), *San Filep u l-kult tiegħu: Atti tas-simpozju, 13 u 14 ta` Novembru 2004* (pp. 1–6). 12th May Band and Social Club.

Cameron, N. (2017). Liturgical space and performative order: The role of choir stalls in late Gothic churches. *Studies in Church Architecture, 12*(1), 45–68.

Campbell, G. (2006). *The Grove encyclopedia of decorative arts*. Oxford University Press.

Catholic Church. (1600). *Caerimoniale Episcoporum iussu Clementis VIII Pontificis Maximi reformatum*. Ex Typographia Apostolica Vaticana.

Curl, J. S., & Wilson, S. (2015). *A dictionary of architecture and landscape architecture* (5th ed.). Oxford University Press.

Chia, C. M. (2024). *Relationship between architectural form, function, and meaning in Cathedral Churches*. Journal of the University of North Sumatra Studies, 51(5).

DePiro, N. (2000). *Malta - influence and patronage*. Miranda.

Di Marzo, G. (1880). *I Gagini e la scultura in Sicilia nei secoli XV e XVI (Volume 1.).* Tipografia del Giornale di Sicilia.

Edwards, C. (2012). "Improving" the decoration of furniture: Imitation and mechanization in the marquetry process in Britain and America, 1850–1900. *Technology and Culture,* 53*(2*), 401–434.

Emiliani, A. (Ed.). (1978). *Leggi, bandi e provvedimenti per la tutela dei beni artistici e culturali negli antichi stati italiani, 1571–1860*. Edizioni ALFA.

Ferres, A. (1866). *Descrizione storica delle chiese di Malta e Gozo*. Oxford University.

Fiorini, S. (1991). Artists, artisans and craftsmen at the Mdina Cathedral in the early sixteenth century. *Melita Historica,* 10(4),321-352. https://www.um.edu.mt/library/oar//handle/123456789/41228

Fiorini, S. (1992). *The Mandati documents at the archives of the Mdina Cathedral, Malta 1473-1539*. The Hill Monastic Manuscript Library, Minnesota & The Catheddral Museum, Malta.

Fiorini, S. (1999). The shipment of works of art to Medieval mdina, Malta. *Journal of Mediterranean Studies*, 9(1), 4–13. https://muse.jhu.edu/article/670238

Fiorini, S. (2013). The triple strand of the liturgical tradition of the Church in Malta : Byzantine, roman, gallican rites. *Melita Theologica*, 63(2), 5–18 . https://www.um.edu.mt/library/oar/handle/123456789/15188

Fsadni, M. (1965). *Il- miġja u l ħidma ta' L-ewwel Dumnikani f* Malta, 1450-1512. Lux Press.

Galea Naudi, J., & Micallef, D. (1996). The choir stalls of the Cathedral, Mdina. *Treasures of Malta,* 2(3), 37–41.

Glover, A. D. (2016). *Reconstructing the office furniture: The art of the early modern choir stall* [Doctoral dissertation, University of York]. ProQuest Dissertations & Theses Global. https://www.proquest.com/dissertations-theses/reconstructing-office-furniture-art-early-modern/docview/1818964481

Gosden, C., & Marshall, Y. (1999). The cultural biography of objects. *World Archaeology*, 31(2), 169–178. https://doi.org/10.1080/00438243.1999.9980439

Gromotka, M. (2015). Transformation campaigns of church interiors and their impact on the function and form of Renaissance altarpieces: The example of S. Pietro in Perugia and Pietro Perugino's ascension of Christ. *Marburger Jahrbuch Für Kunstwissenschaft*, 42, https://www.researchgate.net/publication/309429980_Transformation_Campaigns_of_Church_Interiors_and_their_Impact_on_the_Function_and_Form_of_Renaissance_Altarpieces_The_Example_of_S_Pietro_in_Perugia_and_Pietro_Perugino's_Ascension_of_Christ

Gyllenbok, J. (2018). *Encyclopaedia of historical metrology, weights, and measures*. Birkhauser.

Hackett, S. MSC (2025). Pre-eminent manifestation of the Church: The cathedral and the future of liturgical architecture. In *Liturgical architecture and the future of Catholic worship*. Springer.

Hanlon, T. (2017). *Tooled: An exploration of craft, the tool, and emergent trends in wooden architecture.* University of Washington.

Harris, J. (2007). *Moving rooms: The trade in architectural salvages*. Yale University Press.

Hendrix, J. S. (2011). *Architecture as cosmology: Lincoln Cathedral and English Gothic architecture*. Peter Lang.

Jameson, A. (1895). *Sacred and legendary art*, (Vol. 2). Houghton Mifflin and company.

Jokilehto, J. (1999). *A history of architectural conservation*. Butterworth-Heinemann.

Joyce, E. (1970). *The technique of furniture making*. Batsford.

Larinà, & G. (2000). Due opere del quattrocento Siciliano a confronto: I cori lignei delle Cattedrali di Malta e Siracusa. *Bollettino Della Società Calatina Di Storia Patria E Cultura*, (7-9), 61–74.

Larinà, G. (Ed.). (2008). *Arte lignea tra Sicilia e Malta nel XV secolo: I cori delle Cattedrali di Malta e Siracusa.* Malta : Midsea Books.

Long, M. (2005). *Architectural acoustics*. Academic Press.

Long, P. O., & Morrall, A. (2019). *Craft and technology in Renaissance Europe*. Cambridge University Press.

Malta blue book for the year 1921 (1923). Government Printing Office.

Mangion, A. (1976). Appendix: The churches of St John and St Michael. In A. Luttrell (Ed.), *Ħal Millieri: A Maltese Casale, it's churches and paintings* (pp. 134–136). Midsea Books Ltd, Malta.

Mangion, A. (1978). *The parish church of St Catherine- Żurrieq. Heritage: An Encyclopedia of Maltese Culture and Civilisation,* (12), 221–226. . https://www.um.edu.mt/library/oar/handle/123456789/46713

Mannoni, C. (2021). Protecting antiquities in early modern Rome: The papal edicts as paradigms for the heritage safeguard in Europe. *Open Research Europe*, 1, 48. https://doi.org/10.12688/openreseurope.13539.1

Mannoni, C. (Ed.). (2022). *Arte, legge, restauro: L'Europa e le prime prassi per la protezione del patrimonio (Sapere l'Europa, sapere d'Europa, Vol. 7)*. Edizioni Ca' Foscari.

Mercieca, S. (2010). The failed siege of 868 and the conquest of Malta by the Aghlabid Princedom in 870. In Grima J. (Ed.), *60th anniversary of the Malta Historical Society: A commemoration* (pp. 87–102). Malta Historical Society.

Morvan, H. (2023). Observant reform and Dominican church interiors in Italy (15th-16th centuries). In P. Delcorno, & B. Roest (Eds.), *Observant reforms and cultural production in Europe* (pp. 113–133). Radboud University Press.

Perusini, G. (1989). *Il restauro dei dipinti e delle sculture lignee: Storia, teorie e techniche*. Del Bianco Editore.

Piron W., & Seliger A. (Eds.). (2017). *Choir stalls and their workshops: Proceedings of the misericordia international colloquium 2016*. Cambridge Scholars Publishing.

Pugin, A. (1851). *A treatise on chancel screens and rood lofts: Their antiquity, use, and symbolic signification*. C. Dolman.

Pullicino P. (1877*). Il nuovo coro della Chiesa Cattedrale di Malta*. Albion P.

Ramond, P., Arveiller-Dulong, V., & Jullien, F. (1989). *Le bois dans le mobilier et la sculpture: Connaissance et restauration.* Éditions du Patrimoine.

Sands, R. (2022). Life beyond life: Repair, reuse, and recycle — the many lives of wooden objects and the mutability of trees. *Archaeometry, 64,* 168–186. https://doi.org/10.1111/arcm.12708.

Thake, C. (1994, August 7). The reconstruction of the Mdina Cathedral. *The Sunday Times.* https://www.um.edu.mt/library/oar/handle/123456789/128925

Thake, C. (Ed.). (2018**).** *The construction of the Mdina Cathedral: Insights from the libri della fabrica (Ecclesiastical Archives in Malta, Crossroads of Cultures and Religion, 1968–2018 ed.).* The Cathedral Archives.

Tribune (architecture). (1911/2021**).** In *Encyclopædia Britannica* (Vol. 27). Retrieved from https://en.wikisource.org/wiki/1911_Encyclop%C3%A6dia_Britannica/Tribune_%28architecture%29

Tringham, R. (1995). Archaeological houses, households, housework and the home. In D. &. Benjamin, & D. Stea (Eds.), *The home: Words, interpretations, meanings, and environments* (pp. 79–107). Avebury Press.

Vella, C. (2010). Sculpture in Malta in the early post-Muslim period. In Grima J.F. (Ed*.), 60th anniversary of the Malta Historical Society : A commemoration* (pp. 455–466). Malta Historical Society.

Vella, C. (2013). *The Mediterranean artistic context of late Medieval Malta, 1091-1530*. Valletta : Midsea Books.

Vlad Borelli, L., Agnoloni, G., Bruschetti, P., Caldini, E., del Dottore, D., & Salvi, A. (2010). *Conservazione e restauro delle antichita': Profilo storico* (1. ed. ed.). Viella.

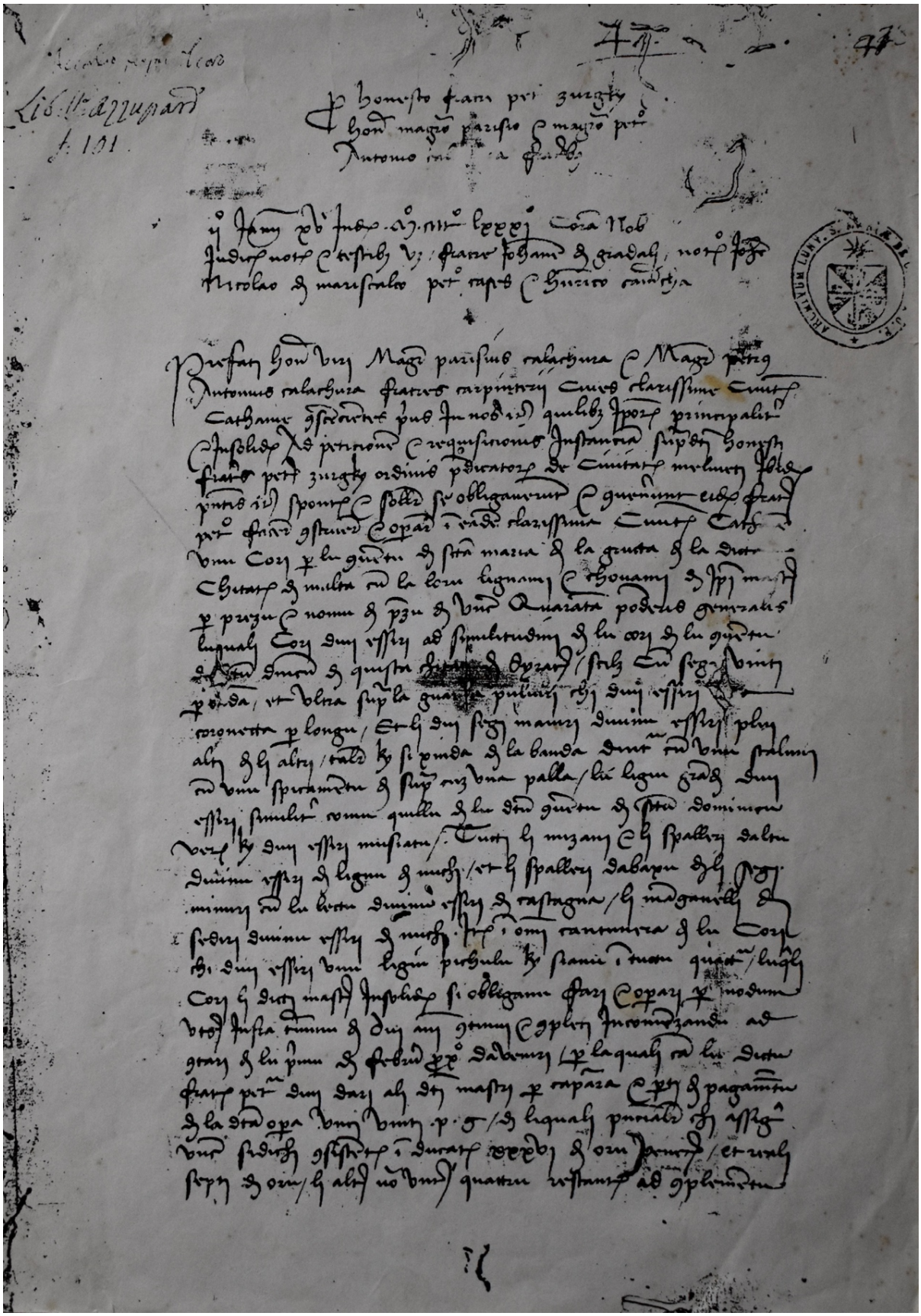
Villaseñor Sebastián, F., Teijeira Pablos, M. D., Muller, W., & Billiet, F. (2015). *Choir stalls in architecture and architecture in choir stalls*. Cambridge Scholars Publishing.

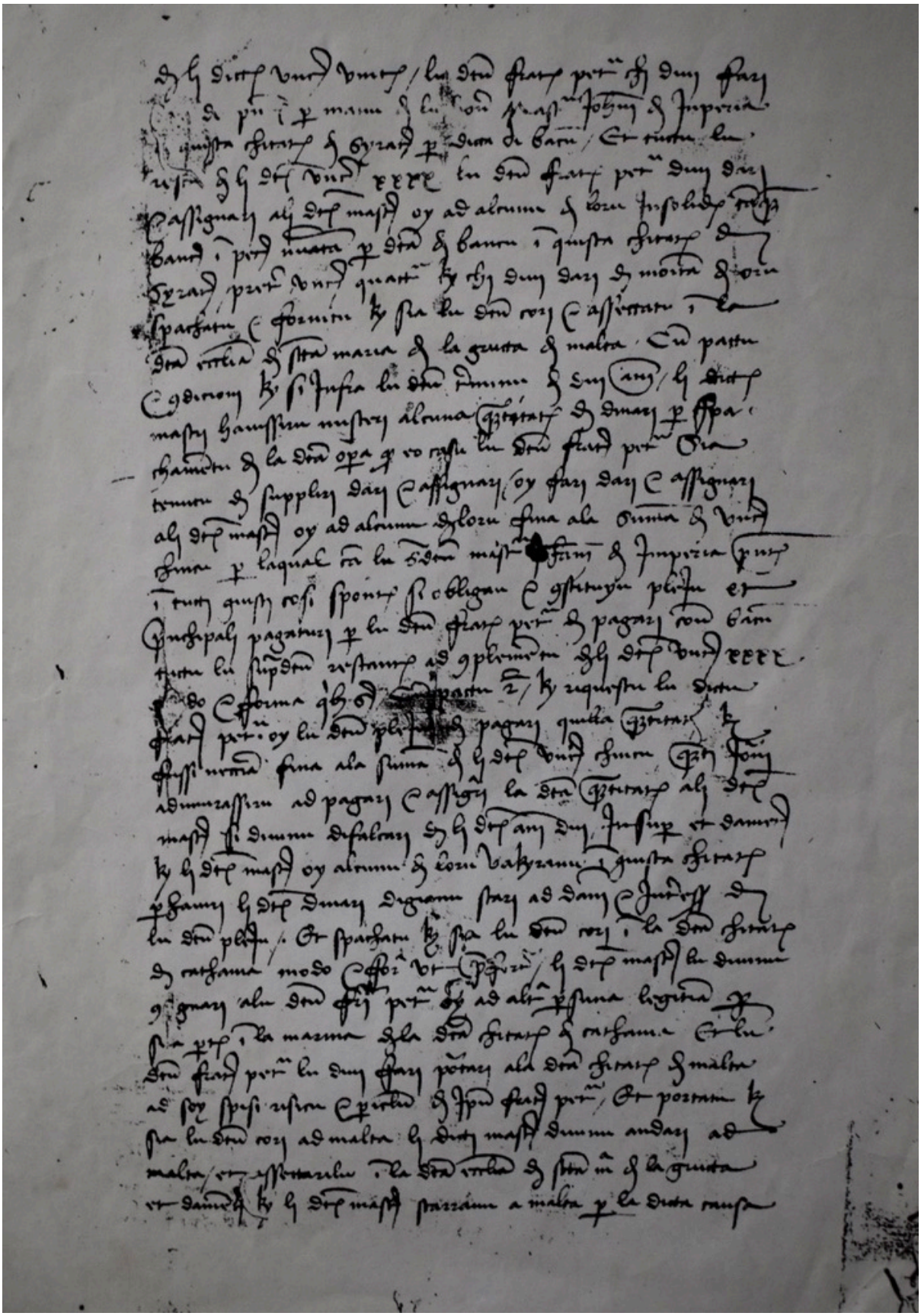
von Falke, J. (2023). *Art in the house: Historical, critical, and aesthetical studies on the decoration and furnishing of the dwelling.* Routledge/Taylor & Francis Group.

