Sacred Space and Identity: Insights from Archaeoanthropology, Historiography, and Archaeogenetics at the St. Isidore Cathedral of Chios Island, Greece

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Abstract

This article aims to present a comprehensive evaluation of two human burials unearthed during rescue excavations conducted in 1981/82 beneath the mosaic floor of the central nave of the Basilica of Saint Isidore, in the Letsaina area of the capital of Chios Island. The archaeological site of this Byzantine monument, characterized by architecturally complex stratigraphic sequences spanning different periods and adorned with elaborate mosaics reflecting its former grandeur, provided a multidimensional framework for the investigation. Whereas archaeological investigations were conducted prior to the site's recent and important restoration project, the archaeological interpretation presented herein reflects the stratigraphic framework and understandings established during the 1980s excavations.

The specific construction and placement of the tomb, along with the absence of grave goods, posed significant challenges for its dating. Additionally, an intriguing aspect of their discovery was its evocation—according to tradition—with the burial of the martyrs Isidore and Merope in this sacred space, where the Byzantines erected monumental Christian structures in their honor.

Keywords

Byzantine Chios, Interdisciplinarity, Monumental Architecture, Complex Stratigraphy, Funerary Practices, Historiography, Bioarchaeology, Archaeometry, Archaeogenetic Investigation, Saint Isidore

1. INTRODUCTION

The Basilica of St. Isidore, situated in the Letsaina sector of Chios Island (Figure 1), is considered the oldest Palaio-Christian landmark of the Byzantine era in the island's capital, based on historical[1] and hagiographical sources.[2] Built to honor its patron saint and commemorate his martyrdom and site of burial[3], this sacred structure—along with enduring legends preserved through oral tradition[4]— also evokes the memory of St. Merope of Ephesus, who suffered martyrdom for defying Roman orders by burying St. Isidore[5] and was herself interred near him[6]. The monument was erected in an emblematic seaside locale facing the Ionian and Phocaean coastline of Asia Minor, its foundations purportedly having overlapped the bearings of a Roman period necropolis, which the Christians did not disdain for burying their own[7].

Figure 1. Topographic Location of the St. Isidore Site (arrow) in the Capital City of Chios (Google Earth).

Over the ages, through the upheavals of the island's turbulent history, the edifice suffered the destructive effects of earthquakes[8], corsair and pirate invasions marked by

[1] Zolotas, G., *Historia of Chios*, Volume A, ii, Athens 1923, p. 45-46.

[2] Nikiphorou of Chios, (1873), "Akolouthia Tou Agiou Isidorou" *Neon Leimonarion*, N. Rousopoulos Press, Athens, pp. 183-186; Zolotas, G., *Historia of Chios*, Volume B, Athens 1924, p. 226.

[3] For the year of his execution, 250 AD, see Zolotas, *op. cit.*, A. ii. pp. 52–53. For an extensive narrative of Isidor's arrival in Chios and the circumstances of his martyrdom during the persecutions under Emperor Decius, see Zolotas, *op. cit.*, B, pp. 214–218, 219–222.

[4] Ibid., pp. 218-219, 223-224; Zolotas, op. cit. A. ii., p. 48.

[5] Zolotas, *op. cit.* B., pp. 221-222.

[6] Zolotas, *op. cit.* A. ii., p. 48, pp. 52-53; Zolotas, *op. cit*. B., p. 20; Nikiphorou of Chios, *op. cit*. p. 186.

[7] Zolotas, op. cit. pp. 52-53; Zolotas, *op. cit.* B, p. 222.

[8] Zolotas, *op. cit.*, B, p. 222, alludes to an earlier "rotonda"-style chapel erected by Constantine, which was likely destroyed by an earthquake. On p. 223, he records the destructive effects of the earthquake of 1387 on the dome of the later monument and further describes the catastrophic damage caused by the earthquake of 1881, which completely demolished the structure. Cf. Zolotas, *op. cit.*, A. ii., p. 51.

ruinous damage[9], looting[10], depredation[11], vandalism, arson, and war[12], as well as consequences of occupations by foreign powers. It endured periods of partial to nearly complete destruction, was periodically abandoned, and was repaired and rebuilt multiple times[13] (Figure 2).

Figure 2. Aerial View of the St. Isidore Archaeological Site (EFA of Chios); retrieved through Google Image Search.

This article aims to present a comprehensive evaluation of two human burials unearthed during the 1981/82 rescue excavations beneath the nave floor of the basilica. The present

[9] Regarding the pillage of Chios by the Arabs in the second half of the 7th century AD, both during their voyage to the Hellespont to besiege Constantinople and again during their retreat following their defeat under the reign of Emperor Constantine IV, the Younger—The Bearded (*Πωγωνᾶτος*, *Pogonátos*), ibid., pp. 53–54.

[10] Georgii Pachymeris (Pachymeres Georgius) Γεωργίου του Παχυμέρη, De Michaele et Andronico Paleologis Andronicus Palaeologus-Ανδρόνικος Παλαιολόγος, *Corpus Scriptorum Historiae Byzantinae* Volumen Alterum, Bonnae: Impensis Ed. Weberi, 1835 L.V., pp. 436-437, C-DL.VI., p. 510, A.; L.VI., p. 558, A-B, https://archive.org/details/georgiipachymer00pousgoog/page/2/mode/2up

Muntaner, R., (1920), (Transl. from Catalan) L. Goodenough, *The Chronicle of Muntaner*, Vol. I., Chapter CXVII (117), p. 292, https://archive.org/details/thechronicleoframonmunta1/page/292/mode/2up.

[11]On the reverent transfer of the Saint's bones to Constantinople for safekeeping from invaders' desecration and looting, and their deposition in the Church of St. Irene in Constantinople, see Zolotas, *op. cit.*, B, pp. 224–225. Regarding the Russian abbot Daniel, who, during his pilgrimage to the Holy Land in 1106/7, referred to the existence of St. Isidor's grave in Chios but not his remains, see Zolotas, *op. cit.*, B, p. 228. On the Russian Archbishop of Novgorod, Antonius, who honored the remains of St. Isidor in Constantinople in 1200, see Zolotas, *op. cit.*, B, p. 228. On the removal of the Saint's remains from Chios by the Venetians in 1124, see Zolotas, *op. cit.*, A. ii, p. 49. For the theft of the Saint's decapitated head from Chios and its sale to the Venetians in Constantinople in 1204, see Zolotas, *op. cit.*, A. ii, pp. 55–56. On the unanimous acknowledgment by hagiographers of the abduction of the Saint's remains by the Venetians, see Zolotas, *op. cit.*, B, p. 226. For the reference provided by Ludovicus (Louis) Moreri, translated from French: 'This place (Chios) became famous for the martyrdom of Saint Isidore, who suffered under Decius. A part of his relics was brought from there to Constantinople in the middle of the 5th century, two hundred years after his death. The other part was taken in the 12th century by the Venetians, who brought it to their city and placed it in 1125 in a chapel of the church of Saint Mark,' see Moreri, L. (1725), *Le grand historique dictionnaire ou le mélange curieux de l'histoire sacrée et profane*, Paris, p. 639

(https://archive.org/details/MoreriGdDictHist03bnf.pdf/page/n645/mode/2up?utm_source=chatgpt.com&q=chio). This corroborates Zolotas's statement (*op. cit.*, B, p. 225) regarding the probability that Moreri's reference alludes to some of St. Isidor's relics being transferred to Constantinople, while others remained in Chios and were later taken by the Venetians.

[12] In 1822, see Zolotas, *op. cit*. A. ii., p. 51

[13] Ibid., p. 50.

study revisits the archaeological stratigraphy and architectural phases of the Cathedral as they were identified and recorded through successive excavation campaigns—from the seminal investigations of 1918 and 1928, which first documented the site's stratigraphic layers, to those of the 1980s, which provided confirmation and further elucidation of the initial findings. These foundational observations continue to provide a sound structural framework for contextualizing the newly integrated bioarchaeological, radiocarbon, and archaeogenetic findings. While subsequent archaeological investigations, conducted prior to the restoration of the church [between 2019 and 2022 by the Ephorate of Antiquities of Chios (EFA of Chios/ΕΦΑ Χίου)], have offered valuable updates and technical refinements, these have not altered the broader interpretive framework of the site's long-term symbolic trajectory, sacred character, and sociopolitical resonance as it pertains to the burial evidence and associated historical phenomena examined herein.

The basilica, characterized by intricate intra-site stratigraphic associations with architectural contexts and adorned with ornate mosaics reflecting its former splendor, provided a complex backdrop for the investigation[14] . The nature of the grave construction and the absence of artifactual materials or burial offerings posed significant challenges for chronological attribution. Intriguingly, their discovery was evoking the enduring legacy of the martyrs St. Isidore and St. Merope, who, according to tradition, were interred at this sacred site where the Byzantines erected monumental Christian edifices in their honor. Could it be possible to reconstruct aspects of their identities and life histories to derive insights into the two human individuals?

Through an interdisciplinary approach combining historical and archaeological assessments, forensic anthropological examination, and the application of archaeometric and archaeogenetic analyses, this study seeks to contextualize the burials within the broader framework of the site's historical, cultural, and religious significance.

1.1. The Historical and Archaeological Context of the Monument

After the liberation of Chios Island from the Ottoman Empire by the Greek military forces in 1912[15], official surveys to assess the preservation of historical monuments and archaeological sites commenced in 1915. The following quotation by G. Soteriou (translated from Greek) offers valuable insight into archaeological efforts on the island: "Last August, following the Ministry's orders, I traveled to Chios, where I stayed for about a month, visiting nearly all the villages on the island, so that I could gain a general understanding of the Christian monuments and thus be better prepared to work more systematically on such monuments…The monuments of Christian typology in Chios may be categorized as Early Christian, Primarily Byzantine, and Frankish."[16] Similarly, the following excerpt from G. Soteriou, 'On the Earliest Christian Monuments of Chios,' continues the narrative with a

[14] Soteriou, G. A., (1916), "Αρχαιότερα χριστιανικά μνημεία Χίου", *Archaeologikon Deltion*, V: 2, Issue: 1-3, Parartema, p.28.