Wettinger, G. (2014, -05-04). Malta in the high Middle Ages. https://vassallohistory.wordpress.com/malta-in-the-high-middle-ages/

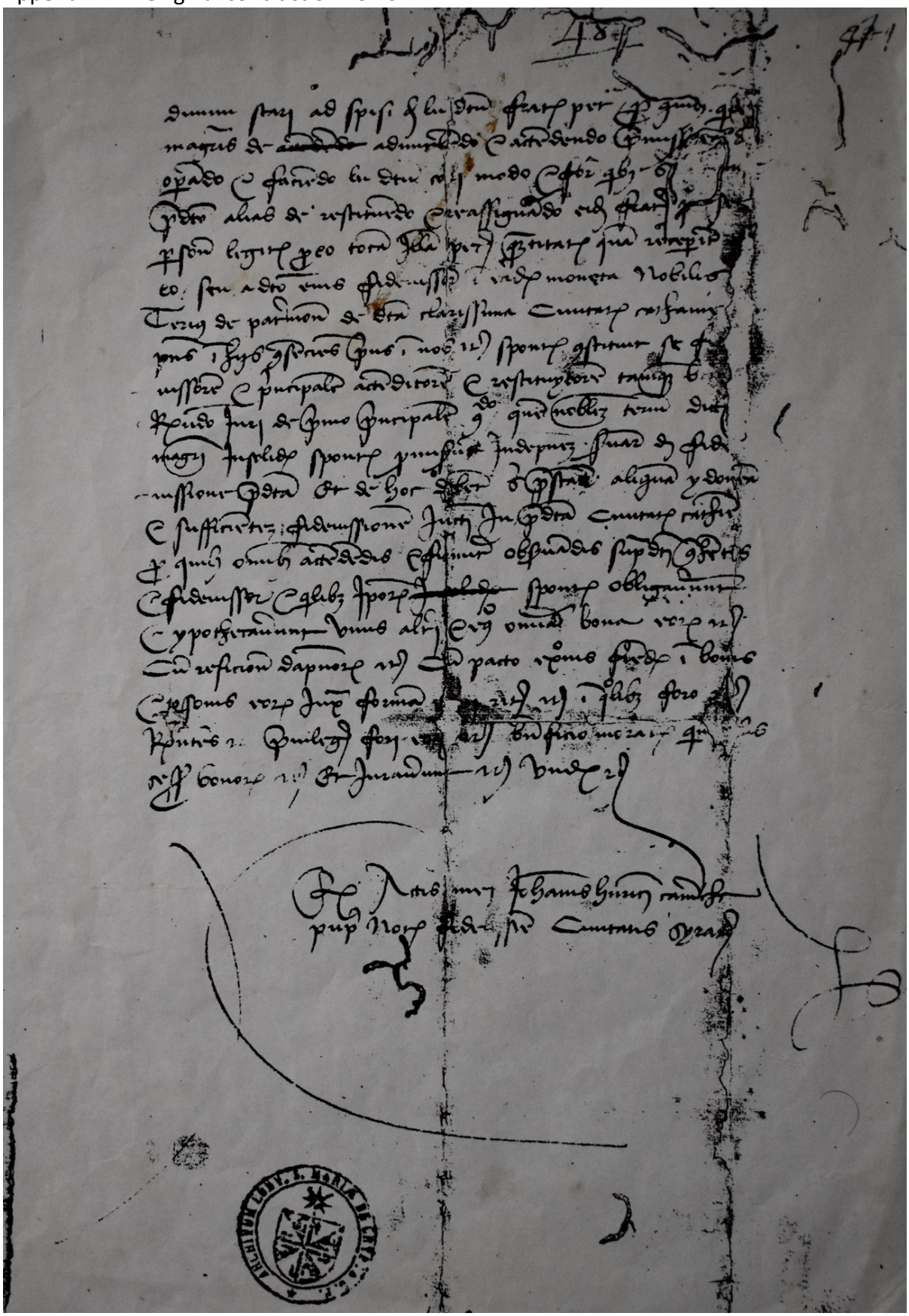
Appendix A. – The original contract of works

This appendix provides a transcription and translation of a 15th-century contract copy between Petro Zurgky and the Calachura brothers for the construction of a set of choir stalls for the conventual church of Sta Maria della Grotta. The original document is preserved in *Giuliana antica I*, (f.47) at the Dominican Archives in Rabat, Malta. The transcription was prepared by Ms Mireia Peris Vicent, while the translation was undertaken by the present author.





Appendix A. – Original contract of works



Transcription

Pro honesto fratri Petro Zurgky, /[2] honestos magistro Parisio et magistro Petro /[3] Antonio, Cal[achur]a fratribus.

/[4] IIº januarii, XVª indictionis, Mº CCCCº LXXXIº. Coram nobis, /[5] judice, notario et testibus, videlicet: fratre Johanem di Gradali, notario Johanne /[6] Nicolao di Mariscalco, Petro Cases et Heurico Camercha.

/[7] Prefati honorabilis viri magister Parisius Calachura et magister Petrus /[8] Antonius Calachura fratres carpinterii cives clarissime civitatis /[9] Cathanie conscintientes prius in nos.

Item quilibet impot? principaliter /[10] et insolidum ad peticionem et requisicionis instanciam supradicti honesti /[11] fratris Petrus Zurgky ordnis praedicatoris de civitatis Meliveti ibidem /[12] presentis.

Item spont? et sollr? se obligaverunt et convenierunt eidem fratri /[13] Petro facere construere et operare in eadem clarissima civitate Cath[ani]e /[14] unu cori per lu conventu di Sancta Maria di la Gructa di la dicta /[15] chitate di Malta cum la loru lignami et chouami di ipsi masgistro /[16] per prizu et nomu di prizu di unci quaranta ponderis generalis /[17] luquali cori divi essiri ad similitudini di lu cori di lu conventu /[18] d[i Sanc]tu Dominicu di quista chi[tate] di Syracusa, scilicet cum seg? vinti /[19] per**da et ultra supra la gua*** pulviri(?) chi divi essiri [---] /[20] coronecta per longu. Et li dui segi maiuri(?) divinu essiri plui /[21] alti di li altri talr? ky si x-da? di la banda dintru cum unu scaluni /[22] cum unu spicamentu di supra eius(?) una palla lu ligni grandi divi /[23] essiri similiter comu quillu di lu dictu conventu di Sanctu Dominicu /[24] ver? ky divi essiri musiatu(?). Tucti li mizani et li spallery daltu /[25] divinu essiri di lignu di nuchi et li spalleri dabaxu dili segi /[26] minuri cum lu lectu divino essiri di castagna li manganelli di /[27] sediri divinu essiri di nuchi.

Item in omni cantunera di lu cori /[28] chi divi essiri unu ligni pichulu ky sianu in tuctu quactru(?) luquali /[29] cori li dicti magistro insolidus si obliganu fari et operari per modum /[30] vts? infra terminu di dui anni continui et conpleti inconvenzandu ad /[31] contari di lu primu di februarii proximo daveniri per la quali tam lu dictu /[32] frater Petru divi dari ali dicti mastri per capara? et parti di pagamentu /[33] di la dita opera unci vinti p g di liquali pu-a? chi assigna /[34] unci sidichi consistente(?) in ducatos XXXVI di oru [---] et reali /[35] septi di oru li altr? no? unci quactru restantes ad conplementu //[1v] dili dicti unci vinti lu dictu frater Petru chi divi fari /[2] [---] di pnt? per manu di lu [h]onorabili masgistru Johanni di Inperia /[3] [---] quista chitate di Syracusa predicta di bacu?. Et tuctu lu /[4] res[---] di li dicti unci XXXX lu dictu frater Petru divi dari /[5] et assignari ali dicto magistro oy ad alcunu di loru insolid? tamque /[6] banc? in Petr? nuata? predicta di bancu in quista chitate di /[7] Syracusa praeter unci quactru ky chi divi dari di moneta(?) di oru /[8] spachatu e fornitu ky sia lu dictu cori e assectatu in la /[9] dicta ecclesia di Sancta Maria di la Gructa di Malta. Cum pactu /[10] et condicioni ky si infra lu ditu terminu di dui

anni, li dicti /[11] magistri havissiru iuisteri? alcuna quantitate di dinari per spa/[12]chamentu di la dita opera quod eo casu lu dictu frater Petru sia /[13] tenutu di suppliri dari et assignari oy fari dari et assignari /[14] ali dicto magistro oy ad alcunu diloru fina ala summa di unci /[15] chincu per laqual ca? lu supradictu magistru [Jo]hanni di Imperia pnt? /[16] in tucti quisti cosi spont? si obligau et constituyu pleju et /[17] princhipali pagaturi per lu dictu frater Petru di pagari cou? bacu? /[18] tuctu lu supradictu restante ad conplementu dili dicti unci XXXX /[19] [---]o et forma quibus s[---]pactu [---] ky riquestu lu dictu /[20] frater Petru oy lu dictu ple[ju] [---] di pagari quilla quantitat[e] ky /[21] fussi -eccia? fina ala summa di li dicti unci chincu -- -- /[22] adi?rassiru ad pagari et assignari(?) la dicta quantitate ali dicto /[23] magistro si divinu difalcari di li dicti anni dui insuper et da-et? /[24] ky li dicto magisto oy alcunu di loru vakyranu(?) in quista chitate /[25] per haviri li dicti dinari digranu stari ad davi- et int?ess? di /[26] lu dictu pleju. Et spachatu ky sia lu dictu cori in la dicta chitate /[27] di Cathania modo et forma ut performa(?) li dict? mgist? lu divinu /[28] con[si]gnari alu dictu fratri Petru oy ad altra persuna legitima per /[29] s[u]a parte(?) in la marina dila dicta chitate di Cathania. Et lu /[30] dictu frater Petru lu divi fari potari ala dicta chitate di Malta /[31] ad soy spisi risicu et periclum(?) di ipsu frater Petru. Et portatu ky /[32] sia lu dictu cori ad Malta li dicti magist? divinu andari ad /[33] Malta et [a]ssectarilu in la dicta ecclesia di Sancta Maria di la Gructa /[34] et [---] ky li dict? magist? starranu a Malta per la dicta causa //[2r] divinu stari ad spisi di lu dictu frater Petru pro [---] /[2] magris? de [*tachado*] ad—do? et actendendo promiss[---] /[3] operando et faciendo lu dictu co[r]i modo et forma quibus sy[---] /[4] predicto alias de restituendo et reassignando eidem fratri [---] /[5] persone legitime pro eo totam illam pet? quantitate quam [---] /[6] eo seu a dicto eius fideiussore in eadem moneta nobilis /[7] terius de pacamento(?) de dicta clarrisima civitate Cathanie /[8] pns? in h—s? consecuens primus in nos.

Item spont? constituit sit(?) f[ide]/[9]iussorem et principalem acreditorem et restituytorem tamque [---] /[10] kyndo? juri de primo principalem Qdo? Que? Nobliz? – di[ct]i /[11] magistri insolidi spont? provisione? indep--z ser-- di fd[e]/[12]iussione predicta et de hoc [---] s? prost? aliquam ydoneam /[13] et sufficientem? fideiussionem incti? in predicta civitate Cathanie /[14] pro quibus omnibus actendendis et f[---] observandis supradicti [---] /[15] et fideiussor et quilibet ipor? [*tachado*] spont? obligaverunt /[16] et ypothecaverunt unus altri et – omnia bona eorum.

Item /[17] cum reficione dapnorum.

Item cum pacto exms? -- in bonis /[18] et p[er]sonis eorum juxta forma [---].

Item in quolibet foro.

[It]em /[19] -- -- privilegio fori e[orum].

Item beneficio moratoris q[---]s /[20] cess? bonorum.

Item et juraverunt

Item viderunt(?) etcetera.

/[21] -- actis mei Johannis Heurici Cemercha /[22] puplicus notarius fede[li]ssime civitatis Syracusa.

Translation

To the honorable brother Peter Zurgky,/[2] and the honorable masters Parisio and Peter /[3] Antonio Calachura, brothers.

/[4] On the 2nd of January, in the 15th indiction, 1481. In our presence, /[5] the judge, notary, and witnesses, namely: brother Johannem di Gradali, notary Johannes /[6] Nicolaus di Mariscalco, Peter Cases, and Heuricus Camercha.

/[7] The aforementioned honorable men, Master Parisius Calachura and Master Petrus/[8] Antonius Calachura, brothers, carpenters, and citizens of the most illustrious city /[9] of Catania, consenting beforehand among themselves. Likewise, each individually and jointly, primarily /[10] and in solidarity, at the request and solicitation of the aforementioned honorable /[11] brother Petrus Zurgky, of the Order of Preachers, from the city of Mdina, being present./[12]

Moreover, voluntarily and diligently, they bound themselves and agreed with the same Brother /[13] Petrus to make, construct, and produce in the same most illustrious city of Catania /[14] a choir for the convent of Santa Maria della Grotta of the said /[15] city of Malta, with their own timber and materials provided by the said masters, /[16] for the price and sum of forty ounces of general weight, /[17] which choir must be made in the likeness of the choir of the convent /[18] of St. Dominic of this city of Syracuse, namely, with twenty seats /[19] , [---] and above the guarda polveri (canopy) there must be a /[20] coronetta in length. And the two major seats must be higher /[21] than the others in such a way that ?? inside with a step /[22] and a finial above, with a large wooden panel /[23] that must likewise be similar to that of the said convent of St. Dominic. /[24] Moreover, it must be ornamented. All the armrests and backrests above /[25] must be made of walnut wood, and the lower backrests of the smaller seats /[26] along with the bed must be of chestnut wood. The armrests of /[27] the seats must be made of walnut wood.

/[28] Moreover, in every corner of the choir, there must be a small piece of wood in all four [corners], which /[29] choir the said masters jointly obligate themselves to make and construct properly /[30] within the term of two continuous and complete years, beginning to count /[31] from the first of February next. For this, the said /[32] Brother Petrus must give the said masters, as a deposit and part payment /[33] for the said work, twenty oncie of general weight, of which he shall assign /[34] sixteen oncie, consisting of thirty-six golden ducats [---] and seven golden reals. /[35] The remaining four ounces //[1v] of the said twenty ounces, the said Brother Petrus must provide /[2] [---] in payment through the honorable Master Johannis di Inperia, /[3] [---] of this city of Syracuse mentioned above, as guarantor. And the entire /[4] remaining amount of the said forty ounces, the said Brother Petrus must give /[5] and assign to the said masters or to any of them jointly, either /[6] by bank draft in Petrus' name, payable at the bank in this city of /[7] Syracuse, except for four ounces which must be paid in gold /[8] once the said choir is delivered and installed in the /[9] said church of Santa Maria della Grotta in Malta. With the

agreement /[10] and condition that if, within the said period of two years, the said /[11] masters require additional sums of money for the completion /[12] of the said work, in such a case the said Brother Petrus shall /[13] be obliged to provide, pay, or arrange for payment to the said master /[14] or to any of them, up to the sum of five ounces. For this reason, /[15] the aforementioned Master Johannis di Inperia voluntarily /[16] bound himself and constituted himself as guarantor and /[17] principal payer on behalf of the said Brother Petrus to pay by bank /[18] the entirety of the remaining balance of the said forty ounces /[19] [---] and in the form agreed upon. With the agreement that /[20] if the said Brother Petrus or the guarantor [---] should fail to pay the amount /[21] up to the sum of the said five ounces, then they shall /[22] be obliged to pay and assign the said amount to the /[23] said master, and such payment shall be deducted from the said two years. Moreover, /[24] if the said master or any of them should come to this city /[25] to collect the said money, they shall not delay but rather /[26] proceed promptly at the expense and interest of the /[27] said guarantor. Once the said choir is completed in the said city /[28] of Catania in the agreed manner, the said masters shall /[29] deliver it to the said Brother Petrus or to another legitimate person on /[30] his behalf at the marina of the said city of Catania. And the /[31] said Brother Petrus must have it transported to the said city of Malta /[32] at his own expense, risk, and peril. Once /[33] the said choir is transported to Malta, the said masters must go to /[34] Malta and install it in the said church of Santa Maria della Grotta. and [---] that the said masters shall remain in Malta for the said task //[2r] at the expense of the said Brother Petrus for [---] /[2] the masters, regarding and [---], fulfilling the promised /[3] work, performing and completing the said choir in the manner described above, /[4] otherwise returning and reassigning to the said Brother [---] /[5] or a legitimate person on his behalf the full payment amount which [---] /[6] either from him or from the said guarantor in the same noble currency, /[7] derived from the payment made in the said illustrious city of Catania, /[8] and [---] accordingly, as first established between us. Furthermore, voluntarily, they constituted as guarantor and /[9] principal creditor and returner, likewise [---], /[10] [---] the right of the principal, guaranteeing in full the /[11] responsibility of the said masters jointly and individually, voluntarily ensuring /[12] the aforementioned guarantee and providing sufficient /[13] and appropriate security in the said city of Catania. /[14] For all these things to be fulfilled and [---] observed, the above-mentioned [---] /[15] and the guarantor, as well as each of them [removed], voluntarily bound themselves/[16] and mortgaged all their possessions, one to the other.

Furthermore, /17 with reimbursement for damages. Furthermore, with the agreement for compensation in goods /18 and persons, according to the terms [---]. Furthermore, in any court. Furthermore, /19 [---] the privilege of their jurisdiction. Furthermore, the benefit of extensions of [---] /20 or cessations of goods. Furthermore, they swore. Furthermore, they witnessed, etc./21 -- recorded by me, Johannis Heurici Cemercha, /22 public notary of the most faithful city of Syracuse.

Appendix B. – Stratigraphic Analysis

Appendix B. – Stratigraphic Analysis

Introduction

This Appendix includes the sample proformas used throughout the analysis of three samples taken from the choir fragments. The investigation involved examining the stratigraphy of the samples using polarized light microscopy, providing a detailed analysis of their layered composition. For each sample, an account on the main conclusions obtained from the analysis is also provided. For a full account of the methodology employed, refer to section *3.2.3,* ***Methodology – Stratigraphic Analysis***, which elaborates on the techniques, instrumentation, and analytical procedures used. This section ensures clarity, reproducibility, and scientific rigor in the approach to understanding the physical and chemical properties of the samples.

The sampling rationale was guided by the visual examination of the choir stall fragments (see *5. Conservation records and visual observations*). The selection of sampling areas was carefully planned to ensure accurate and representative results. Priority was given to locations with minimal wear or damage, as these areas were more likely to provide a complete sequence of layers without interference from deterioration. Samples were taken from areas where the gilding layers were intact and well-preserved. Additionally, sampling sites were chosen in a way that minimised visual impact, preserving the artefact's aesthetic and historical integrity.

Context

Visual analysis has confirmed that the frames, on all panels except the ones on the **Adam and Eve**, are later additions, with strong indication that the original frames were inlaid *(*see *5.3. Alterations).* Based on this evidence, one could postulate that the choir stalls would have been originally finished with a clear coat that enhances the natural tone and grain of the selected wood.

However, a thick reddish-brown layer is present on most fragments, including the Solomonic columns, acanthus leaves, stall sides, and added frames, specifically in the parts that would have been visible when the choir stalls were assembled. This may suggest that this decorative treatment was applied during the stalls' lifetime of service, and after the frames had been replaced. Similar darkening layers were also observed on the dorsal panels. The backgrounds of some panels appear to be almost fully covered, whilst others seem to have been abraded, with traces of this material still visible in surface depressions caused by uneven planing during the original manufacture. This implies that parts of the dorsal panels were subsequently abraded to reveal the inlaid decoration beneath.

Furthermore, archival evidence suggests that gilding was a later decorative addition, with documentation of an oil gilding application confirmed to have occurred in March 1712 (see *4.6. changes in decorative treatment*).

Appendix B. – Stratigraphic Analysis

Objective, Selection of Samples, and Sample Labeling

An exploratory stratigraphic analysis was conducted to investigate the superimposition of the finishing layers on the choir stalls. The objective of this study was to uncover the chronological sequence of decorative interventions.

To achieve these goals, three samples were selected, each representing a distinct component of the choir stalls and chosen for their potential to yield meaningful historical information:

The **Solomonic Columns**: Original elements from the 15th century that remained visible until the dismemberment of the choir in the 19th century. These columns were anticipated to retain most of the finishing layers applied over time, providing valuable insights into the decorative treatments applied during different periods.

The **Added Frames**: Non-original components likely introduced during the 17th century. Their later addition meant they would lack the earlier finishing layers present before their installation.

The **Adam and Eve Panel**: This panel is notable for retaining its original 15th-century frame, a rare exception to the widespread replacement of frames. Pullicino (1877) noted that by the 19th century, the panel was positioned at the back of the choir stalls, facing the wall. Unlike most other fragments, the panel and its frame show no signs of gilding or red and brown layers, with the wood grain remaining clearly visible. This absence of additional finishing layers is likely due to its placement against the wall—possibly after the 1626 or 1681 relocation—shielding it from subsequent decorative treatments. If this hypothesis is correct, the sample taken from this panel would be expected to exhibit only the earliest finishing layers, without later additions.

The samples taken and analysed during this research exercise are the following:

Sample label	Source	Presumed period of manufacturing
CSM02_SC	Solomonic Column	15th century
CSM03_AF	Added Frame	17th century
CSM04_AEP	Adam and Eve Panel	15th century

Table 1. - list of samples including their location and presumed manufacturing date of the

Sample proformas

Appendix B. – Stratigraphic Analysis

Sampling and analysis: 15th century choir stalls, Mdina Metropolitan Cathedral Museum, stored fragments		**Sample location**
Date: 20/10/24	Location: Solomonic fragment no.10 – column base colar	Sample: **CSM02_SC**

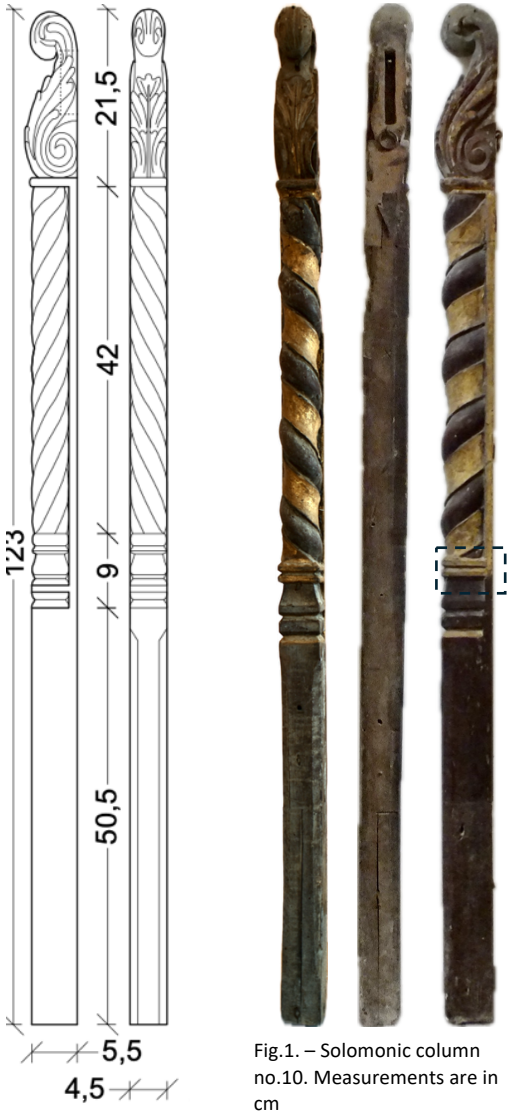


Fig.1. – Solomonic column no.10. Measurements are in cm

Fig 2. - Reverse side of Solomonic fragment **H.1.7**., showing a chiseled Roman numeral 'X'. On the right, the natural grain and color characteristic of walnut are clearly visible. On the left (indicated by the white arrow), a thick accumulation of red pigment is visible, applied to the exposed surface of the fragment prior to its dismantling.

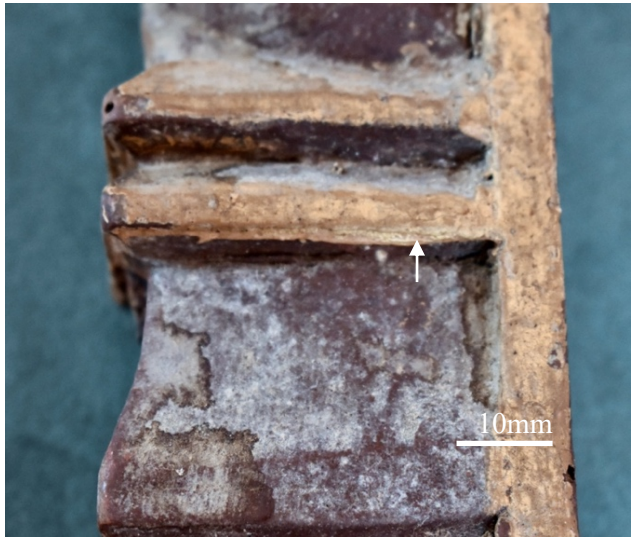


Fig. 3 - . Sample location on the underside of the collar, area of sample lifting is indicated by the white arrow

Description:

Sample **CSM02_SC** was extracted from a Solomonic column (**H.1.7.**). The sample was lifted from the underside of the column base collar (fig.3.), capturing a two-sided cross-section, part of which was gilded and part was not. This approach allowed for observations of both the gilded and non-gilded areas, offering insight into the stratigraphic differences between these surfaces.

Appendix B. – Stratigraphic Analysis

Sampling and analysis: Observation of sample under stereo microscope		**Microscopy: Unmounted Sample**
Date: 20/10/24	Location: Solomonic fragment no.10 – column base colar	Sample: **CSM02_SC**

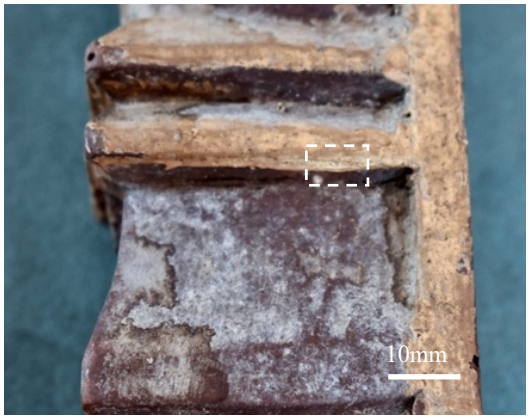


Fig.4. (left) – sample location

Two distinct layers of red could be observed, separated by a dark brownish layer seemingly dried and deteriorating. On the gilded side of the sample (indicated by the yellow arrow), the mentioned layers are followed by a thick white layer, a thin yellow layer, and finally, the gold leaf positioned on top
The non-gilded area of the collar (indicated by the black arrow) also presented a brown finishing layer

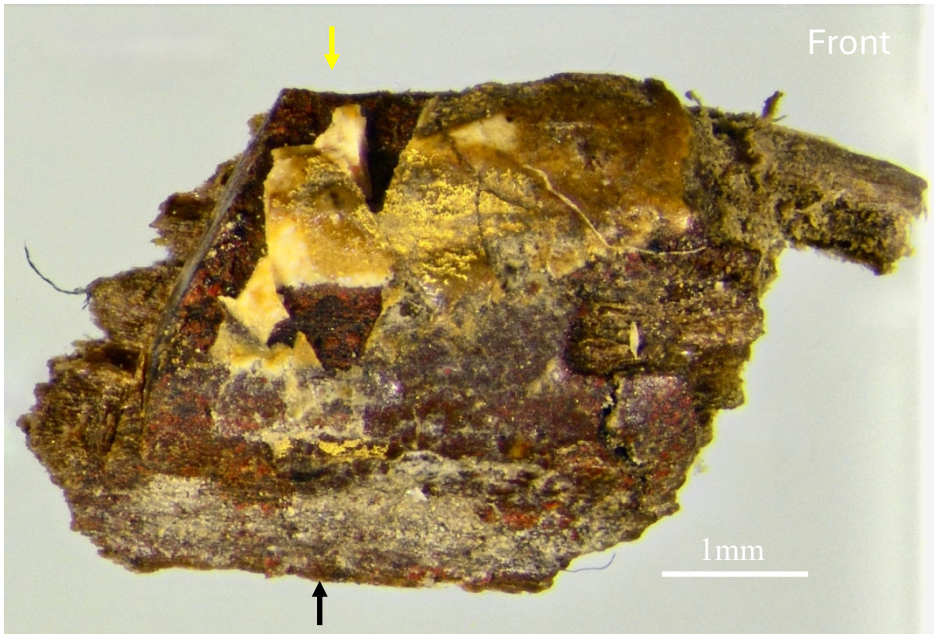


Fig.5. – front side of samble
Black arrow indicates the lower, non-gilded part of the collar
Yellow arrow indicates the upper part of the collar

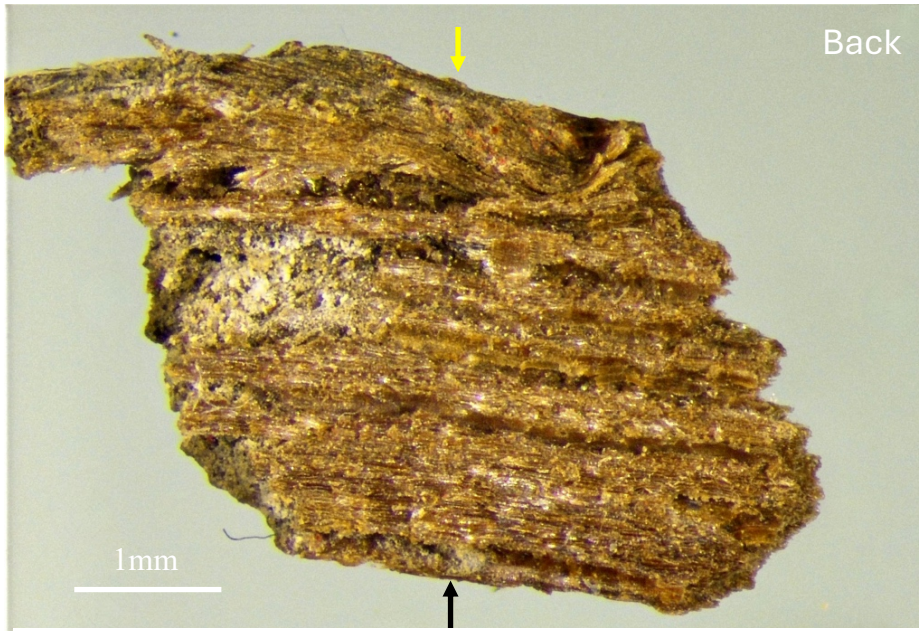


Fig.6. – back side of sample
Black arrow indicates the lower, non-gilded part of the collar
Yellow arrow indicates the upper part of the collar