[15] While Chios was liberated on November 11, 1912, the ceasefire agreement that ended the First Balkan War was signed on May 30, 1913. For details, see "The London Peace Conference" in Anderson, F.M., and Hershey, A.S. (1918), *Handbook for the Diplomatic History of Europe, Asia, and Africa 1870-1914*, National Board for Historical Service, Washington, p. 430.

[16] Soteriou, *op. cit*., pp. 27-28.

reflection on the state of preservation of these monuments and highlights the limited archaeological references available, particularly regarding the St. Isidore landmark site: "Among the Christian monuments of the first millennium AD, that is, up to the construction of Nea Moni in the early 11th century, which serves as a chronological marker for the monuments of the island, very few have survived destruction. Of these, the foremost position is held by the Church of St. Isidore, located near the Hospital of the city of Chios. Regarding this church, which incorporates the tombs of the patrons of the island, Saints Isidore and Myrope—who were martyred in Chios in the 3rd century AD during the reign of Decius—, we have no clear evidence except for the tradition preserved in the New Leimonarion (in the commemoration service on May 14), which testifies to the existence of a magnificent church over the tombs of the martyrs, built in the late 7th century by Constantine Pogonátos (668–685), certainly buried under the humble chapel of our days which was built on the ruins of an earlier church which was destroyed in the 1881 earthquake."[17]

Archaeological excavations of the landmark site began in 1918 under G. Sotiriou[18] and were later continued in 1928 by A.K. Orlandos.[19] These efforts were further complemented by rescue excavations conducted in the summers of 1981 and 1982 by the Third Ephorate of Byzantine Antiquities, led by C. I. Pennas.[20] Unearthing and tracing in retrospect the sequential record of diachronic architectural deposits embedded within the historic site revealed that basal foundational elements of the Christian monument, repurposed in secondary use, had originally been components of significant architectural structures, possibly dating as early as the Classical period[21]—providing tangible evidence of human activities that underscore the site's enduring prominence across different historical periods.

Investigating the complex canvas of multiphase stratigraphic associations, with a particular focus on the earliest traces of the ecclesiastical monument, Sotiriou identified two Early Christian phases, assigning them to the fifth and seventh centuries, respectively[22]—the latter during the reign of Emperor Constantine IV Pogonátos. Accordingly, Orlandos, although initially identifying only one early phase dating to the fifth century among four architectural phases of the monument, presented in the impressive floor plans he published (Figure 3)—which also illustrated the splendor of remarkable mosaic panels—subsequently identified in agreement with Sotiriou's assessment an additional Early Christian phase dating to the seventh century.[23]

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[17] Ibid., p. 28 (the Greek text translated in English by A.P. Agelarakis).

[18] Soteriou, *op.cit*., pp. 27-30; (1929), *Archaeologiki Efhmeris*, pp. 191-2, 214-39.

[19] Orlandos, A. K., (1930), *Monuments byzantins de Chios* II, *Plances*, Athens.

[20] Pennas, C. I., (1986), "The Basilica of St. Isidore: New Evidence", in (Eds.) John Boardman and C.E. Vaphopoulou-Richardson, *Chios: A Conference at the Homereion in Chios*, Clarendon Press, Oxford, pp. 317-334.

[21] Pennas, *op. cit.* p. 331

[22] Soteriou, *op.cit*., *Archaeologiki Efhmeris*, pp. 191-2, 214-39.

[23] The initial four phases were identified as: "the 5th century", "the period of the Franks", "the 16th to the 17th centuries", and the "current one" (the latter being the most superimposing phase during Orlandos' archaeological investigation), see Pennas *op. cit.*, p. 318.

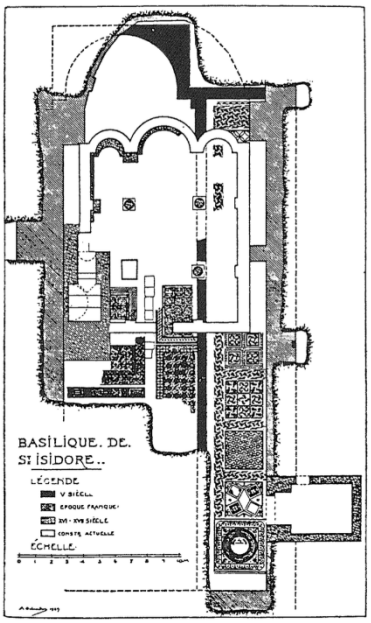

Fig. 1. Basilica of St Isidore. The phases according to A. Orlandos.

Figure 2. Orlandos'1928 Excavation Floor Plan of the Monument, published in 1930 (*op.cit.*), showing Only Four Phases of Construction. An Additional Early Phase was recognized later (see footnote 23). Figure and Original Caption reproduced Courtesy of C.I. Pennas (*op. cit*., p. 318).

Thus, the archaeological explorations by Sotiriou and Orlandos on the earlier phases of the monument broadly aligned with the historical sources recorded by Zolotas.[24]

During the excavations conducted at the monument by the Ephorate of Byzantine Antiquities in 1981 and 1982, Pennas identified five main phases, and a secondary stage of the third phase, of the Christian structure (Figure 4).

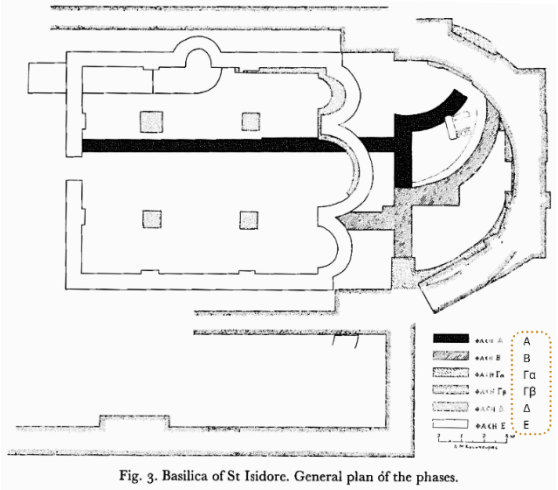

Fig. 3. Basilica of St Isidore. General plan of the phases.

Figure 3. The 1981/2 Excavation Floor Plan of the Monument. Figure and Original Caption reproduced Courtesy of C.I. Pennas (*op. cit*., p. 320). For Clarity, the Phase Designations within the Outlined Quadrant on the Right Side of the Image have been enhanced by Ar. Agelarakis as the Original Inscriptions appear faded.

[24] Regarding the structure erected by Emperor Marcian (reigned 450–457) after the Saint appeared to him in a dream requesting a shelter—an earlier church, ostensibly built by Constantine in the 'rotunda' style, having been demolished by an earthquake—see Zolotas, *op. cit.*, B, p. 222. Additionally, the biographer of the Saint records in *Neon Leimonarion* that Emperor Pogonátos constructed a new monument following the ransacking and burning of the preexisting structure (likely the one built by Emperor Marcian) by the Arabs. Cf. Zolotas, *op. cit.*, A. ii, pp. 49, 54.

Regarding the first phase, Pennas noted that it comprised "a nave, flanked by two aisles and terminating in a bema with a horseshoe-shaped apse", which reused at its basal components structural "architectural elements from the walls and stylobates of an earlier (church)". This first phase also incorporated preexisting mosaic panels "of an earlier (church)" at the nave and the "easternmost panel of the southern aisle".[25] The apse partially superimposed a grave context which, based on its artifactual record, dated to the later 4th to the mid-5th century, providing a *terminus post quem* for the first phase. Pennas concluded that the "adaptation of the earlier building to a basilica took place during the second half of the fifth century".[26]

In sequence, a three-aisled basilica was traced during the second phase, characterized by new construction with a discernible lateral, spatial allocation southwards from the first phase. The apse and the southern side wall of the new structure superimposed components of the earlier basilica. Only a few panels of the earlier mosaic decorations were retained, while "columns and column-bases were made especially for the basilica in this (second) phase."[27] Based on relative dating, the second phase predated the middle of the sixth century, the period corresponding to the third phase.

During the third phase, Pennas identified a new and enlarged three-aisled basilica, erected at an elevation difference of 0.5 m higher than the previous phase. Parallel to the spatial relations documented between the structures of the first and second phases, the third phase monument also followed the pattern of a contiguous lateral allocation southwards from the second phase, utilizing in its foundational expansion "the side walls of the old (second) phase as stylobates for the new aisle arcades."[28] Of interest to the repurposing of pagan architectural elements for foundational components of the basilica is Pennas' observation that the stylobates were spolia from important ancient buildings. Drawn from the record of diagnostic architectural materials, Pennas dated the stylistic motive of the third phase to the middle of the sixth century. Based on significant construction repairs that took place to the apse of this building, which, although it retained its internal semicircular contour, externally "featured two large square buttresses (width of 2.0 m) supporting the triumphal arch," Pennas identified this as a second building period of the third phase. The latter, he notes, although it may date as claimed by tradition to the reign of Constantine IV Pogonátos (668-85)[29], could not be fully substantiated by the nature of the archaeological findings. Regarding this matter, historical sources indicate that following the looting and destruction of the earlier phase monument inflicted by the Arabs, Emperor Pogonátos rebuilt the basilica with remarkable grandeur.[30]

The fourth phase comprised the remnants of a smaller structure, identified as a cross-in-square type church. This church was constructed within the internal dimensions of the third phase's basilica, using spolia from ancient buildings and erecting pillars on unreliable foundations. These elements suggest, as noted by Pennas, that the site had been abandoned for a considerable period between the third and the fourth phases. Regarding a relative dating

[25] Pennas, *op. cit*. p. 325.

[26] Ibid., p. 328.

[27] Ibid., fig 5, p. 322, and pp. 329-30.

[28] See footnote 21, *supra*, and ibid., fig.6, p. 323, and fig. 7, p. 324.

[29] Pennas, *op. cit*. p. 332.

[30] See footnotes 9 and 24, *supra; c*f. Soteriou (1916), *op. cit.*, p. 28, footnote 2.

for the fourth phase, Pennas further observes "A *terminus ante quem* for the fourth phase is provided by the earthquake of 1389[31] mentioned in the Allatius Codex",[32] which damaged a component of its dome[33].

The fifth phase described by Pennas involved the rebuilding of the church "following the same (architectural) plan, but with… (a structural intervention) now added at the middle of the northern wall,"[34] which, if such a feature did in fact exist, could have coincided with the period of the Ottoman occupation of Chios Island, providing the year 1566 as *a terminus post quem* for the structural intervention of a minaret to the church[35] along with a *terminus ante quem* for the functioning of the structure as a Christian church before the end of the 220 years (in 1566) of the Genovese tenure on the island[36].

Beyond the information recovered from the 1981/2 rescue archaeological excavations of the site, historical sources reveal that the once splendid church remained in operation, albeit in a nearly ruinous state, sustained by a few impoverished monks residing in peripheral monastic cells[37], until its severe desecration, looting and arson in 1822 by the Turks[38].

In subsequent decades, Zolotas himself records entering the holy site in 1866, finding it deserted, its walls burned and stripped of any decoration although still supporting remnants of the dome. He also states that the floor of the monument was invisible, concealed beneath layers of sediment that had accumulated over time, left untended and overgrown with wild plants and dense bushes, the site having been abandoned following the deliberate burning of the church during the massacre of Chios.[39] Zolotas further records that upon his return to the site twenty years later, any structural elements he had seen standing in 1866 had been

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[31] Pennas, op. cit. p. 332.

[32] The earthquake occurred on Saturday March 20, 1389, 43 years after 1346, when the Genoese took control of Chios, and 16 years after the Genoese House of Giustiniani assumed governance of the island, see Zolotas, *op. cit.*, A. ii, p. 49; Soteriou (1916), *op. cit.*, p. 28, footnote 2.

[33] Zolotas, *op. cit.*, B, p. 223, mentions: "Ὁ θόλος οὗτος ὁ μέγας διερράγη κατά τον σεισμόν του 1387 ὡς μας πληροφορεῖ το γνωστόν σημείωμα τοῦ Ἀλλατιανοῦ κώδικος, μέγα δ' ὅμως αὐτοῦ τμῆμα ἀπέμεινεν ὄρθιον" ('This great dome was ruptured during the earthquake of 1387, as we are informed by the well-known note in the Allatian Codex, yet a large part of it remained standing'). In this reference Zolotas records the year of the earthquake in 1387.

[34] See footnote 31, *supra*.

[35] Regarding the conquest of Chios by the Turks in 1566, Moreri records (translated from French): 'The Genoese took control of it (Chios Island) in the year 1346, and it was governed as a republic by the Mahons, the foremost nobles of the House of Giustiniani. They paid tribute to the Turks. Pasha Piali took it by order of Suleiman in the year 1566, under the pretext that they were not paying the tribute and that they had warned the people of Malta about the plan to besiege them. The Venetians, after taking control of it in 1694, let it be retaken the following year by the Turks, who maintain a garrison there and impose a tax called *Carach*.' See Moreri, *op. cit.*, p. 639.

[36] See Moreri, *op. cit*. p. 639; Zolotas, *op. cit*. A. ii., p. 49; Soteriou (1916), *op. cit*. p. 28, footnote 2.

[37] Zolotas, *op. cit*. B. p. 231

[38] The year 1822 marked the massacre and burning of Chios, a genocidal reprisal by the Turks against the Chians for their support of the revolt against the Ottoman Empire, leaving the island desolate and depopulated. See Brewer, D. (2001), *The Greek War of Independence: The Struggle for Freedom from Ottoman Oppression*, Overlook Press, London, Chapter 16.

[39] See footnote 38, *supra*.

completely destroyed by the catastrophic earthquake of 1881, leaving behind only piles of amorphous wreckage and debris composed of stones and sediment[40].

Lastly, as addressed above, Sotiriou (1916) provides an important record regarding "the humble chapel of our days, which was built on the ruins of an earlier church that was destroyed in the 1881 earthquake."

2. METHODOLOGY

2.1. The Archaeological Context of the Grave and the Examination of the Bones

During the 1982 rescue excavations at the monumental site conducted by the Third Ephorate of Byzantine Antiquities led by Pennas, a burial context was discovered at the floor of the monument involving human skeletal remains. The location of the grave, given the sequential phases of the monument, had been cut into the mosaic floor of the nave associated with the basilica's third phase of architectural development. However, if considered within the spatial extent of the fourth phase--constructed within the internal dimensions of the third-phase basilica, as noted above--it would be deemed as situated in the westernmost section of the nave of the cross-in-square church identified by Pennas, which replaced the basilica built by Pogonátos (668-85), with a *terminus ante quem* for its construction and unobstructed liturgical use prior to the earthquake of 1389[41].

The burial place, assessed as an archaeological feature, simulated the contour of an approximately 2.15 x 1.70 m quadrant, intrusive into the ornate mosaic floor of the first phase's basilica, which dates to the second half of the fifth century[42] (Figure 5). Taking advantage of the elevation differential between the mosaic floors of the raised westernmost section of the nave and the lower nave, the grave was dug to a depth of approximately 0.35 m below the mosaic floor. Oriented in a west-eastward direction, its northern long side adjoined the basal level of foundations that had served to support the northwestern stylobate of the fourth-phase cross-in-square church (Figures 6, 7, 8, and 9). Considering the multiphase stratigraphic associations of the monument, this foundational component had originally provided structural support in separating the nave from the northern aisle of the first-phase basilica (Figures 3, and 5).

[40] Zolotas, *op. cit.*, A. ii, p. 51; cf. Zolotas, *op. cit.*, B, p. 223, for a reference in the Allatian Codex that he cites regarding the complete destruction of the church by the 1881 earthquake.

[41] See footnotes 31, and 32, *supra*.

[42] See footnote 26, *supra*.

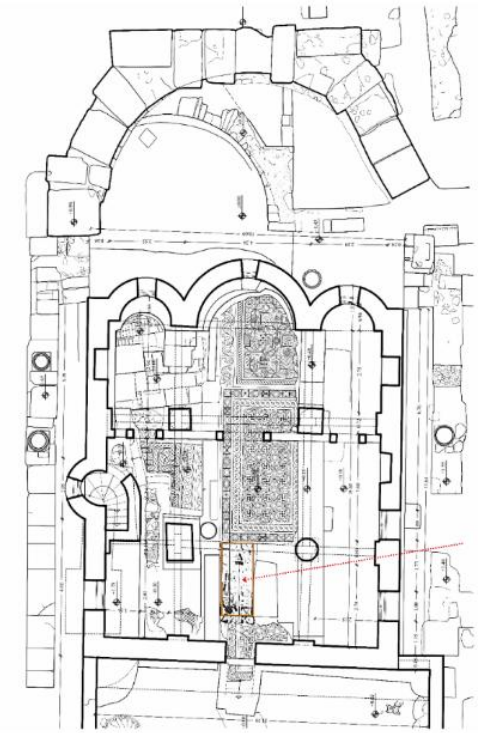

Figure 4. The Floor Plan of the Monument, provided by S. Voyadjis, includes the Location of the Grave as detailed by Ar. Agelarakis (Base Plan Courtesy of S. Voyadjis).

Figure 6. The Grave Context, photographed from within the Excavated Monument in 1982, from an Eastern Point of View (Courtesy EFA of Chios; Image provided to A.P. Agelarakis in 1981/2 by C.I. Pennas, then Ephor and Site Excavator).

Figure 7. An Eastward View, photographed within the excavated Monument in 1982, from the Eastern Short Side of the Grave, showing the Elevational Variability between the Grave and the Lower Level of the Mosaic Panels, as well as the Opening of the Holy Door into the Sanctuary, which was Established in the Fourth Phase. Also Visible is the Unconsolidated, Elevated Foundation (functioning as the Toichobate) of the Iconostasis Walls, which separated the Nave from the Altar (Courtesy EFA of Chios; Image provided to A.P. Agelarakis in 1981/2 by C.I. Pennas, then Ephor and Site Excavator).

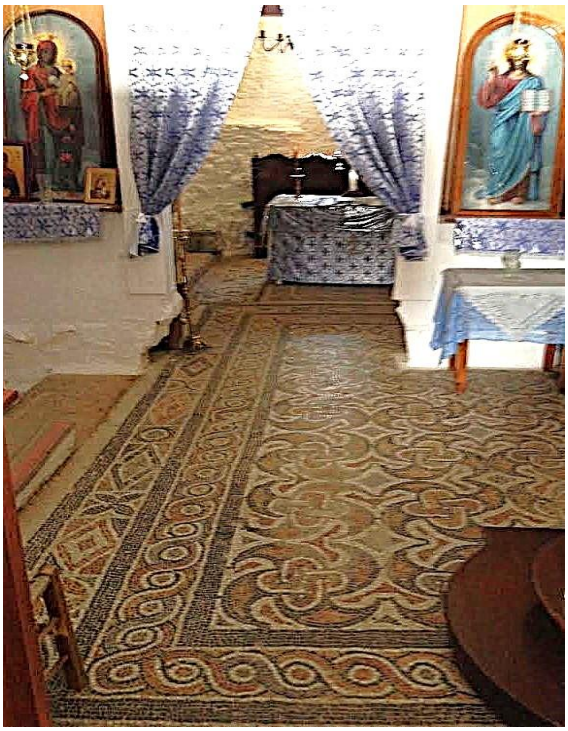

Figure 8. An Eastward View of the Nave, the Iconostasis, and the Sanctuary, photographed within the functioning Church in 2014 by A.P. Agelarakis, prior to the 2019 Initiation of the Church's Restoration, for Comparative Purposes with the Image in Figure 7.

Figure 9. A Close-up View related to the Image in Figure 8, photographed Eastward from the Nave toward the Sanctuary, prior to the Church's restoration. The Whitewash on the Right marks the Basal End of the Iconostasis on the Right Side of the Holy Door. The Ornate Mosaic Panels highlight the Hues and Chroma of their Tesserae, likely sourced from Parent Rock Materials on the Island of Chios.