Appendix B. – Stratigraphic Analysis

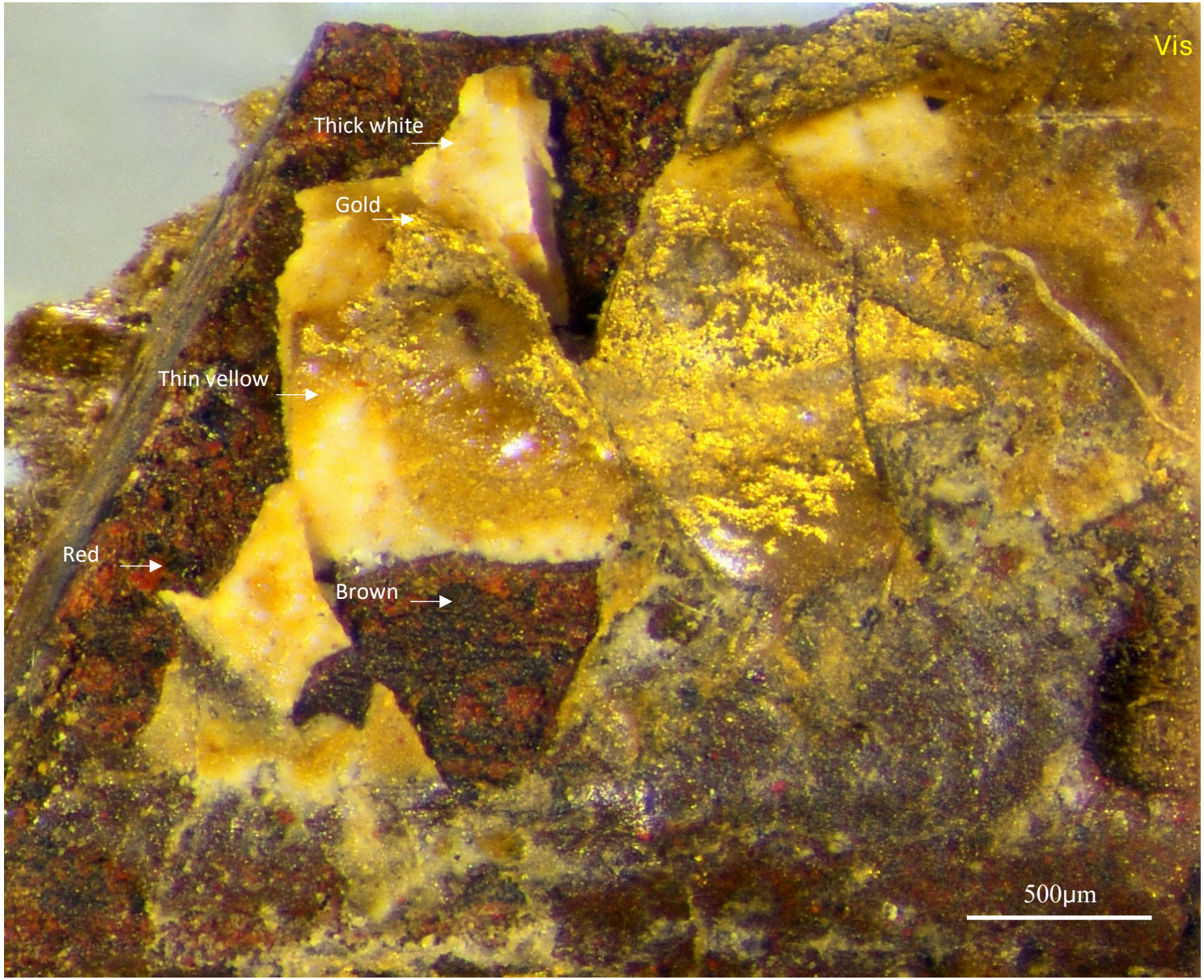


Fig.7. - Micrograph of gilded part of the collar on sample **CSM02_SC** at 20x magnification.

Appendix B. – Stratigraphic Analysis

Sampling and analysis: Observation of sample under PLM		**Microscopy: Cross section**
Date: 20/10/24	Location: Solomonic fragment no.10 – column base colar	Sample: **CSM02_SC**

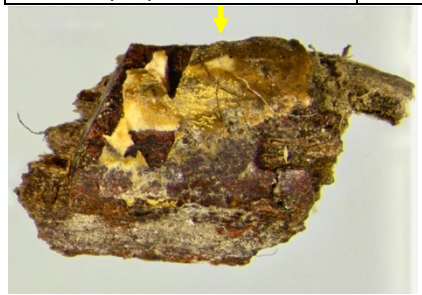


Fig.8.-**CSM02_SC** - Gilded side of the collar, indicated by the yellow arrow

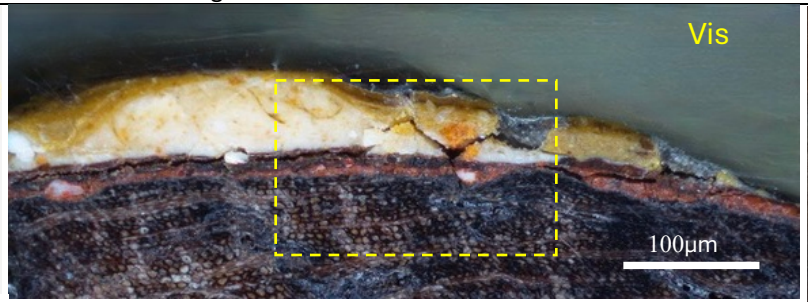


Fig.9.-Micrograph of **CSM02_SC** at 50x
Yellow square indicates area of focus for Figs. 10. & 11.

Layer	Visible light	UV
9	Very thin metallic shiny discontinuous layer	thin dark layer
8	Slightly darker yellow layer with thin dark line at the bottom. Presents similar inclusions as layer 7	Dull brown with slightly more fluorescence than layer 7. The lower part (dark line under visible light) appears to have slightly more fluorescence.
7	Ochre layer with small white transluscent inclusions and brown inclusions some of which are large	Appears dull brown under UV. White inclusions present a muted greyish fluorescence whilst the brown inclusions appear dark red.
6	Thick white layer with small white and yellow inclusions and a much larger orange inclusion	The layer fluoresces bright white. The yellow inclusions appear orange whilst the large orange inclusion appears as red
5	Darker red layer with small black inclusions and larger transluscent inclusion	Appears darker under UV. The large transluscent inclusions present a bright white fluorescence
4	Dark brown layer of seemingly brittle nature.	Homogeneous white fluorescence
3	Light red layer with darker red and black inclusions. Larger inclusions, white in colour and with different texture. The layer presents several cracks.	The light red layer appears as a dark red layer with black inclusions. The white inclusions exhibit white fluorescence, while some of the cracks display yellow fluorescence.
2	Not observable under visible light	Thin layer, few microns thick with a whitish-grey fluorescence
1	Wood: visible porous structure characteristic of wood cells seen in transversal section, appearing as a dark network. The cells appear filled with some form of material	Wood: the material impregnating the wood cells has a bright yellow to amber fluorescence closer to the surface, while exhibiting a subdued amber-brownish fluorescence deeper into the sample.

Table 2. – stratigraphic sequence of sample CSM02_SC

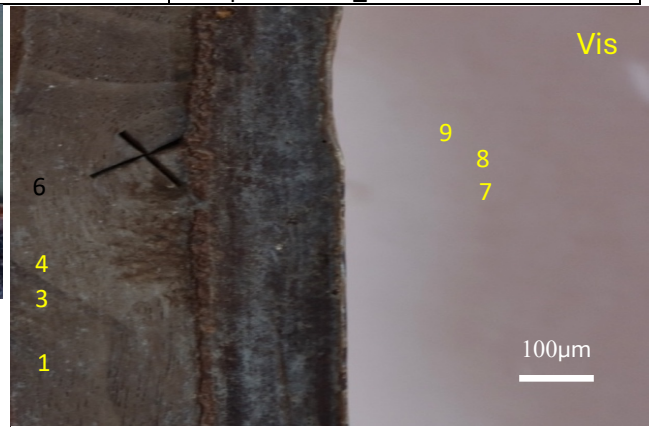


Fig.10. - Micrograph of **CSM02_SC** at 100x under Visible light
Layer 2 was not visible under Visible light
Layer 5 is not captured in this micrograph

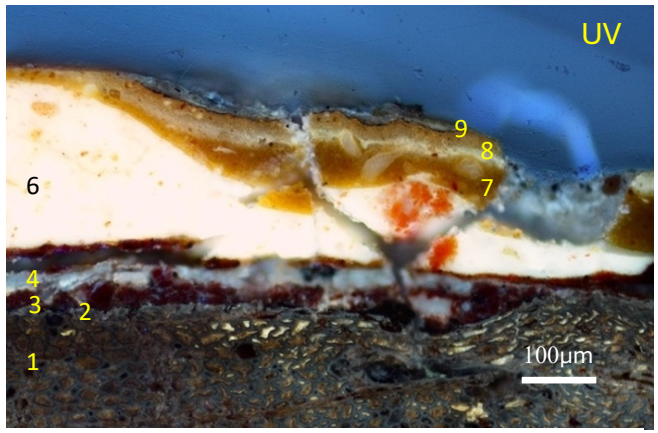


Fig.11. - Micrograph of **CSM02_SC** at 100x under UV light
Layer 2 was visible only under UV light
Layer 5 is not captured in this micrograph

Appendix B. – Stratigraphic Analysis

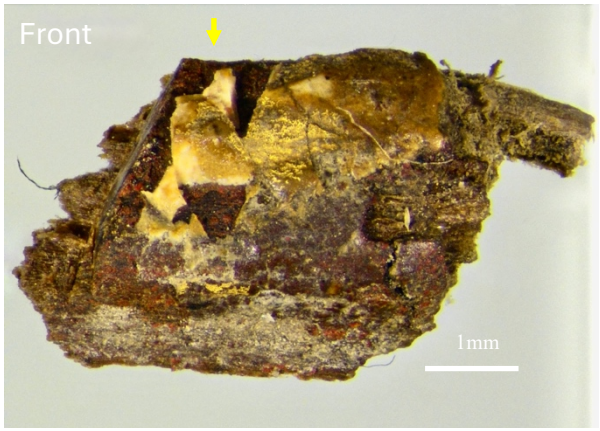


Fig.12. - **CSM02_SC** - Gilded side of the collar

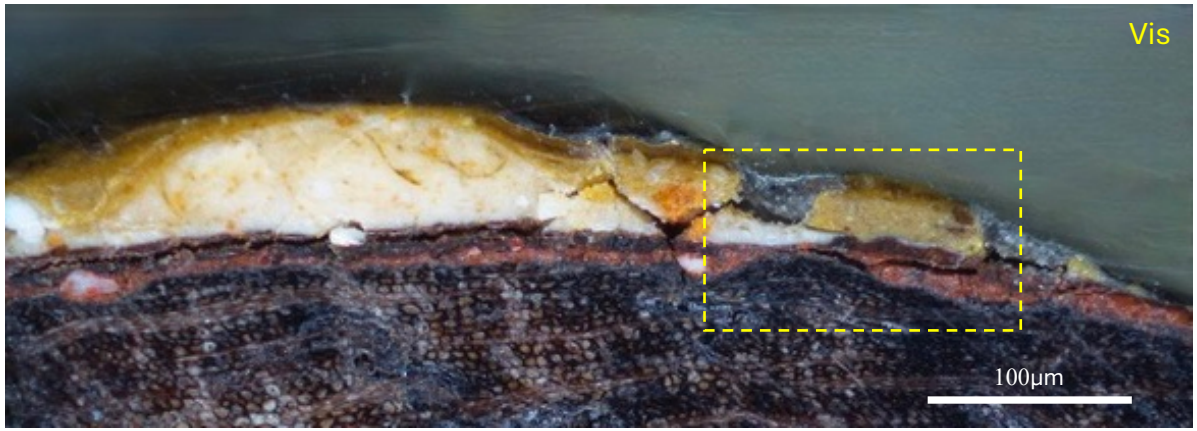


Fig.13.-Micrograph of **CSM02_SC** at 50x Yellow square indicates area of focus for Figs. 14. & 15.

Fig.14. - Micrograph of **CSM02_SC** at 200x under Visible light
Highlighting the presence of Layer 5

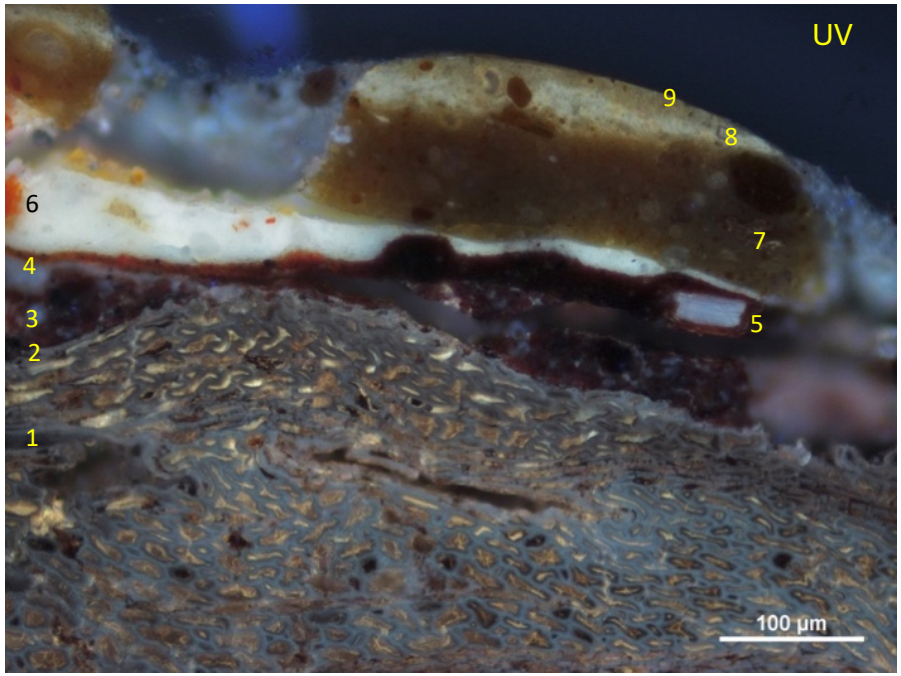


Fig.15. - Micrograph of **CSM02_SC** at 200x under UV light
Highlighting the presence of Layer 5

Appendix B. – Stratigraphic Analysis

Sampling and analysis: Observation of sample under PLM		**Microscopy: Cross section**
Date: 20/10/24	Location: Solomonic fragment no.10 – column base colar	Sample: **CSM02_SC**