At the time of excavation in 1982, the surface of the grave site was covered by a ca. 4.0 cm thick layer of concrete, which was coplanar with the remnants of the mosaic tesserae of the elevated westernmost section of the nave floor, extending westward from the rim of the short side of the grave toward the cross-in-square church's Western Entrance—just as it was across the rest of the elevated floor's surface. Due to unknown conditions, the ornate mosaic of the elevated floor region—except for the area impacted by the intrusive feature of the grave, which was documented in the illustration of Orlandos' floor plan publication in 1930[43] (Figures 10, and 11)—had been removed. Whereas Orlandos' illustration of his 1928 excavation provides relative dates through *termini ante* and/or *post quem* on the state of the mosaic—absent from the surface of the grave—and a *terminus post quem* for the removal of the remaining mosaic from the elevated floor region, the absence of associated artifacts within the grave posed challenges for establishing a reliable dating of the funerary context and the human remains.

In addressing the archaeological relevance of the grave context to the stratigraphic complexities of the site, Pennas invited A.P. Agelarakis[44] to evaluate the anthropological materials. The human skeletal remains, recovered by the archaeological team at the site, had been collected and transferred to the main Ephorate office in the city of Chios. It was there that the remains were made available to the physical anthropologist for the purpose of conducting an osteological analysis, and through personal communication with the excavator,[45] was informed that this particular grave was the only one discovered during the 1982 excavation season within the internal domain of the multiphase monumental structure and that it had retained human skeletal remains for physical anthropological study.

A preliminary inspectional analysis of the anthropological materials identified the presence of two human individuals, designated as Homo I (Figures 6, 10, and 12), and Homo II (Figure 13) respectively. Homo I was represented by a higher degree of skeletal completeness, with a greater number of cranio-infracranial axial and appendicular elements retained[46]. In contrast, Homo II exhibited a lower degree of anatomical preservation, with

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[43] Orlandos, *op. cit*., (1930), *Monuments byzantins de Chios* II, *Plances*, Athens.

[44] Specialized in physical anthropology-bioarchaeology.

[45] In April of 1982.

[46] Although the preserved cranial remains of Homo I were for the most part incomplete and fragmented, it was possible to consolidate and reconstruct a largely unilateral right component of the cranium. This included components of the facial cranium (comprising the mandible, the right maxillary component, the right zygomatic bone, and a right fragment of the frontal bone ranging anteriorly from the glabella to the right fronto-zygomatic suture, postero-laterally to the antero-superior junction with the squamosal suture of the temporal bone, and latero-superiorly along the coronal suture toward the pre-bregmatic region), the right cranial lateral wall (involving the ipsilateral region's frontal, bregmatic, temporal and zygomatic fragments, as well as the occipital bone's contribution to the cranial domain of the asterion at the region of the temporo-mastoidea-lambdoidal junction), and, further, the dorsal wall and partial basal cranium through the ipsilateral region of the lambdoidal suture between the occipital and parietal bones.

Regarding the dentitions, the right maxillary quadrant had retained the right central incisor, the anatomic root of the lateral incisor, the canine, the first premolar, the anatomic root of the second premolar, and the second molar. The left maxillary quadrant had retained the first premolar and the second molar. In the mandible, the right quadrant had retained the labial/anterior dentitions and the second molar, while the left quadrant had retained all labial/anterior teeth, both premolars, and the second molar.

Of the infracranial axial skeleton, the first (proximal) four vertebrae, the sternum, the sacrum and the coccyx were retained in a good state of preservation, while the rest, having suffered from taphonomic conditions, were represented by small, deteriorated fragments. A similar condition was observed for the scapulae. Of the rest of the upper extremities, only the clavicles, the humeri, and the right radius were retained in a good state of

fewer cranial and infracranial elements surviving and those present displaying extensive fragmentation and a markedly poorer state of preservation.[47] Based on the nature of bone fragmentation and deterioration sustained by the compact and cancellous bone components of Homo II's skeletal body, it appeared that the preservation differentiation compared to Homo I could have been influenced not only by taphonomic factors but post-burial anthropogenic activities as well. This was supported by the fact that taphonomic conditions[48], in addition to bone fragmentation, had impacted the dorsal surfaces of skeletal components of both individuals—particularly the bones of the scapulae and vertebral columns—in comparable ways, further suggesting that both individuals had been interred in a supine position.

Figure 10. A Westward View of the Grave with Human Remains *in situ*, showing the Line of the Remaining Mosaic Floor Across the Western Rim of the Grave (Courtesy EFA of Chios; Image provided to Agelarakis in 1981/2 by C.I. Pennas, then Ephor and Site Excavator).

preservation. For the lower extremities, the innominates, femora, tibiae, and left fibula were also retained in good condition.

[47] The recovered remains of Homo II included severely fragmented components of the vault, lateral walls, and base, as well as mandibular fragments from both right and left components of the gonion extending parabolically toward the ramus and corpus, with the left second mandibular molar retained in the alveolus. Of the axial infracranial skeleton, several vertebral fragments were recovered, along with the well-preserved sacrum, highly fragmented rib corpus elements, and a partially preserved sternum. Regarding the appendicular skeleton, the upper extremities were represented by the well-preserved clavicles, the relatively well-preserved humeri (both lacking proximal epiphyses, due to taphonomic processes), and phalangeal fragments of the right hand. The lower extremities were represented by fragments of both innominate bones, and the right femur.

[48] These involved post-interment truncation effects resulting from the compactness of superimposed stratigraphic layers, the physical and chemical properties of the surrounding sediments, moisture content and sediment saturation, as well as bioturbation.

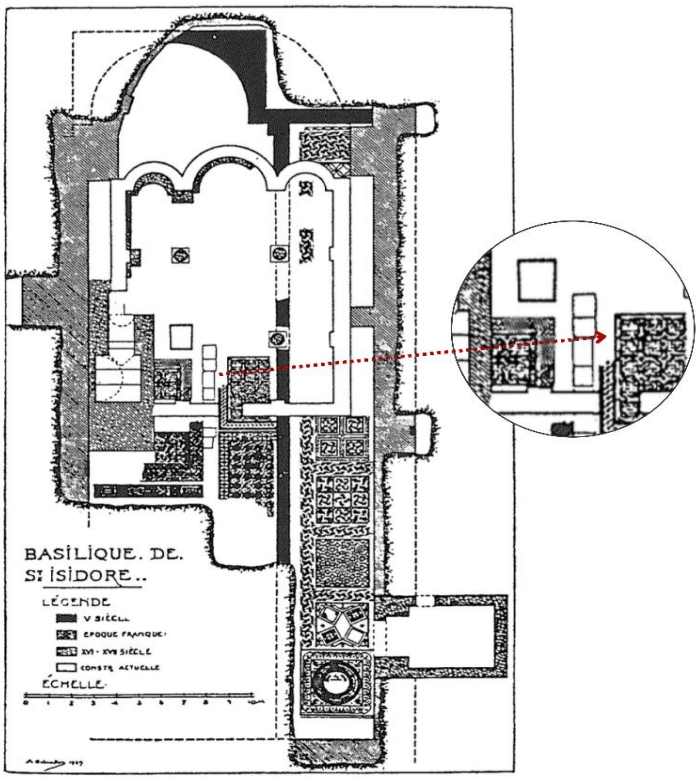

Fig. 1. Basilica of St Isidore. The phases according to A. Orlandos.

Figure 11. Orlandos' 1928 Excavation Floor Plan of the Monument, published in 1930 (*op. cit.*), as detailed by Ar. Agelarakis to indicate a Location already void of Mosaic Floor Covering, designating the Exact Space where the Grave was Later discovered by Pennas in 1982. Figure and Original Caption reproduced Courtesy of C.I. Pennas (*op. cit.*, p. 318).

Figure 12. The Grave Context, focusing on the Skeletal Remains of Homo I, photographed from within the Excavated Monument in 1982, viewed from a Southern Viewpoint (Courtesy EFA of Chios; Image provided to Agelarakis in 1981/2 by C.I. Pennas, then Ephor and Site Excavator).

Figure 13. The Grave Context, focusing on the Skeletal Remains of Homo II, located *in situ* at the Forefront Near the Shorter Eastern Side of the Grave, photographed within the Excavated Monument in 1982, viewed from an Eastern Perspective (Courtesy EFA of Chios; Image provided to Agelarakis in 1981/2 by C.I. Pennas, then Ephor and Site Excavator).

With the preparation and availability of the excavator's photographic archive, the *in situ* images of the human remains provided valuable support in assessing the causes underlying the bone preservation issues, particularly for Homo II. They also served to document the anatomical positions, placement, and spatial relationships of the two interments (Figures 6, and 13) within the grave context. Homo I was a primary inhumation burial[49] with the skeleton recovered in anatomical articulation. The funerary preparation and placement of the body suggested a Christian burial, with the individual placed in a supine and extended positioning, oriented west to east and facing eastward. The head was supported by a carefully worked, cuboid-shaped stone, likely serving as a headrest. The forearms were flexed at the elbows, with the hands resting over the abdominal region.

The skeletal remains of Homo II were found in an anatomically disturbed and disarticulated state, arranged within a shallow, intentionally prepared depression in the sediment near the eastern short side of the grave, positioned latero-distally in relation to the right foot of Homo I. This reflected a funerary process associated with Christian burial rituals, involving the repositioning of skeletal remains from an earlier interment to accommodate the placement of a new burial within a grave with multiple interments[50]. Thus, the archaeological relationship between the two individuals in the grave designates Homo I as

[49] There were no traces of wood or nails recovered to indicate that a coffin could have been used.

[50] Cf. Agelarakis, A. P., (1997) "Excavations at Polystylon (Abdera) Greece: Aspects of Mortuary Practices and Skeletal Biology", *Archaiologiko Deltio*, V:47, pp. 293-308; Agelarakis, A.P., and Agelarakis, A. (2015), "Abdera/ Polystylon: A Byzantine Town in Western Thrace in the Context of Historical Developments during the 6th – 14th Centuries as Depicted by its Archaeo-Anthropological Record", *Byzantina Symmeikta*, V:25, pp. 11-56.

the primary or main burial, while the earlier and repositioned remains of Homo II represent a secondary burial within the funerary context.

Through subsequent bioarchaeological analyses of the skeletal record, combining morpho-anatomic manifestations and mensurational readings, it was possible to assess that Homo I was of male biological sex, not of a particularly robust build, with a standing height of ca. 1.66 m (Figures 14, and 15). Further, dental anthropological evaluations[51] indicated a well-prepared dietary intake (*intra vitam*), rich in carbohydrates[52] and a dental age at death within the age subgroup of Late Adulthood, approximately 38 to 45 years of age. Cranial sutural synostotic processes and degenerative changes in infracranial axial syndesmotic and appendicular articular surfaces indicated an age range at death within the later years of Late Adulthood and the initial years of the *Maturus* age subgroups, approximately 38 to 48 years of age.

Regarding Homo II, the highly incomplete, severely fragmented, and poorly preserved skeletal remains challenged the ability to recover, evaluate, and assess important diagnostic morpho-anatomic criteria, as well as to retrieve adequate mensurational readings from the cranial, infracranial axial, and appendicular skeleton—requisite for deriving a well-supported biological sex assessment of the individual involved. However, based on emphasized skeletal markers at *loci* of muscular origin and insertion observed on a select number of preserved bone fragments[53], it appeared that the individual was robustly built and physically highly active during life.[54] Whereas mandibular dental and alveolar bone conditions, along with morphological changes at the auricular surface of the right ilium fragment, indicated an age at death within the middle of the *Maturus* and the Older age subgroups, approximately 55 to 65 years of age, the morphological manifestations, in conjunction with the limited mensurational readings obtained, were rather inconclusive regarding the biological sex assessment of Homo II. Specifically, the limited skeletal mensurational readings retrieved could not be compared, in 1982, to metric data from a local or regional archaeological population, as such data were not yet available. Furthermore, the archaeological dating of the grave was unknown, and the population affiliation of Homo II was unclear, making it difficult to identify a population that could be considered both coeval and comparable with Homo II. In comparing the mensurational readings with records made available from a medieval population in Scania, Sweden[55], the metrics of Homo II were clustering at the maximum scores attained for female individuals and the lower scores for males. However, the morphoanatomic characteristics of skeletomuscular robustness, for the specific age subgroup range, aligned with manifestations

[51] Involving the health of maxilla-mandibular alveolar bones, the wear patterns of dental incisal edges and occlusal odontoglyphic platforms.

[52] There were moderate supragingival calculus deposits on both anterior and posterior teeth, particularly on the mandibular counterparts, along with moderate periodontal disease and dental *ante mortem* loss, especially of mandibular molar teeth, with well-healed alveolar sockets. Additionally, there was a periapical abscess at the maxillary right second premolar, which had caused prolonged *intra vitam* maxillary sinusitis of an inflammatory and infectious nature. Untreated, the spread of the infection could have affected regional vital structures, potentially resulting in morbidity.

[53] Involving the clavicles, the diaphyses of the humeri, phalangeal fragments of the right hand, as well the right femoral diaphysis.

[54] Further, on matters of palaeopathological interest, the right femur of Homo II had sustained a trauma impact, which had healed well before death.

[55] Unpublished data kindly made available to the physical anthropologist in 1983 via personal communication with his osteology advisor, the late Dr. Per-Ove Persson, Docent at Lund University and Nordiska Museet, Lund, Sweden.

observed with marked prevalence among individuals of male biological sex in the same population, suggesting an assessment for Homo II as a male individual more probable.[56]

Given the unknowns surrounding the archaeological dating of the grave and interments within the complex stratigraphic associations of the monumental site of St. Isidore of Chios, the population affiliation of the two individuals interred, and the still ambivalent biological sex assessment of Homo II, there remained a significant challenge for the prospect of gaining a glimpse into their "identity" and possibly the reasons for their burial within the floor of the basilica. Aspiring to the potential to 'come closer' to these answers[57], the physical anthropologist proposed in 1983[58] to revisit this project, anticipating that advancements in

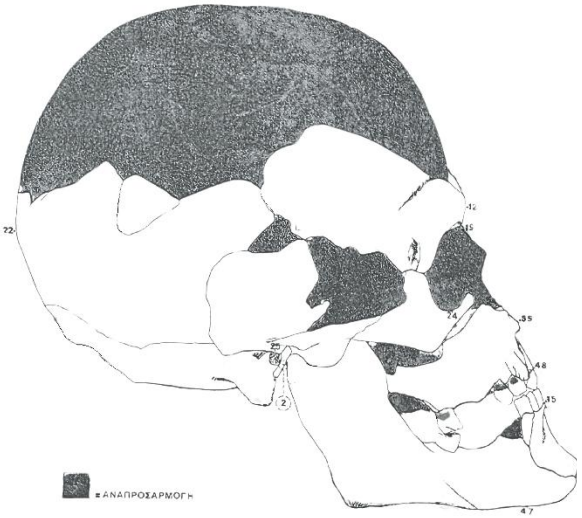

Figure 14. A Preliminary Technical Drawing Illustrating the Right Lateral Cranial View, comprising Consolidated Cranial Fragments of Homo I, rendered on Chios Island during the Summer of 1982 by Ar. Moutafis.

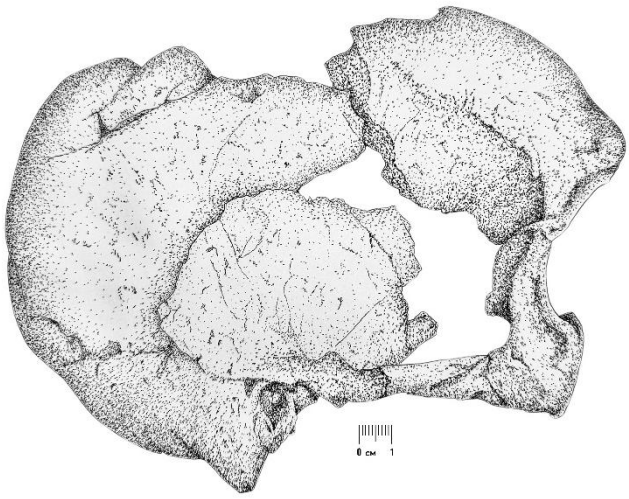

Figure 15. A Technical Drawing Illustrating the Preserved Right Lateral Cranial View of Homo I, rendered by Ar. Agelarakis on Chios Island during the Summer of 2022.

investigative archaeometric techniques within the progressively emerging domain of archaeological laboratory sciences could offer the possibility of providing clearer insight into these unresolved matters.

[56] Cf. Archival Report: Agelarakis, A. "΄Ερευνα Ανθρωπολογικού Υλικού (Καθεδρικού Αγ. Ισιδώρου)", Moutafis, A. "Σχέδια", (1983), Εφορεία Βυζαντινών Αρχαιοτήτων Χίου υπό τη διεύθυνση Χ. Ι. Πέννα.

[57] Inclusive for the evaluation of a hypothesis that the skeletal remains of Homo II could relate to St. Merope or a portion of St. Isidor's bones, see Zolotas, *op. cit.*, B, p. 225, regarding the probability that Moreri's reference alludes to some of St. Isidor's relics being transferred to Constantinople, while others remained in Chios and were later taken by the Venetians, cf. footnote 11, *supra*.

[58] During the presentation and submittal of his assessment in the archival report to the Ephorate of Byzantine Antiquities in Chios, referenced in footnote 56 *supra*.

2.2. Revisiting the Past: Interdisciplinary Investigations Unveiling Insights into the Burial Context of St. Isidore

Approximately four decades later, in 2021, an interdisciplinary inquiry was initiated by Agelarakis along with a team of collaborators, aimed at shedding light on aspects of the project through archaeometric and archaeogenetic analyses while revisiting elements of the archaeological record and integrating the historical context thereto appertaining. Pennas played a key role in facilitating the issuance of the permit for the selective sampling of materials[59] representing the two individuals for laboratory analyses and in providing insight into the archaeological context of the site[60]. Laboratory analyses for radiochronology and archaeogenetic investigations were conducted at the David Reich Laboratory under the supervision of Iosif Lazaridis[61], with the radiochronological dates and archaeogenetic results detailed in "*Genetic Analysis of St. Isidore Late Byzantine Individuals*," in this study. An in-depth critical and historiographic analysis of the Latin documents concerning the Venetian involvement in Chios, particularly the extraction and transfer of St. Isidore's bones to Venice, was conducted by Edward Reno[62,63] and is explored in "*Historical Background to the cult of S. Isidore in Venice*" in this study.

3. RESULTS

3.1. Archaeometric and Archaeogenetic Reflections into the Lives and Historical Context of the Two Individuals

While the archaeogenetic investigation remains ongoing to uncover additional data, conclusive results have already provided significant insights into the biological sex and ancestry of the two individuals. Homo I has been verified as male, while Homo II as female. Further, the genomic analyses established that the two St. Isidore individuals, though not genetically related, belonged to the same population, with no discernible ancestral variation between them. Their genetic profiles closely align with present-day Greek people, particularly those from the Dodecanese, strongly suggesting their local origin as part of the Roman-Byzantine population that persisted through the Ottoman period to the present-day islanders of the eastern Aegean (as detailed in Chapter "*Genetic Analysis of St. Isidore Late Byzantine Individuals*," in this study).

[59] The petition to select and export representative samples of the two individuals for laboratory analyses was submitted on November 22, 2021. The permit for selecting and exporting samples for archaeometric and archaeogenetic analyses was issued by the Ministry of Culture and Sports on April 4, 2022. On June 5, 2022, a dental sample and a preexisting bone fragment (approximately 10.0 to 15.0 g per individual) were selected on Chios Island.

[60] Insight into the archaeological context of the site provided by Pennas is detailed in Chapter "*The Historical and Archaeological Context of the Monument*," as addressed above, which examines the archaeological findings of his excavation at the monument.

[61] Senior Staff Scientist, Department of Human Evolutionary Biology, Harvard University.

[62] Associate Professor and Chair, Department of History, Adelphi University.

[63] Specializing in Medieval History and Canon Law.