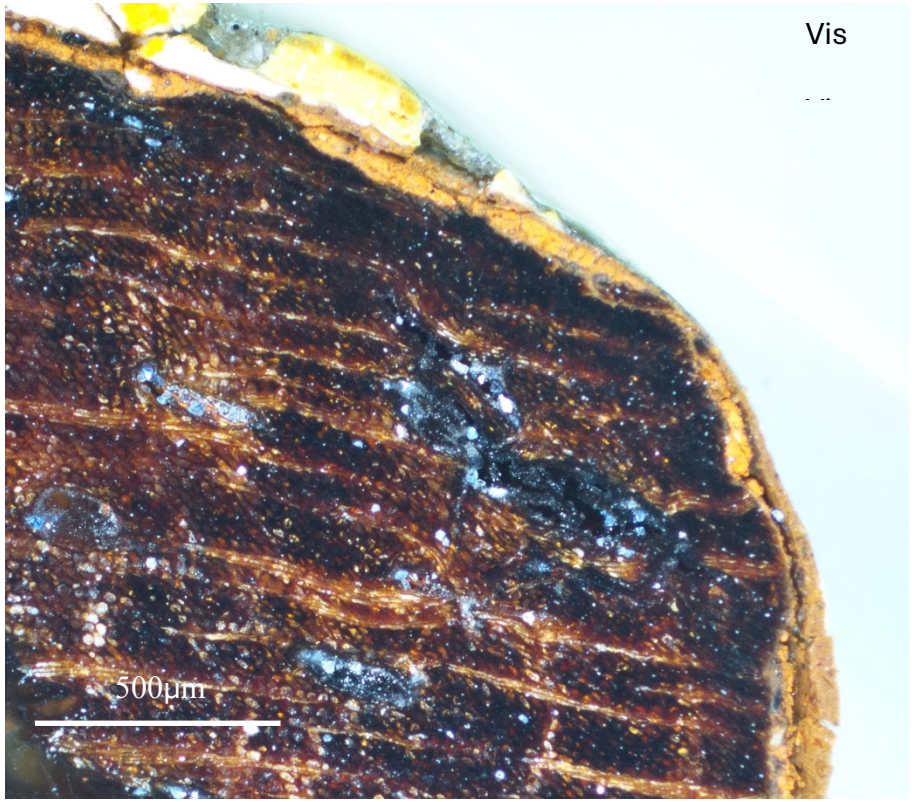


Fig.16. - **CSM02_SC**: cross section 50x magnification, under Visible light

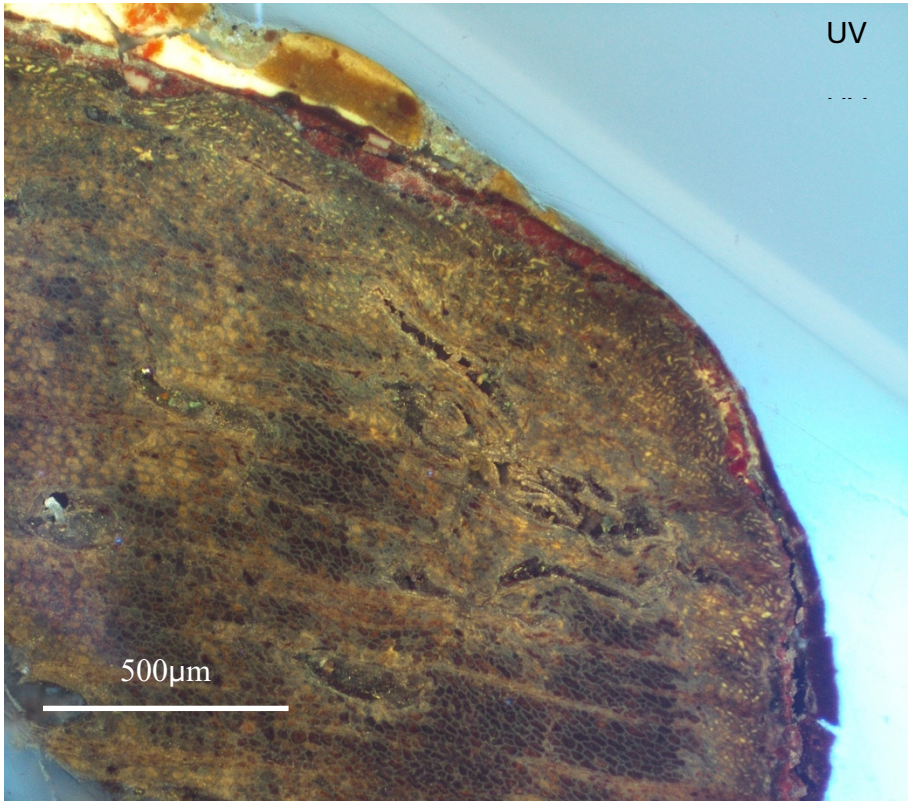


Fig.17. - **CSM02_SC**: cross section 50x magnification, under UV light

Observations at 50x magnification:
Two distinct red layers were identified: a lighter red layer beneath and a darker red layer above. These layers are separated by a discontinuous, brownish layer that fluoresces white under UV light, likely indicating a varnish layer. Signs of deterioration in the top part of the bottom red layer (lighter red layer) and the overlying varnish are evident in the cracking and detachment of the strata.
Additionally, a substance exhibiting bright yellow to amber fluorescence was observed within the wood cells.

Appendix B. – Stratigraphic Analysis

Sampling and analysis: Observation of sample under PLM		**Microscopy: Cross section**
Date: 20/10/24	Location: Solomonic fragment no.10 – column base colar	Sample: **CSM02_SC**

Fig.18. - **CSM02_SC** – Non-gilded side of collar

Fig.19. - **CSM02_SC** at 100x manification under visible light

Observations:
The substance exhibiting yellow-amber fluorescence is more prominent in the cells closer to the wood surface. The vessels (pores responsible for water conduction in hardwoods) remain unobstructed, showing no signs of tyloses (blockages formed by outgrowths of adjacent cells, typically produced as a natural defense or during aging). This lack of obstruction, combined with the observation that the fluorescence is concentrated near the surface, strongly suggests that the substance was applied to the wood surface rather than resulting from natural deposition.

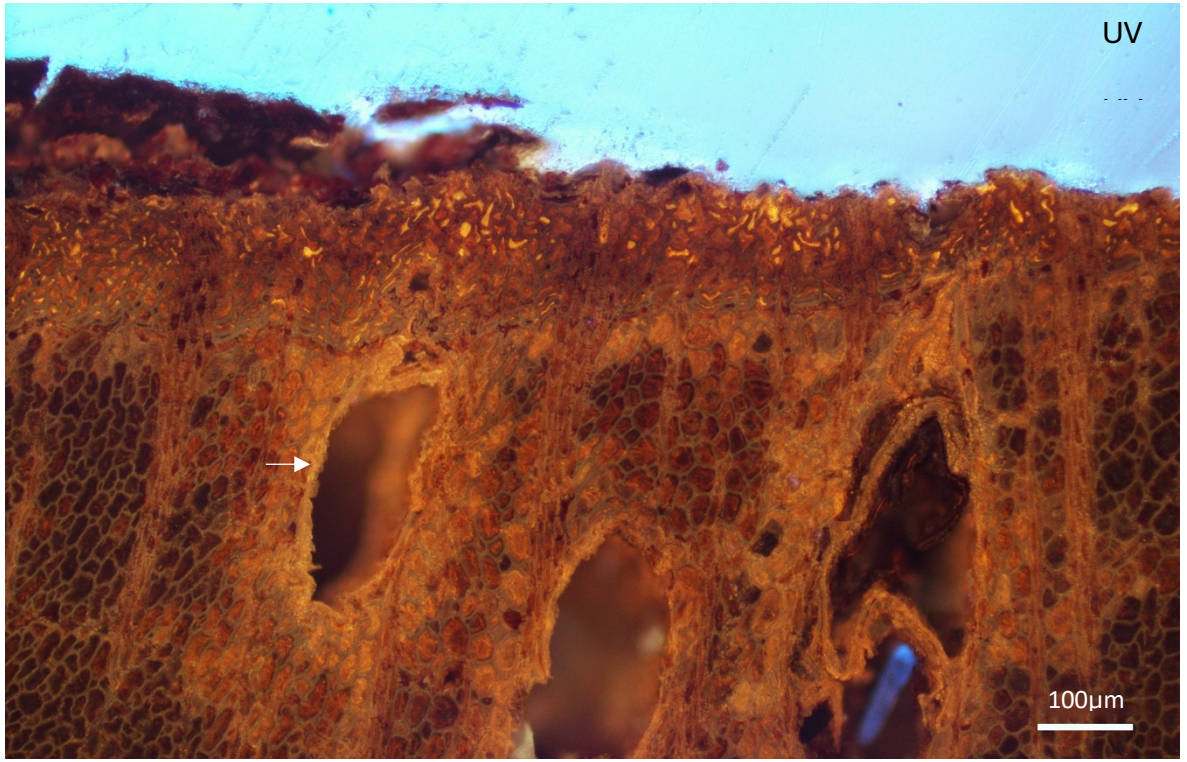


Fig.20. - **CSM02_SC** at 100x magnification under UV light, illustrating the higher concentration of fluorescent substance filling up the cells closer to the wood surface and unobstructed vessels, indicated by the white arrow.

Conclusions:

The wood cells are impregnated with an organic material that emits yellow-amber fluorescence, with the fluorescence concentrated closer to the wood surface. This suggests that the material was applied as a surface treatment. The fluorescence is also present in the non-gilded area of the sample (the lower part of the collar), indicating that the material was uniformly applied across the entire surface, including areas not involved in subsequent decoration.

Under UV light, a thin, uniform white layer, only a few microns thick, is visible beneath the lower red layer. Material characterization is needed to better understand the composition and nature of this layer.

Two distinct red layers were observed on the sample, separated by intermediate layers, indicating that red pigment was applied at different stages in the history of the choir stalls. The lower red layer (layer **3**) appears to have been applied uniformly but shows signs of deterioration, including cracking. Layer **4**, which appears dark brown under visible light but exhibits bright white fluorescence under UV light, is likely a varnish layer. Macroscopic observations suggest a brittle, dried-out consistency, which may contribute to its discontinuity across the sample, indicating areas of loss.

The light red layer (layer **3**) and the presumed varnish layer (layer **4**) are very similar to the corresponding layers observed on sample **CSM03_AF_a** (Added frame), suggesting that the frames had already been replaced when these layers were applied.

The layers related to the gilding system (**6**, **7**, **8**, and **9**) observed on this sample are comparable to layers **3**, **4**, and **5** on sample **CSM03_AF_b**. However, **CSM03_AF_b** presents an earlier gilding episode that is absent from the stratigraphy of this sample.

Layer	Comparable with	Possibly
9	CSM03_AF_b – Layer 6	Gold leaf
8	CSM03_AF_b – Layer 4	Preparation for gilding – base colour richer in oil size
7	CSM03_AF_b – Layer 4	Preparation for gilding – base colour
6	CSM03_AF_b – Layer 3	Preparation for gilding – ground
5	Differs from other samples	Pigmented layer – darker red – different application
4	CSM03_AF_a - Layer 5	Varnish layer
3	CSM03_AF_a - Layer 4	Pigmented layer – Light Red
2	?	Requires further investigation
1	CSM04_AEP - Layer 1	Wood – hardwood (indicated by presence of vessels) possibly impregnated with a drying oil or varnish

Table 3. - comparison of the layers observed on CSM02_SC with those found on other samples.
The third column presents a hypothesis regarding the possible nature of these layers, based on an informed assessment of finishing techniques.
Material characterization is required to confirm or refine this hypothesis

Appendix B. – Stratigraphic Analysis

Sampling and analysis: 15th century choir stalls, Mdina Metropolitan Cathedral Museum, stored fragments – Nativity panel, added frame		**Sample location**
Date: 20/10/24	Location: Gilded section of moulding on later added frame recovered from the nativity panel	Sample: **CSM03_AF (a&b)**

Fig. 21. – Added frame. The white arrow indicates the area of sample extraction

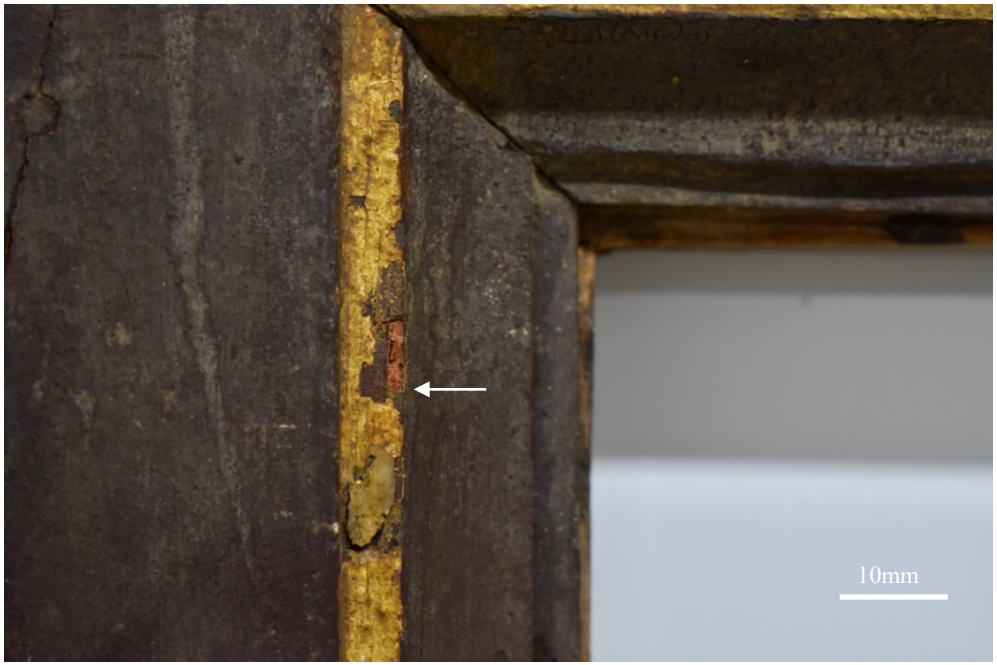


Fig. 22. - Area of sample extraction on the gilded part of the added frame

Description:
Sample **CSM03_AF** was taken from the frame added to the Nativity panel. The sample exhibited a thick reddish-brown coating that obscured the visibility of the wood grain. Beneath the gilding, a dark layer was observed, similarly obstructing the wood pores. Due to the fragile and brittle composition of the sample, it could not be removed as a single piece and was instead extracted sequentially. The resulting sample consists of two parts: **CSM03_AF_a**, representing the lower section, and **CSM03_AF_b**, corresponding to the upper section. These segments were analyzed separately to gain a comprehensive understanding of the frame's stratigraphy and subsequent interventions.

Appendix B. – Stratigraphic Analysis

Sampling and analysis: Observation of sample under stereo microscope		Microscopy: Unmounted Sample
Date: 20/10/24	Location: Gilded section of moulding on later added frame recovered from the nativity panel	Sample: **CSM03_AF_a**

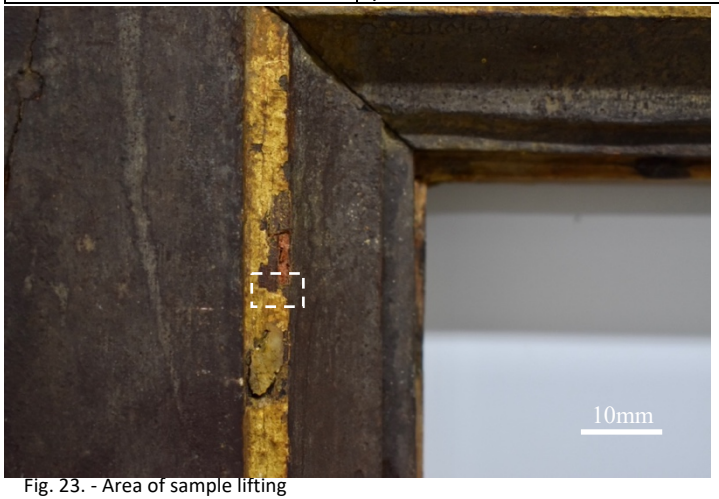


Fig. 23. - Area of sample lifting

CSM03_AF_a represents the lower section of the sample **CSM03_AF**

In the lacunose areas evealed after separation, the wood substrate was exposed. A dark brown coating was observed covering the surface and filling the wood pores. A super imposed brittle, varnish-like layer was also observed.
The back side of the sample presents anatomical features consistent with coniferous species.

Fig.24. - **CSM03_AF_a**: Front

Fig.25. - **CSM03_AF_a**: Back

Appendix B. – Stratigraphic Analysis

Sampling and analysis: Observation of sample under PLM		**Microscopy: Cross section**
Date: 23/10/2024	Location: Gilded section of moulding on later added frame recovered from the nativity panel	Sample: **CSM03_AF_a**

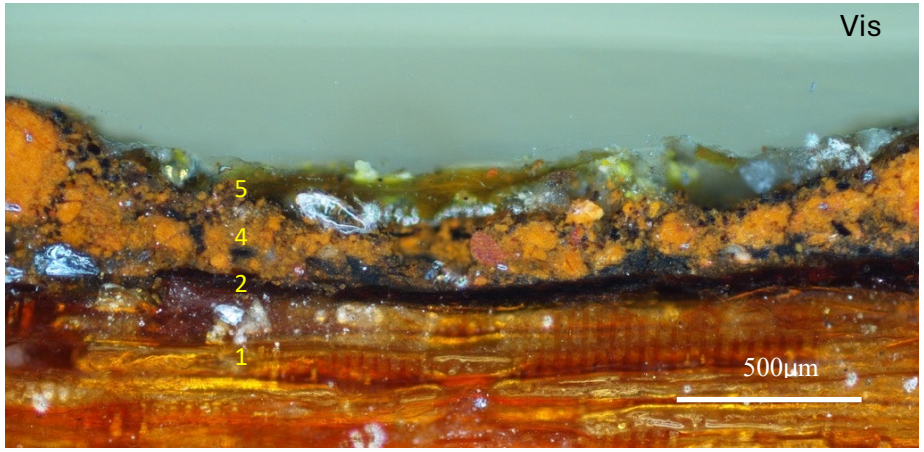


Fig.26. - **CSM03_AF_a**: Cross section 100x Visible light.
Layer 3 was not visible under visible light.

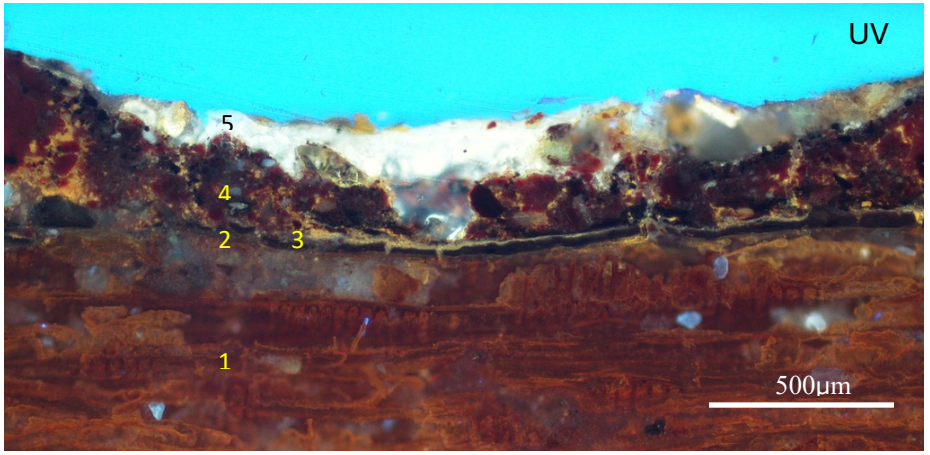


Fig.27. - **CSM03_AF_a**: Cross section 100x UV light.
Layer 3 was only visible under UV light

Layer	Visible light	UV
5	Transluscent brownish layer, seemingly brittle	White fluorescence layer
4	Light red layer with darker red and black inclusions. Other inclusions appear white in colour and with different texture. The layer appears compact but presents several cracks.	Red Layer: The white inclusions fluoresce from white to bright yellow under UV light, while the dark red inclusions appear black
3	Not observable in visible light	This thin layer only a few microns thick is observeable only under UV and it luminesces in bright greyish-white
2	Dark brown/black layer which seems to partially stain the outer few microns of tracheid cell wall of the wooden substrate	Dark brown/black layer which seems to partially stain the cell wall of the tracheids on the outer part of the wood substrate
1	Wood substrate: identified as a coniferous species, and seen in tangential anatomical direction.	Wood substrate, with clear visibility of tracheid structure and pits.

Table 4. – stratigraphic sequence of sample CSM03_AF_a

Fig.28. - **CSM03_AF_a**: Cross section 200x Visible light

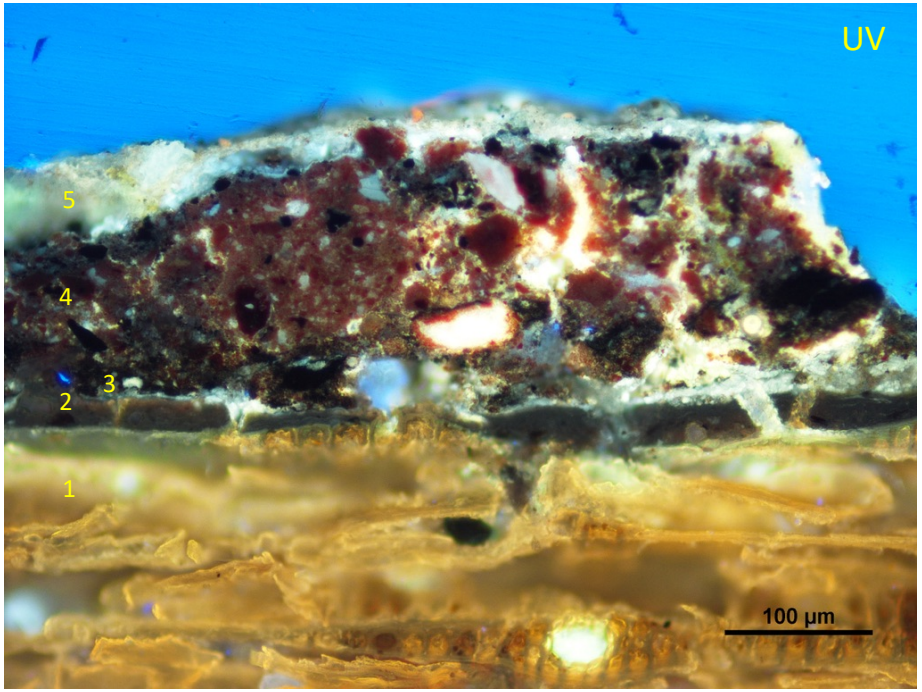


Fig.29. - **CSM03_AF_a**: Cross section 200x UV light

Layer	Comparable with	Possibly
5	(Transluscent transparent layer) CSM02_SC – Layer 4	Varnish
4	(Light red layer) CSM02_SC – Layer 3.	Red paint layer
3	Requires further investigation	Finish for layer 2? / sealant or isolation layer for layer 4?
2	(Dark brown/black layer) Differs from other samples	Stain / isolation material?
1	(Wood substrate) Differs from other samples	Wood; Coniferous species

Table 5. – comparison of the layers observed on CSM03_AF_a with those found on other samples.
The third column presents a hypothesis regarding the possible nature of these layers, based on an informed assessment of finishing techniques.
Material characterization is required to confirm or refine this hypothesis

Conclusions:

Layer 1, (Fig.31.) reveals the distinct visibility of secondary wall thickenings and pittings within the wood substructure.

CSM03_AF is seen in the tangential section, unlike **CSM02_SC** and **CSM04_AEP**, which are seen transversally. Despite this variation, differences in wood species were identified: the presence of tracheids on sample **CSM03_AF_a** proves that coniferous wood was used for the manufacture of the asses frames, confirming the observations made through macroscopic examination.

Furthermore, unlike the original fragments (**CSM02_SC** and **CSM04_AEP**), the sample from the added frame (**CSM03_AF**) lacks a fluorescence-emitting substance impregnating its cells. The clear visibility of secondary wall thickenings and pitts, in **CSM03_AF**, indicates that the tracheids are not impregnated.

Layer 2, a feature unique to **CSM03_AF**, is absent in the other two samples derived from original manufacture fragments. This layer, approximately 15 µm thick, remains unidentified, further research is required to determine its composition and purpose.

Layers 4 and 5 (the red pigmented layer and the varnish layer) show striking similarities to **Layers 3** and **4** of sample **CSM02_SC**. This observation strongly suggests a probable decorative intervention applied across the choir stalls following the addition of the frames.

Conclusions:

Layer 1, (Fig.31.) reveals the distinct visibility of secondary wall thickenings and pittings within the wood substructure.

CSM03_AF is seen in the tangential section, unlike **CSM02_SC** and **CSM04_AEP**, which are seen transversally. Despite this variation, differences in wood species

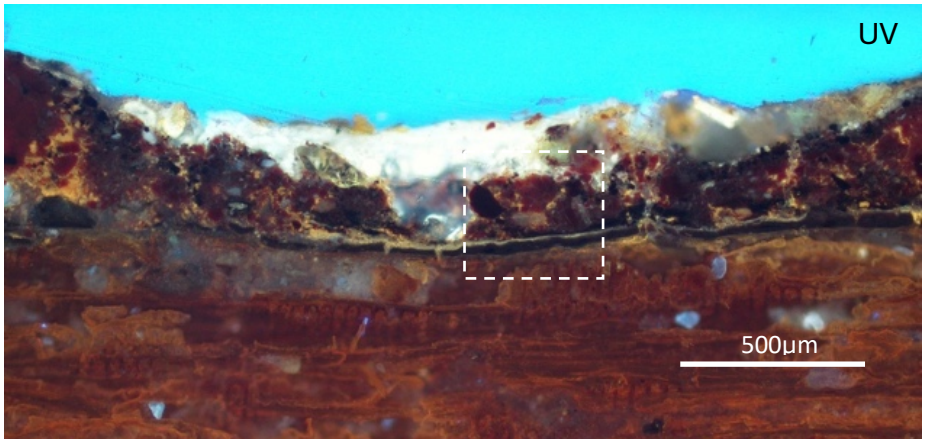


Fig.30. - **CSM03_AF_a** - cross section at 100x under UV light

Fig.31. - **CSM03_AF_a** - cross section at 500x under UV light

Appendix B. – Stratigraphic Analysis

Sampling and analysis: Observation of sample under stereo microscope		**Microscopy: Unmounted Sample**
Date: 20/10/24	Location: Gilded section of moulding on later added frame recovered from the Nativity panel	Sample: **CSM03_AF_b**

Fig. 32. - Area of sample lifting

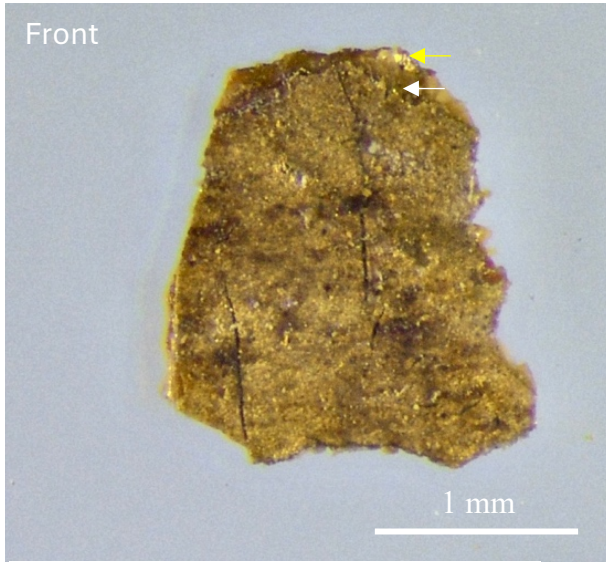


Fig.33. - **CSM03_AF_b**: Front side

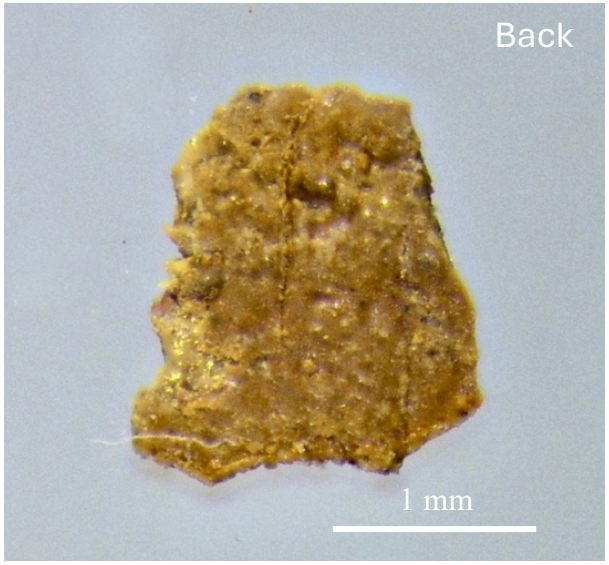


Fig.34. - **CSM03_AF_b**: Backside

CSM03_AF_b represents the upper section of the sample **CSM03_AF.**

The observations of the unmounted sample indicate that multiple layers of gilding are present. An upper gilding layer, indicated by the white arrow in Fig.33, and a lower one indicated by the yellow arrow. On the back side of the sample a dull yellow ocre coating could be observed.

CSM03_AF_b represents the upper section of the sample **CSM03_AF.**

Appendix B. – Stratigraphic Analysis

Sampling and analysis: Observation of sample under PLM		**Microscopy: Cross section**
Date: 23/10/2024	Location: Gilded section of moulding on later added frame recovered from the nativity panel	Sample: **CSM03_AF_b**

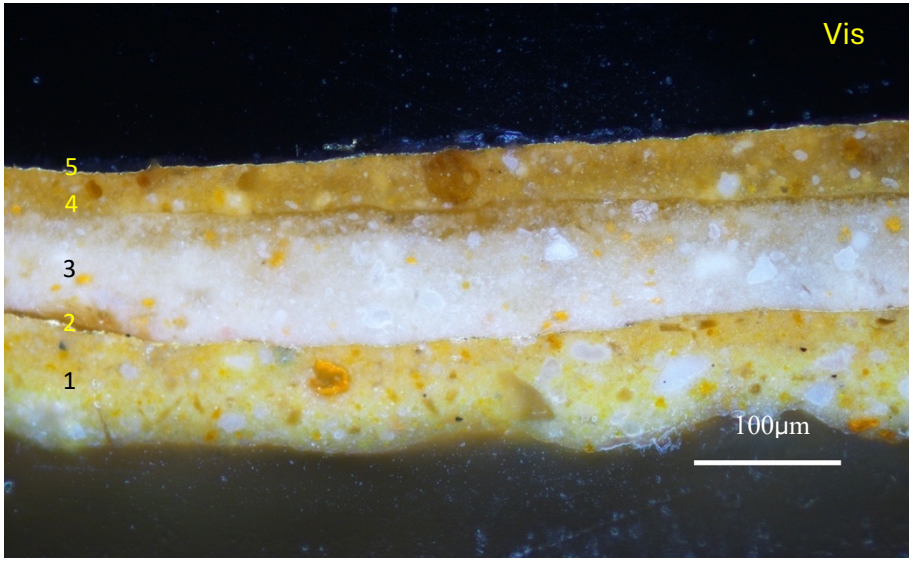


Fig.35. - **CSM03_AF_b**: 200x magnification under Visible light

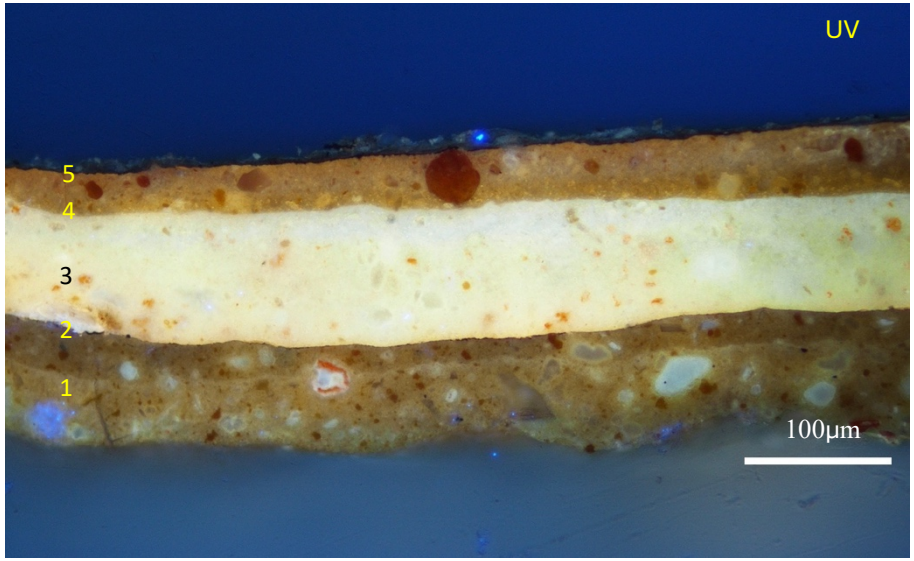


Fig.36. - **CSM03_AF_b**: 200x magnification under UV light

Layer	Visible light	UV
5	Thin metallic shiny layer only a few microns thick	Thin dark layer only a few microns thick
4	Ochre layer with white and brown inclusions	Dull dark ochre layer. The large brown inclusions appear red in UV and yellow inclusions
3	Thick white layer with bright white, yellow and orange inclusions	Thick off-white fluorescent layer with orange and greyish inclusions
2	Thin metallic shiny layer only a few microns thick	Thin dark layer only a few microns thick
1	Light yellow layer with white and amber colour inclusions, some of which appear transluscent. No differentiation in strata could be observed within this layer under visible light	Dull light brown fluorescence with red inclusions and light fluorescent inclusions & top -Darker brown layer with fluorescent and small red inclusions

Table 6. – stratigraphic sequence of sample CSM03_AF_b

Layer	Comparable with	Possibly
5	CSM02_SC – Layer 9	Gold leaf
4	CSM02_SC – Layers 7 and 8	Preparation for gilding – base colour with top part richer in binder
3	CSM02_SC – Layer 6	Preparation for gilding – ground
2	Not observed on other samples	Gold leaf
1	Not observed on other samples	Oil size

Table 7. – comparing the layers observed on CSM03_AF_b with those found on other samples.
The third column presents a hypothesis regarding the possible nature of these layers, based on an informed assessment of finishing techniques.
Material characterization is required to confirm or refine this hypothesis.