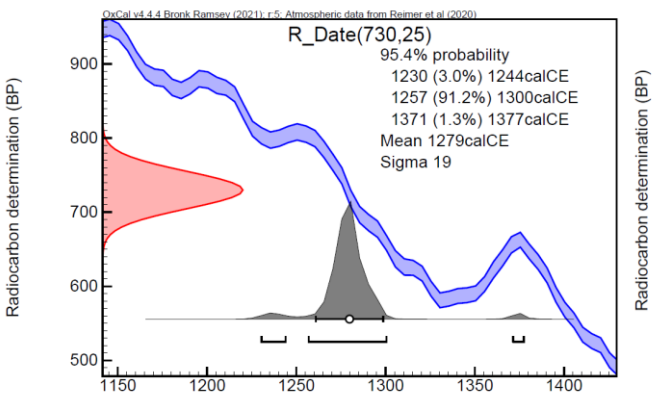

Figure 16. Calibrated ^{14}C Date for Homo II, the Female Individual.

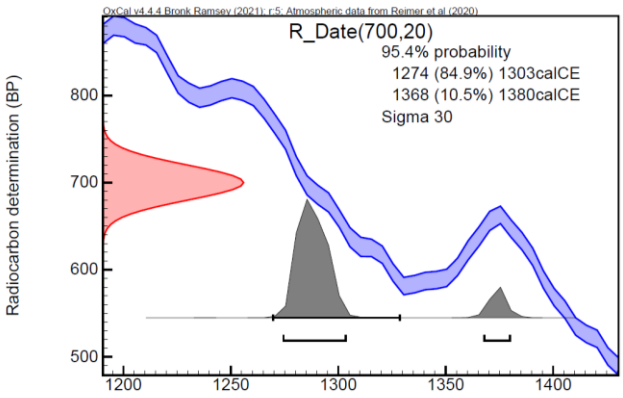

Figure 17. Calibrated ^{14}C Date for Homo I, the Male Individual.

Radiocarbon dating placed the interment of both individuals within the second half of the 13th century. Using OxCal software for radiocarbon calibration, the female (Homo II), with the highest probability score at 91.2% accuracy, ranged between 1257 and 1300 (Figure 16). The male (Homo I) produced a similarly precise range, with the highest score at 84.9% accuracy, dating between 1274 and 1303 (Figure 17).[64]

The radiochronological ranges of the dates derived for the two individuals engendered a unique opportunity for generating a canvas of the historical context during the period. Given that the radiocarbon dating of the two individuals was based on the measurements of the radioactive decay of the ^{14}C isotope in their skeletal remains after their death, the results provided chronological parameters for their lifetimes and deaths, defining a range of 43 years between a *terminus post quem* of 1257 and a *terminus ante quem* of 1300 for the female individual, and a range of 29 years with a *terminus post quem* of 1274 and a *terminus ante quem* of 1303 for the male individual.

Regarding Homo II, in averaging the life expectancy of the female individual at 60 years of age (between 55 to 65 years as addressed above), subtracted from her *terminus post quem* of 1257, she would have been born in 1197, the second year of Byzantine Emperor Alexios III Angelos' (Alexios Komnenos) reign—soon followed by the events of the fourth Crusade—while the event of her death in 1257 would have coincided with the reign of Emperor of Nicaea, Theodore II Doukas Laskaris. Thus, she would have been 28 years old when Chios was liberated from the Latins by the Emperor of Nicaea, John III Doukas Vatatzes, in 1225[65], but would have died approximately four years before the 1261 reconquest of Constantinople from the Latins by co-Emperor of Nicaea, Michael VIII Palaiologos.

In considering her *terminus ante quem* of year 1300, she would have been born in 1240, during the reign of Emperor of Nicaea, John III Doukas Vatatzes, and would have died during the reign of Byzantine Emperor Andronikos II Palaiologos and in the sixth year of the reign of co-Emperor Michael IX Palaiologos. Thus, she would have been born 15 years after the 1225 liberation of Chios from the Latins and would have been 21 years of age at the reconquest of Constantinople.

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[64] Radiocarbon dating was conducted at the University of Georgia, Athens, GA.

[65] Nikephoros Gregoras, *Byzantina Historia, Corpus Scriptorum Historiae Byzantinae*, Bonnae, Impensis Ed. Weberi, 1829, V. I, pp. 28-29, https://archive.org/details/byzantinahistor00bekkgoog/page/28/mode/2up

Regarding Homo I, in averaging the life expectancy of the male individual at 43 years of age (between 38 to 48 years as addressed above), subtracted from his *terminus post quem* of year 1274, he would have been born in 1231, the tenth year of reign of Emperor of Nicaea, John III Doukas Vatatzes, while the incidence of his death in 1274 would have coincided with the reign of Byzantine Emperor Michael VIII Palaiologos. Thus, he would have been born six years after the 1225 liberation of Chios by Vatatzes and would have died 13 years after the 1261 recovery of Constantinople from the Latin Empire[66] and restoration of the Byzantine Empire by the co-Emperor of Nicaea, Michael VIII Palaiologos.

In considering his *terminus ante quem* of year 1303, he would have been born in 1260, during the penultimate year of Emperor of Nicaea John IV Doukas Laskaris and the second year of the reign of his co-Emperor Michael VIII Palaiologos, and would have died during the reign of Byzantine Emperor Andronikos II Palaiologos and in the ninth year of reign of co-Emperor Michael IX Palaiologos. Thus, he would have been born 35 years after the 1225 liberation of Chios from the Latins by Vatatzes and would have been one year old at the recapture of Constantinople and the restoration of the Byzantine Empire by the co-Emperor of Nicaea, Michael VIII Palaiologos.

4. DISCUSSION

Evaluating the radiocarbon dates derived for the two individuals in comparison, and sampling the version of their respective *termini post quem* namely of 1257 for the female (hence born in 1197) and 1274 for the male (hence born in 1231)[67]—the female would have been 34 years old at the time of his birth.[68] Subsequently, they would have been alive concurrently for approximately 26 years[69], and following her death, he would have continued his life for an additional 17 years[70]. Therefore, given their respective *termini post quem* dates, it is suggested that, based on the age difference between them,[71] it is unlikely that the female would have been in a marital relation with him. Further, based on the molecular relatedness analysis, the two individuals were not genetically related; hence, a maternal-offspring relationship is refuted, as is any other consanguineous relatedness between the two individuals interred in the grave. Hence, the concept that the two individuals, a male and a female, interred in spatial proximity within the same grave, could not presuppose in this case a spousal or maternal-filial relationship. Furthermore, according to the calculations provided by the consideration of their respective *termini post quem*, the female individual wound have died 17 years before the male; thus, her interment in the grave would have preceded his burial accordingly. This would indicate that the burial processes of the two individuals were not relatively conterminous, thus necessitating a second reopening of the grave for the burial process of the male in due time. The latter would not be refuted by the archaeo-anthropological evaluations of the intra-grave assessments established between the primary and secondary burial relations of the male and female, respectively.

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[66] On the 25th of July 1261, by general Alexios Komnenos Strategopoulos.

[67] Subtracting from the *termini* the average life expectancy of 60 years for the female, and 43 years for the male.

[68] Subtracting from the year of his birth, in 1231, the year of her birth, in 1197.

[69] Subtracting from the year of her death, in 1257, the year of his birth, in 1231.

[70] Subtracting from the year of his death, in 1274, the year of her death, in 1257.

[71] At the time the male would enter adulthood, at ca. 18 years of age, the female would have been 52 years old.

In relation to the dates provided by the *termini post quem*, an evaluation of the radiocarbon dates derived for the two individuals, based on the sampling of their respective *termini ante quem*—namely 1300 for the female (hence born in 1240) and 1303 for the male (hence born in 1260)—indicates that the female would have been 20 years old at the event of his birth. Subsequently, they would have been alive concurrently for approximately 40 years, and following her death, he would have continued his life for an additional period of 3 years. Under the circumstances provided by their respective *termini ante quem* dates, it is suggested that, based on the age difference between them[72], it is rather unlikely that the female would have been in a marital relation with him—resembling the assessment relating to the *termini post quem* age differences. Further, as previously mentioned, a maternal-filial relationship or a consanguineous kinship between the two individuals is refuted based on the genetic relatedness analysis. However, unlike the assessments based on the *termini post quem* dates, in this case, the years of death between the two individuals would differ by only three years, nevertheless still requiring a second reopening of the grave for the interment of the male.

And yet, considering the calculated range of 106 years between the earliest estimated birth date of the female in 1197 and the latest estimated death date of the male in 1303, this period spans the reign of Alexios III Angelos through that of Andronikos II Palaiologos, marking an era of tumultuous historical events characterized by widespread insecurity, conflict, plunder, and devastation. Referring to historical cases in 1292 and 1303[73,74] concerning the Island of Chios, it is not improbable—given the chronological range provided by the carbon dates—that the female and male individuals buried in the St. Isidore monument had experienced the ravaging and despoiling inflicted upon the island[75]. This included pillaging, devastating chattel slavery, and the forced displacement of Chians by the marauders of Roger de Luria[76], by Roger de Flor[77] with his Almogávares mercenary troops,[78] and particularly by the Turks. In one instance, the Turks, with 30 ships pillaging Chios, devastated the island, taking loot and enslaving women and children in 40 transport boats, which subsequently sank near the region of Skyros Island.[79,80]

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[72] At the time the male would enter adulthood, at ca. 18 years of age, the female would have been 38 years old.

[73] Miller, W., (1911), "The Zaccaria of Phocaea and Chios (1275-1329)", *The Journal of Hellenic Studies*, V.31, p. 45.

[74] The *terminus ante quem* year of death of the male individual buried in the St. Isidor monument.

[75] If they had remained on Chios for the entirety of this period.

[76] On Roger de Luria ravaging Chios see Muntaner, R., (1920), (Trasnl. from Catalan) L. Goodenough, *The Chronicle of Muntaner*, Vol. I., Chapter CXVII, p. 292.
https://archive.org/details/thechronicleoframonmunta1/page/292/mode/2up.