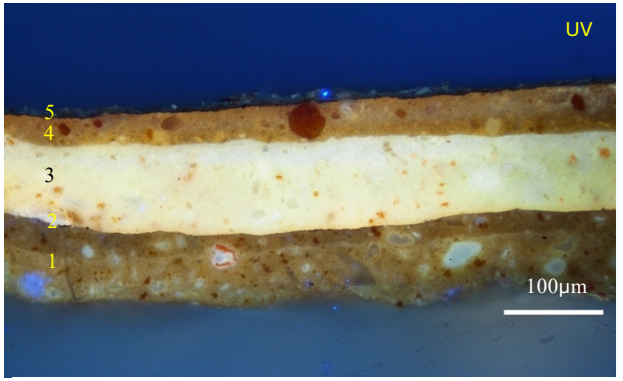


Fig.37. - **CSM03_AF_b**: 200x magnification under UV light

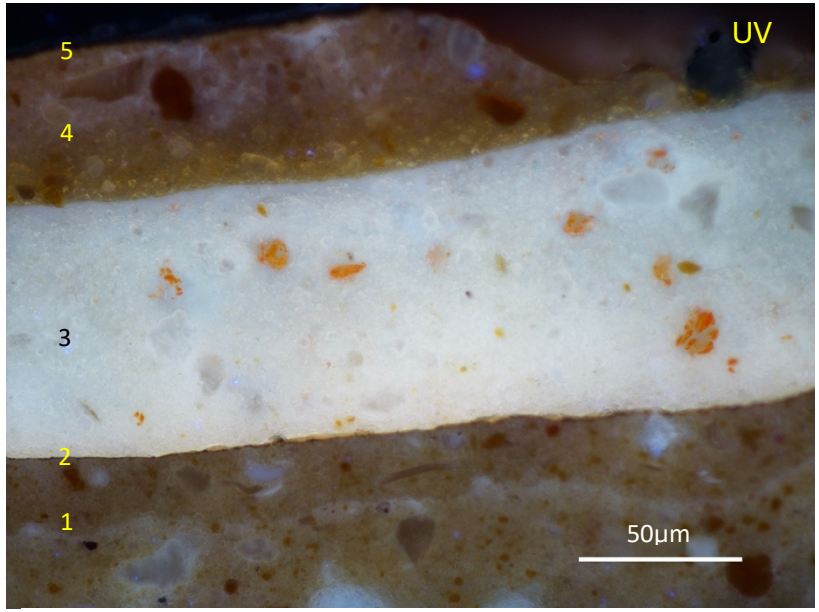


Fig.38. - **CSM03_AF_b**: 500x magnification under UV light

Conclusions

The stratigraphy of sample **CSM03_AF_b** reveals two distinct episodes of gilding. The earlier episode, represented by **layers 1** and **2**, lies atop finishing layers identified in **CSM03_AF_a** and does not originate from the choir stalls' original manufacture. This gilding seemed to have been applied directly onto a varnish layer present on the added frames, which were already decorated with a light red-pigmented layer. Notably, gilding layers associated with this episode (**1** and **2**) were absent in the stratigraphic sequence of **CSM02_SC**.

The second episode of gilding, comprising **layers 3, 4**, and **5**, reflects a later re-gilding process. This included the application of a preparation layers (**3** and **4**), and the gold leaf (**5**). **Layer 4** also served as a base color for the gilding, as indicated by its yellow tonality under visible light, and appears to have a higher binder content in its upper portion. These three layers closely resemble the gilding layers observed in sample **CSM02_SC**.

Appendix B. – Stratigraphic Analysis

Sampling and analysis: 15th century choir stalls, Mdina Metropolitan Cathedral Museum, stored fragments – Nativity panel, added frame		**Sample location**
Date: 20/10/24	Location: Adam and Eve panel	Sample: **CSM04_AEP**

Fig.39. - **Adam and Eve** panel with original frame

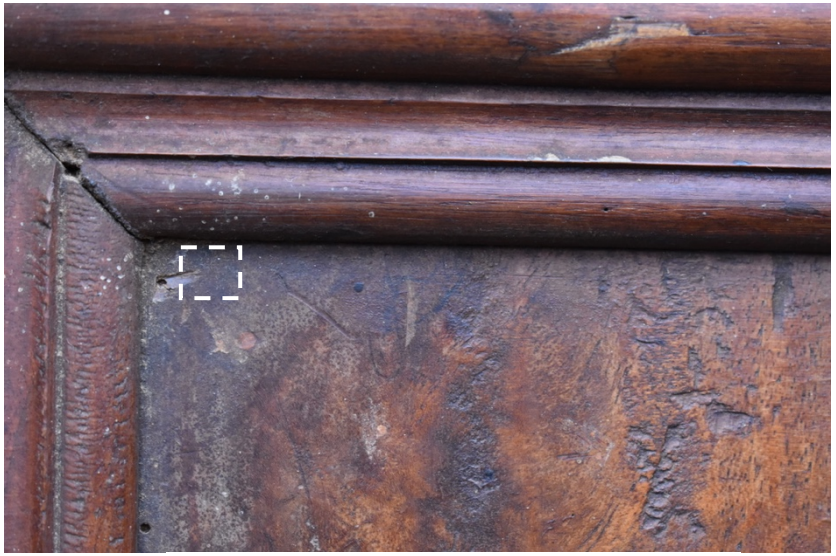


Fig. 40. - Area of sample lifting

Description:
Sample **CSM04_AEP** was extracted from the **Adam and Eve** panel, specifically from a depression near the upper frame. This location was selected due to its propensity for material accumulation during past applications. Furthermore, it is an area likely to have retained a greater number of finish layers, even if the panel had undergone cleaning in the past.

Sampling and analysis: Observation of sample under stereo microscope		**Microscopy: Unmounted Sample**
Date: 20/10/24	Location: Adam and Eve panel	Sample: **CSM04_AEP**

Fig.41. - **Adam and Eve** panel with original frame and area of sample lifting

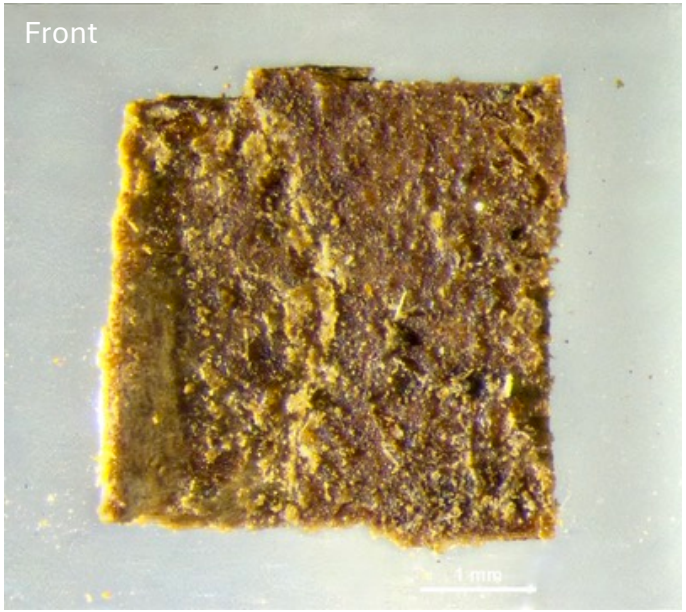


Fig.42. **CSM04_AEP**: Front

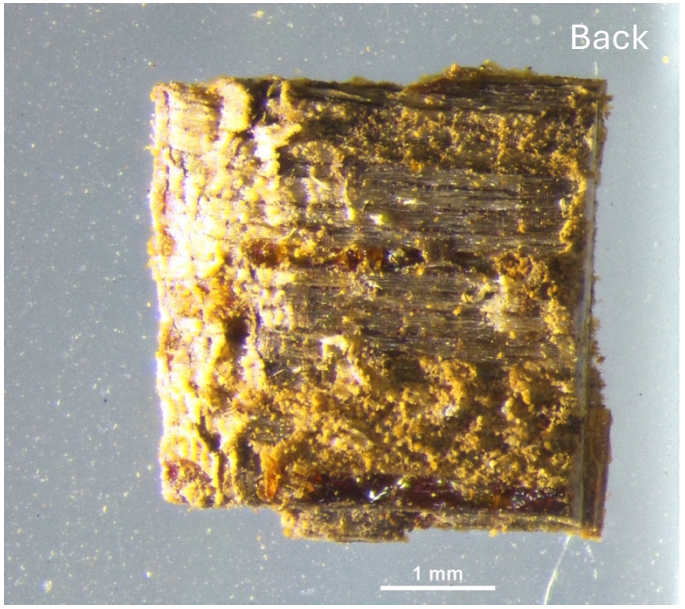


Fig.43. **CSM04_AEP**: Back

An uneven coating could be observed on top of the wood surface.

On the back side of the sample, the wood presents dried brownish frass indicative of past wood worm infestation. The sample presents anatomical features hardwoods and porosity and grain typical of walnut. Conductive tissue (vessels) seems to be imbued with some kind of resin or gum.

An uneven coating could be observed on top of the wood surface.

On the back side of the sample, the wood presents dried brownish frass indicative of past wood worm infestation. The sample presents anatomical features hardwoods and porosity and grain typical of walnut. Conductive tissue (vessels)

Appendix B. – Stratigraphic Analysis

Sampling and analysis: Observation of sample under PLM		**Microscopy: Cross section**
Date: 23/10/2024	Location: Adam and Eve Panel	Sample: **CSM04_AEP**

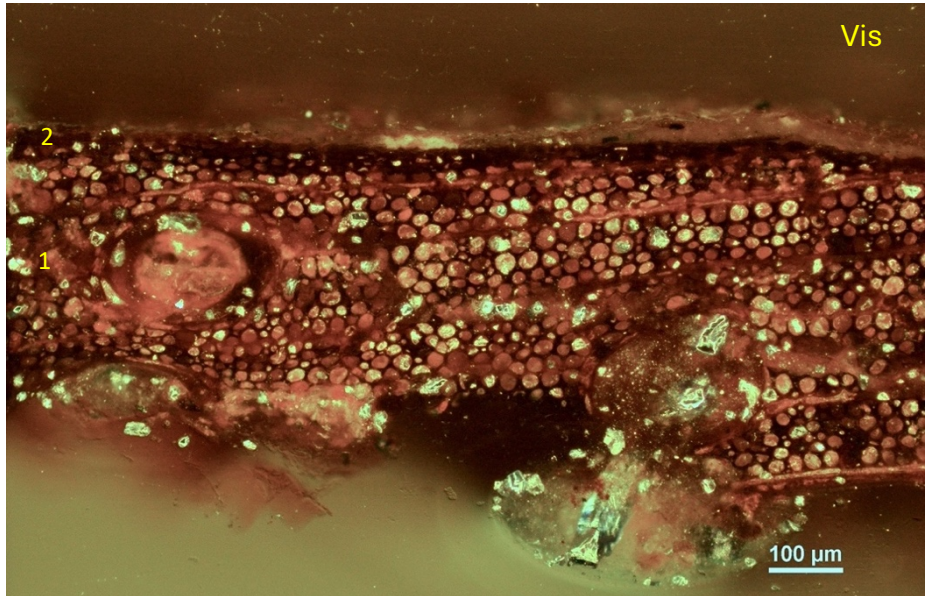


Fig.44. Micrograph of **CSM04_AEP** at 100x magnification under Visible light

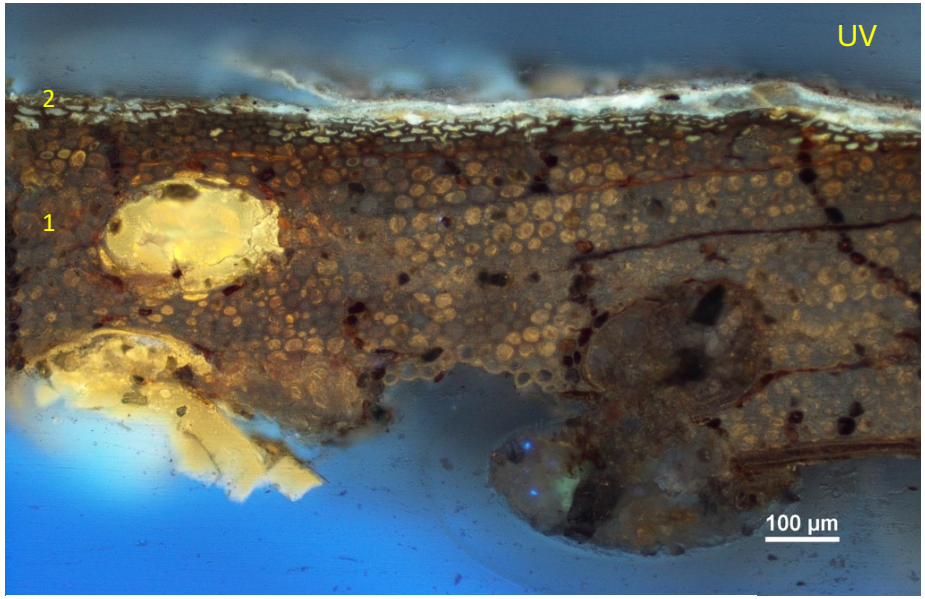


Fig.45. Micrograph of **CSM04_AEP** at 100x magnification under UV light

Layer	Visible light	UV
2	Transluscent light brown to greyish white layer. Part of the layer seems to encompass the outer few microns of wood surface, which appears darker than the rest.	Bright white layer with slightly greyish transluscent parts and some areas having light amber fluorescence, also impregnating the outer wood cells. It might include more than one layer. Further research is required.
1	Wood: visible porous structure characteristic of wood cells seen in transversal section, appearing as a dark network. The cells appear filled with some form of material	Wood: the material impregnating the wood cells has a bright yellow to amber fluorescence, while exhibiting a subdued amber-brownish fluorescence deeper into the sample.