[77] On Roger de Flor ravaging Chios, see Georgii Pachymeris (Pachymeres Georgius) Γεωργίου του Παχυμέρη, De Michaele et Andronico Paleologis Andronicus Palaeologus-Ανδρόνικος Παλαιολόγος, *Corpus Scriptorum Historiae Byzantinae* Volumen Alterum, Bonnae: Impensis Ed. Weberi, 1835 L.V., pp. 436-437, C-D.
https://archive.org/details/georgiipachymer00pousgoog/page/2/mode/2up

[78] Regarding the Spanish Almogávares, cf. Muntaner, R., (1920), (Trasnl. from Catalan) L. Goodenough, *The Chronicle of Muntaner*, Vol. I., Chapter CXVII (117), p. 292 ff. Muntaner provides detailed accounts of the Almogávares, their military campaigns, role and operations as mercenary foot soldiers and scouts during that period.

[79]Regarding the Turks ravaging Chios, see Pachymeris, *op.cit*., L.VI., p. 510, A.
https://archive.org/details/georgiipachymer00pousgoog/page/2/mode/2up

[80] Parenthetically, Pachymeris (*op.cit*., L.VI., p. 558, A-B) refers to Zaccaria Benedetto's 1304 occupation of the island of Chios while negotiating with Emperor Andronikos II to receive Chios as fief for 10 years, noting that

4.1. Few Comments on the Placement of the Grave and the Two Individuals in the Monument

Beyond providing a framework for investigating the historical canvas of events and the possible realities of the two individuals during their lifetimes buried in the St. Isidore monument, the results of the radiocarbon dates offered crucial insights into the refinement of the temporal context in relation to its integration into the stratigraphic associations within the multiphase architectural layers of the site, concerning not only the placement of the grave, but also the intra-grave funerary relations between the female and male interments.

Thus, based on the range provided by the radiocarbon dates, the interment processes took place between 1257 and 1300 (a mean of 1279) for the female and between 1274 and 1303 (a mean of 1289) for the male. The chronological calibration of the two individuals buried in the monument, with an approximate 10-year interval between their burials,[81] predates the 1389 earthquake—considered a *terminus ante quem* for the fourth phase of the monument[82]. Could the burial of the two individuals have coincided with the period identified by Pennas' archaeological conclusion that "the site was abandoned for a long period of time" before the construction of the fourth phase of the monument[83]? Should this be the case, then the range provided by the means of their burials, between 1279 and 1289, may offer a relative framework for a 10-year interval within the period during which the site was purportedly "abandoned". However, it also clearly appears that even though the basilica may have fallen into disuse for a period[84], rendering it inoperative to its former ecclesiastical functions, it nevertheless remained an activity area and site of reverence for the Chian congregation before the construction of the fourth phase church. Notwithstanding that the church would have fallen into a level of inoperability, having suffered from physical and/or anthropogenic conditions, the site of the monument was not deserted but ostensibly remained under the administrative care and management of the clergy and/or other local authority[85], with evident future planning[86]. Additionally, in conjunction with any enduring structural components of the basilica, at least some of the mosaic floor panels of the monument remained unconcealed and accessible. This would have facilitated the precise placement of the grave beneath the mosaic panel of the elevated floor segment of the nave, delineated on its northern side by a contiguous foundational element of the monument.

Moreover, if the decision and symbolic meaning behind placing a grave through the splendid mosaic of the basilica's nave for the burial of the female individual may represent a distinct phase in the monument's history, the calibrated radiocarbon timing of the female individual's interment at 1279 provides a significant new chronological marker. This date establishes an important historical element, occurring 110 years before the destructive 1389

Zaccaria re-fortified and militarily successfully defended the island, for whatever the Genovese did not protect was devastated by plundering Turks.

[81] This calculation is based on the mean dates of 1279 for the female and 1289 for the male. Additionally, the chronological range between 17 years (as determined by their death *termini post quem*) and 3 years (as determined by their death *termini ante quem*) results in an average interval of 10 years between their burials, as provided by the radiocarbon dates discussed above.

[82] See Pennas, *op. cit*., p. 332.

[83] See footnote 82, *supra*.

[84] As concluded by Pennas, see footnote 82, *supra*.

[85] For example, it was not abandoned to serve as a funerary church during that period.

[86] As indicated by the construction of the cross-in-square type church of the fourth phase.

earthquake that damaged the northern section of the church's renowned dome[87]. However, the burial of the female individual was not an exceptional event within the monument, as it was followed approximately 10 years later by the burial of the male individual, suggestive of a ceremonial and commemorative act within the site. Notably, the mosaic panel of the basilica, through which the grave was placed, also formed part of the floor of the cross-in-square church of the fourth phase, specifically positioned just inside its West Entrance, marking its significance as a spatial and symbolic feature within the monument. The grave may have been incorporated into the new structure of the fourth phase, or it may have been introduced in the fourth-phase cross-in-square church. In the latter case, since no archaeologically derived date exists for the construction of the fourth phase, the burial of the female individual in 1279 may provide a valuable chronological reference for understanding the possible timeframe of its establishment, warranting further research on this matter.

5. CONCLUSION

The combined results of the radiocarbon and archaeogenetic analyses provided independent lines of evidence that complemented the archaeo-historical and anthropological investigations in clarifying key aspects of the two individuals buried at the St. Isidore monumental site. These findings allowed for the evaluation and rejection of tentative competing explanatory hypotheses initially considered regarding their identities. Notably, the analyses confirmed that they were not associated with the martyrdom of St. Isidore and Merope, that they did not share a consanguineous relationship, and that their age differences made a marital relationship highly implausible. Furthermore, the male individual could not have been the Genovese nobleman Benedetto Zaccaria, who died in 1307[88], as substantiated by the forensic evidence of the molecular analysis which invalidates this possibility.

Yet, some questions regarding their identities remain unanswered. Could they have been benefactors of the Chian congregation, members of the priesthood or monastic community, or perhaps esteemed individuals granted the rare honor and privilege of interment within the monument, emulating the legacy of St. Isidore and St. Merope associated with the site? Whether any answers will ever emerge remains uncertain—possibly lost to history.

Nevertheless, the scientific approaches implemented in this project aim to contribute a multidimensional understanding of the individuals' placement within the historical and architectural evolution of the monumental site, ensuring that future investigations could build upon these findings with improved insights.

[87] See footnote 31, *supra*.

[88] See footnote, 80, *supra*; cf. Miller, *op. cit*., pp. 45-46. Further, regarding the Genovese, since Benedetto's 1304 occupation of Chios while still in negotiations with Emperor Andronikos II Palaiologos, they respectfully honoring St. Isidor as the patron of Chios Island, along with St. George the patron of Genova; see Zolotas, *op. cit*., B, p. 231.

6. SUPPLEMENTARY MATERIALS: GENETIC ANALYSIS OF ST. ISIDORE LATE BYZANTINE INDIVIDUALS

Molecular sex was assigned using a method[89] that considers the relative proportion of Y-chromosome and X,Y-chromosome sequences in a sampled individual, with input "Twist" capture genome-wide data[90] of the two individuals generated at the David Reich lab in Harvard Medical School. St. Isidore individual I37186 (Genetic lab numeration), designated as Homo II, has an inferred female molecular sex as the number of sequences aligned to the human Y-chromosome (relative to those aligned to both the X and Y chromosomes) was close to zero. Individual I37184 (Genetic lab numeration), designates as Homo I, had a substantial number of sequences aligned to the Y chromosome and is inferred to have been a genetic male.

Table 1. Molecular sex determination

Individual	Number of sequences	Number of sequences on X and Y	Number of sequences on Y	Ratio Y/(X+Y)	Standard error	95% CI	Assignment
I37186.TW	1247279	52828	472	0.0089	0.0004	0.0081-0.0097	XX
I37184.TW	4053256	135505	46890	0.346	0.0013	0.3435-0.3486	XY

The two individuals from St. Isidore were assessed for relatedness using READv2 software.[91] The inferred kinship coefficient of 0.0094 suggests that they are not genetic relatives (inferred "Unrelated" by READv2).

A preliminary analysis of the genetic ancestry of the St. Isidore individuals was undertaken using principal components analysis[92], projecting ancient individuals to present-day West Eurasian variation that shows two parallel clines along Europe (left) and West Asia (right), bridged by some Mediterranean populations from left-to-right in the middle (Figures 18, and 19).[93,94] Present-day Greek, Cypriot, Italian, and Turkish populations genotyped on the Human Origins array[95] are shown for comparison,[96, 97] along with Roman-Byzantine era

[89] Skoglund, P., Storå, J., Götherström, A., and Jakobsson, M., (2013), "Accurate sex identification of ancient human remains using DNA shotgun sequencing", *Journal of Archaeological Science*, 40, pp. 4477-4482, doi:https://doi.org/10.1016/j.jas.2013.07.004.

[90] Rohland, N., Mallick, S., Mah. M., Maier, R., Patterson, N, and Reich, D., (2022), "Three assays for in-solution enrichment of ancient human DNA at more than a million SNPs", *Genome Research*, 32, pp. 2068-2078, doi:10.1101/gr.276728.122.

[91] Alaçamlı, E., et al., (2024), "READv2: advanced and user-friendly detection of biological relatedness in archaeogenomics", *Genome Biology*, 25, 216, doi:10.1186/s13059-024-03350-3.

[92] Patterson, N., Price, A. L., and Reich, D., (2006), "Population Structure and Eigenanalysis", *PLOS Genetics*, 2, e190, doi:10.1371/journal.pgen.0020190.

[93] Lazaridis, I., et al., (2014), "Ancient human genomes suggest three ancestral populations for present-day Europeans", *Nature*, 513, pp. 409-413, doi:10.1038/nature13673.

[94] Lazaridis, I., et al., (2022), "The genetic history of the Southern Arc: A bridge between West Asia and Europe", *Science*, 377, eabm4247, doi:10.1126/science.abm4247.

[95] Patterson, N., Moorjani, P., Luo, Y., Mallick, S., Rohland, N., Zhan, Y., Genschoreck, T., Webster, T., and Reich, D., (2012), "Ancient Admixture in Human History", *Genetics*, 192, pp.1065-1093, doi:10.1534/genetics.112.145037

[96] See footnote 93, *supra*.