Table 8. – stratigraphic sequence of sample CSM04_AEP

Appendix B. – Stratigraphic Analysis

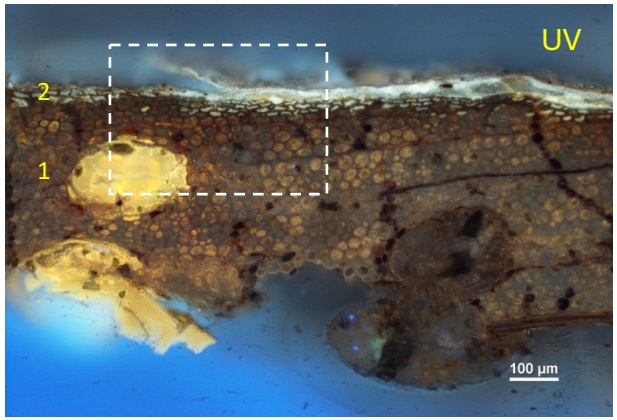


Fig.46.(Left) Micrograph of **CSM04_AEP** at 100x magnification under UV light

Conclusion:
A yellow-amber fluorescent material, similar to that observed in **CSM02_SC**, has been identified impregnating the wood cells in sample **SCM04_AEP** (**Layer 1)** . Additionally, a superimposed layer with white fluorescence (**Layer 2**) has been detected on the wood surface, suggesting a possible later treatment. However, it remains uncertain whether this layer corresponds to the thin, white fluorescing layer—just a few microns thick—found beneath the red pigmented layer in other samples.

If this layer does indeed correspond to the thin white fluorescent layer observed elsewhere, it would strongly suggest that the application of this layer (possibly composed of various layers) occurred while the Adam and Eve panel was still visible. This timing would likely place the event before the 1682 relocation of the choir stalls to Gafà's reconstruction of the choir area. Such a conclusion would also imply that the frames had been replaced prior to e application of this layer, raising the question of whether this replacement is linked to the newly discovered 1626 relocation or to another yet unidentified event. Given these possibilities, a thorough material characterization campaign is strongly recommended to clarify the chronology and underlying causes of these alterations.

Layer	Comparable with	Possibly
2	**?**	Further investigation is required
1	CSM02_SC - Layer 1	Early finish

Table 9. – comparing the layers observed on CSM02_SC with those found on other samples. The third column presents a hypothesis regarding the possible nature of these layers. Material characterization is required to confirm or refine this hypothesis.

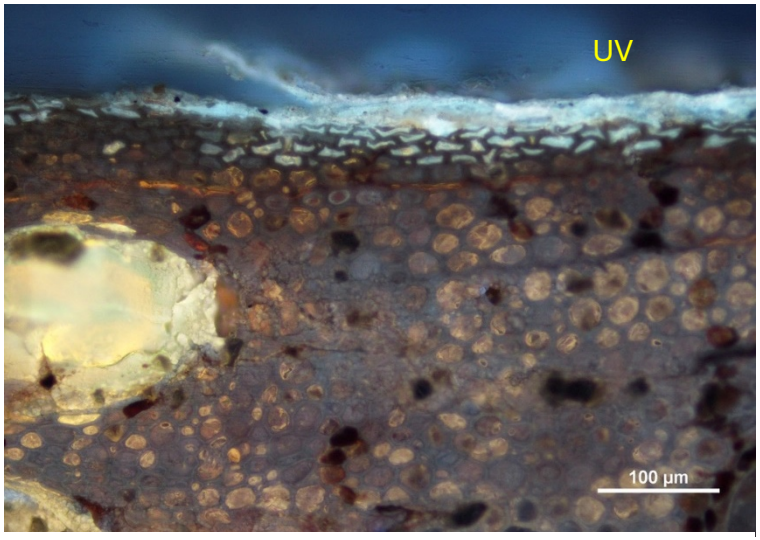


Fig.47. Micrograph of **CSM03_AEP** at 200x magnification under UV light

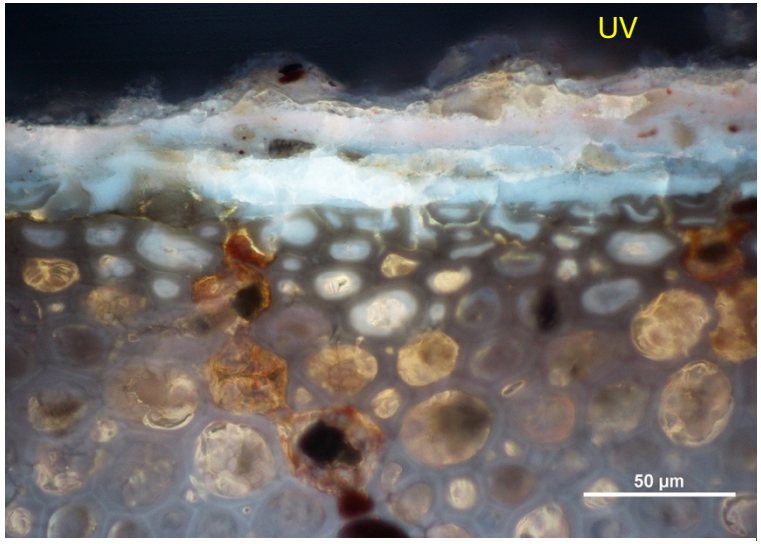


Fig.48. Micrograph of **CSM03_AEP** at 1000x magnification under UV light, suggesting the possibility of layer 2 being composed of multiple layers.

Summary of observations and conclusions

Sample CSM02_SC (Solomonic Column)

Stratigraphy and Layers:

Two distinct red layers (light and dark) were identified, separated by a discontinuous varnish layer (Layer 4) fluorescing white under UV light.

The lighter red layer (Layer **3**) exhibits significant deterioration, including cracking and detachment.

Wood Treatment:

The wood cells are impregnated with an organic material that fluoresces yellow-amber, concentrated near the surface. This indicates the intentional application of a coating rather than resulting from natural deposition.

The vessels (pores) are unobstructed, confirming the material's external origin.

Intervention History:

Layers **3** and **4** closely resemble corresponding layers on the added frame (**CSM03_AF_a**), suggesting a unified decorative intervention following the frame's addition.

Later gilding layers correspond to those on **CSM03_AF_b**, indicating a consistent gilding campaign across multiple elements.

Sample CSM03_AF (Added Frame)

Wood Characteristics:

The sample, observed in tangential section, is made of coniferous wood (tracheids present), differing from the transverse sections of other samples, which are deciduous wood.

The absence of fluorescence-emitting material in the cells distinguishes the frame from the original components.

Unique Layer:

A distinct darkening layer (Layer **2**) is present, absent in the other samples. Its purpose and composition require further investigation.

Decorative Layers:

Layers **4** (red pigment) and **5** (varnish) match those on **CSM02_SC**, confirming a shared decorative intervention after the frame's addition.

Sample CSM03_AF_b (Upper Frame Segment)

Gilding Episodes:

Two distinct gilding events were identified:

An earlier gilding episode (Layers **1** and **2**) applied directly atop the varnish. This gilding episode was not present on the original fragments.

A later gilding episode (Layers **3**, **4**, and **5**), closely resembling the gilding on **CSM02_SC**, indicating a unified re-gilding campaign.

Sample CSM04_AEP (Adam and Eve Panel)

Wood Treatment:

Yellow-amber fluorescent material impregnates the wood cells, consistent with **CSM02_SC**, suggesting a shared treatment method.

Super imposed layer:

A superimposed white fluorescent layer was identified, possibly applied prior to the panels relocation in 1682 further investigation is required to characterise this layer.

Stratigraphic sequence

Table 10. – Stratigraphic sequence as observed across the three samples

Layer	Description	Presumed	Solomonic column	Added frame		Adam and Eve panel
			CSM02_SC	CSM03_AF_a	CSM03_AF_b	CSM04_AEP
12.	**Vis –** Thin metallic shiny layer only a few microns thick	Gold leaf	**X**		**X**	
11.	**Vis –** Ochre layer with small white transluscent inclusions and brown inclusions some of which are large. **UV –** Dull dark ochre layer. The layer presents different shades with more fluorescence in the central part The large brown inclusions appear red. Yellow inclusions also observed.	Oil size	**X**		**X**	
10.	**Vis** – white layer with white, yellow, and orange inclusions. Some of the orange inclusions are much larger **UV** – fluoresces bright white. The yellow inclusions appear orange whilst the orange inclusions appears red.	White preparation layer, probably oil based. Subsequent re-gilding event.	**X**		**X**	
9.	**Vis** – Darker red layer with small black inclusions and larger transluscent inclusion **UV** – The layer appears darker under UV. The large transluscent inclusions present a bright white fluorescence	Darker red layer, possible later redecoration falling outside of period of interest.	**X**			
8.	**Vis** – Thin metallic shiny layer only a few microns thick	Gold			**X**	
7.	**Vis** – Light yellow layer with white and amber colour inclusions, some of which appear transluscent. No differentiation in strata could be observed within this layer under visible light **UV** – Dull light brown fluorescence with red inclusions and light fluorescent inclusions & top -Darker brown layer with fluorescent and small red inclusions	Oil size, presumed March 1712 gilding event			**X**	

Appendix B. – Stratigraphic Analysis

6.	**Vis -** Dark brown layer of seemingly brittle nature. **UV -** fluoresces in white under UV	Varnish layer for **5.**	**X**	**X**		
5.	**Vis –** Light red layer with darker red and black inclusions. Other inclusions appear white in colour and with different texture. The layer appears compact but presents several cracks. **UV** - appears as a dark red layer with black inclusions. The white inclusions exhibit white fluorescence, while some of the cracks display yellow fluorescence.	Light red pigmented layer, redecorative event after addition of frames	**X**	**X**		
4.	**UV** – This thin layer only a few microns thick is observeable only under UV and it luminesces in bright greyish-white	Possibly a finish for **3.** or a grounding for **5**. Material characterisation and comparison with **2**. are strongly reccommended		**X**		
3.	**UV** – Dark brown/black layer which seems to partially stain the cell wall of the tracheids on the outer part of the wood substrate	Dark layer - possibly stain or isolation material		**X**		
2.	**UV** - Bright white layer with slightly greyish transluscent parts and some areas having light amber fluorescence	Waxes or natural resin, possibly later treatment or coating	**X**			**X**
2. A.	**UV** – Wood substrate, with clear visibility of tracheid structure.and pits.	Wood – not impregnated		**X**		
2. B.	**UV** – material impregnating the wood cells with bright yellow to amber fluorescence closer to the surface, and subdued amber-brownish fluorescence deeper into the sample	Wood – impregnated	**X**			**X**

Interpretation:

1. Wooden substrate

The presence of yellow-amber fluorescent material (Layer **1.B**.) in **CSM02_SC** (Solomonic column) and **CSM04_AEP** (Adam and Eve panel) suggests that these fragments were treated with a permeating coating, likely as part of a preservation or decorative process during their original use in the 15th century. Conversely, the absence of this material in **CSM03_AF** (added frames) (Layer **1.A.)** indicates that such coatings were exclusive to the earlier choir stall components, predating the frames' addition.

2. Organic Coatings and Shared Stratigraphy

The white-fluorescing organic layer observed in both **CSM02_SC** and **CSM04_AEP** suggests a shared treatment applied to these fragments. However, material characterization is required to confirm this hypothesis.

3. Dark brown layer

This layer might function as an isolation or grain-filling layer, addressing the differing porosity and grain structure between walnut (**CSM02_SC** and **CSM04_AEP**) and the coniferous species of the frame (**CSM03_AF**). Alternatively, it could represent a wood-darkening stain, which would likely have required a protective topcoat (possibly Layer 3). If the latter is true, it suggests the frames were initially finished to appear as natural wood, with the pigmented red layer added later. Material characterization is essential to validate these possibilities.

4. Potential Finish or Ground Layer for Decorative Coatings

Further analysis is needed to establish whether Layers **2** and **4** share compositional similarities. If they do, this would strongly suggest that a refinishing event occurred while the Adam and Eve panel was still visible, likely before the choir stalls were relocated to Gafà's reconstructed choir area in 1682. This finding would imply that the frames were replaced before this refinishing, possibly linked to the 1626 relocation or another unidentified event. A comprehensive material characterization campaign is recommended to clarify the chronology and causes of these alterations.

5. & 6. Light Red Pigment and Brittle Varnish Layer common to CSM02_SC and CSM03_AF

Layers **5** and **6** are presumed to belong to the same redecorative event, with Layer **5** as the pigmented layer and Layer **6** as its protective, saturating coat. It is unclear whether Layer **4** was introduced during this intervention, possibly as a grounding layer for Layer **5**.

The presence of these layers across **CSM02_SC** and **CSM03_AF** suggests a uniform decorative intervention applied after the frames were incorporated. These layers likely reflect a post-15th-century modification aimed at aesthetic or maintenance purposes.

The deteriorated condition of these layers, characterized by cracking and friability, may have resulted in the loss of superimposed coatings.

7. & 8. Gilding event, possibly 1712

Layers **7** and **8** are linked to a gilding event, identified on sample **CSM03_AF_b**. This gilding appears to have been applied atop earlier decorations, with the oil size layer (Layer **8**) utilizing the varnish layer (Layer **6**) as its base. The absence of a white grounding layer suggests this gilding was a new addition to the frames and other elements.

9. Darker Red Pigmented Layer (Possible Later Redecoration)

The distinct darker red pigmented layer (Layer **9**) observed on **CSM02_SC** is believed to represent a later redecoration or "refreshing" of the choir stalls. Additional research is required to better understand the material's purpose and timeframe.

10.,11.,& 12. Re-gilding event

Layers **10**, **11**, and **12** represent a subsequent re-gilding of the choir, as seen in sample **CSM03_AF_b**, falling outside the study's period of interest.

The presence of these layers on **CSM02_SC**, despite the absence of gilding layers associated with the presumed 1712 event, is notable. The undisturbed condition of Layers **5** and **6** and the direct application of Layers **10–12** suggest no prior losses in this area. This supports the hypothesis that the Solomonic columns were not gilded during the 1712 intervention. This selective application aligns with an entry in the Chapter Deliberations (ACM Delib. Capit. Tom 4, f.60r), which specifies gilding the cornices to match the baptismal font. Further research is required to shed light on this assumption.

Key Conclusions

The stratigraphic analysis reveals a complex history of treatments and modifications to the choir stalls, highlighting distinct phases of intervention:

Initial Treatments (15th Century):
A permeating coating and organic layer applied to original components, reflecting uniform treatment practices.

Refinishing Chronology:
The thin, white fluorescent layer observed in multiple samples may correspond to a refinishing event before the 1682 relocation, suggesting maintenance contemporaneous with the choir stalls' active use.

Original Manufacture vs. Later Additions:
Differences in wood species, treatment, and impregnation clearly distinguish the added frames from the original fragments.

Unified Decorative Campaigns:
Red pigment and varnish layers observed on original components and added frames suggest coordinated refinishing efforts to unify their appearance after frame incorporation.

Evidence of Two Gilding Episodes:
Earlier gilding layers, unique to the added frame (**CSM03_AF_b**), predate the later, unified gilding layers shared across two samples.

Selective Gilding (1712):
Evidence suggests that gilding was applied selectively, possibly reflecting functional or economic considerations.

This exploratory investigation has significantly enhanced our understanding of the chronological sequence of redecorative events that shaped the choir stalls. The findings provide critical insights into the evolving curation practices and choices, which were shaped by functional, aesthetic, and perhaps financial constraints over time.

It provides a foundation for future studies aimed at further characterizing the materials and techniques employed during successive decorative phases, contributing to a deeper understanding of their historical context