[97] Reitsema, L. J., et al., (2022), "The diverse genetic origins of a Classical period Greek army", *Proceedings of the National Academy of Sciences*, 119, e2205272119, doi:10.1073/pnas.2205272119.

individuals [98,99] from Nicaea in the Marmara region of Turkey and the Aegean region of Turkey, which were geographically proximate contexts to the island of Chios in Asia Minor (Anatolia).

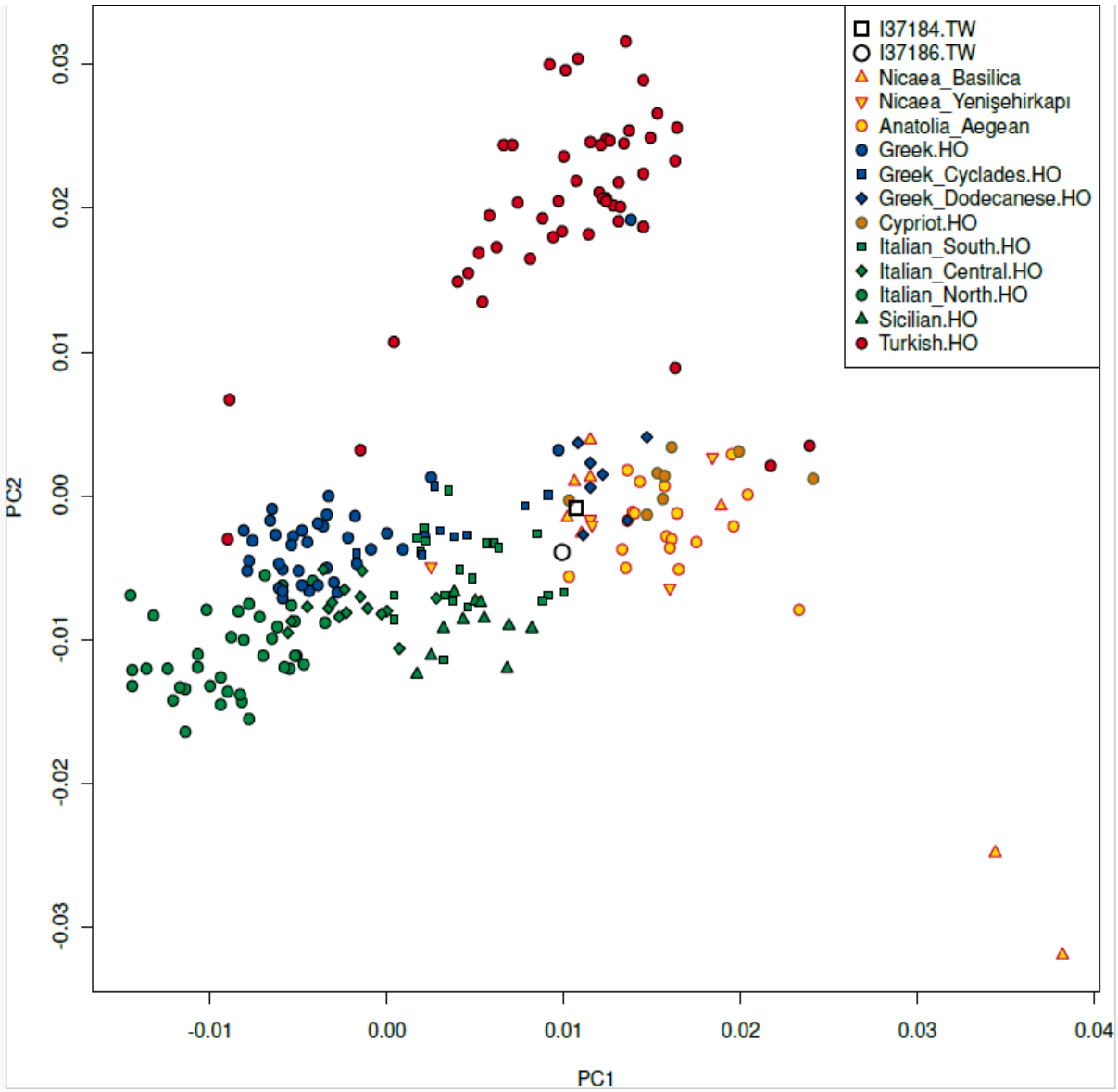

Figure 18. Principal Components Analysis of the Molecular Laboratory Results for Homo I and Homo II (represented by Large Black Symbols—a Circle and a Square), shown in Comparison with Present-Day Populations.

[98] See footnote 94, *supra*.

[99] Lazaridis, I., et al., (2022), "A genetic probe into the ancient and medieval history of Southern Europe and West Asia", *Science*, 377, pp. 940-951, doi:10.1126/science.abq0755 (2022).

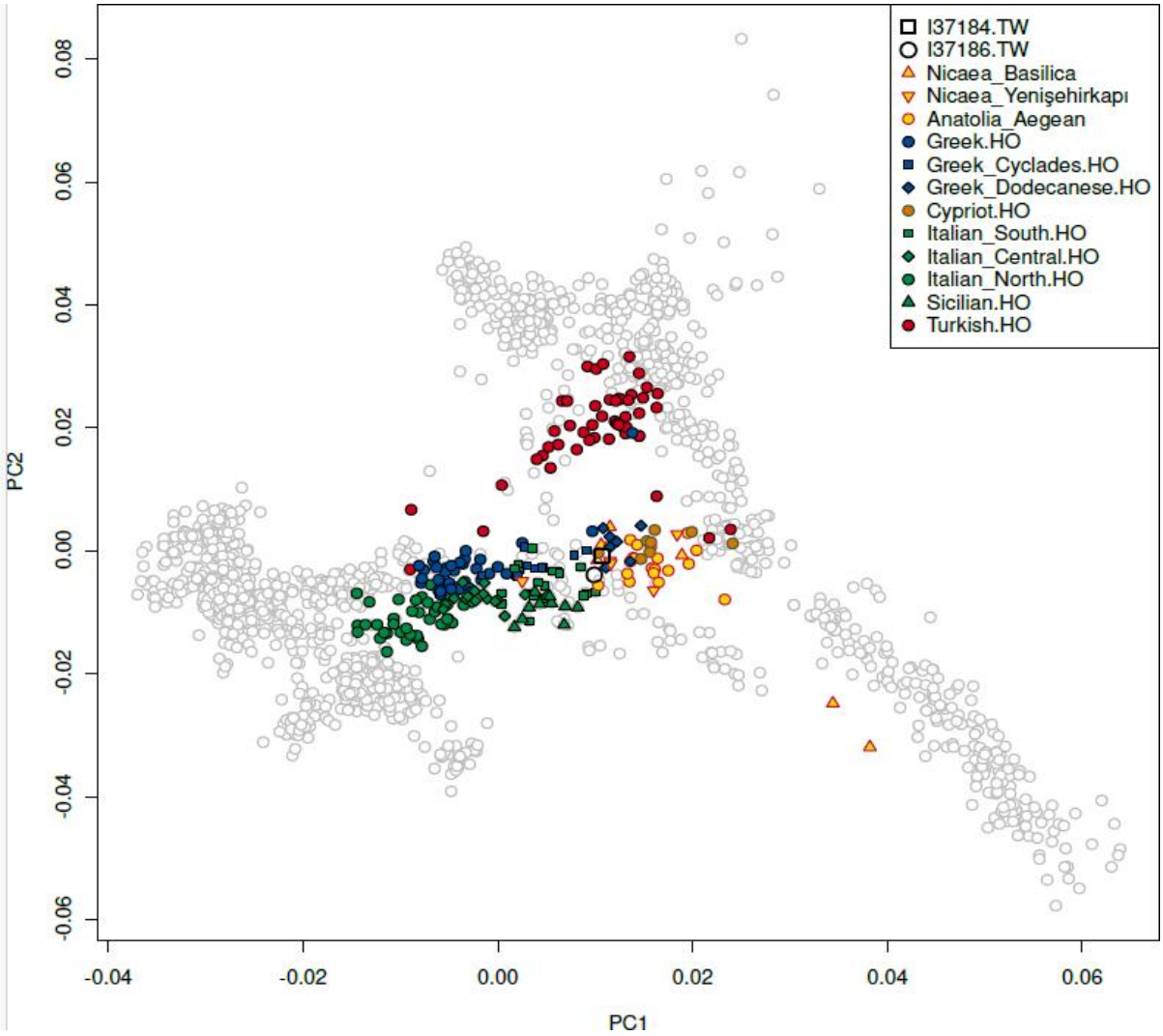

Figure 19. Principal Components Analysis of the Two Medieval Individuals from St. Isidore (represented by Large Black Symbols—a Circle and a Square). Comparative Present-Day Populations are excluded to focus on Populations of Interest.

The two individuals resemble each other with respect to West Eurasian variation at large and are consistent with belonging to the same population: no substantial ancestral variation between them can be discerned. They overlap present-day Greek people from the islands[100]: more closely to those from the Dodecanese (in the eastern Aegean) than the Cyclades, and more remotely to the other present-day Greeks who have experienced some gene flow associated with the Slavic migrations during early medieval times.[101]

Present-day Italian people across the Italian peninsula and including Sicily are genetically distinct; while the possibility that the medieval Genoese may have been genetically different than present-day north Italians sampled at Bergamo must be considered, present-day genetic structure within Italy (in which northern Italians are shifted to the left, European side of the PCA plot) suggests that these individuals (shifted to the right, and well

[100] See footnote 96, *supra*.

[101] Olalde, I., et al., (2023), "A genetic history of the Balkans from Roman frontier to Slavic migrations", *Cell*, 186, 5472-5485.e5479, doi:https://doi.org/10.1016/j.cell.2023.10.018.

beyond Italian-Sicilian variation as a whole) are natives, not associated with the Genoese control of the island.

Additional evidence that the St. Isidore individuals represent the Roman ("Byzantine" in modern terminology) population is furnished by comparing them to present-day Turkish people as well as Roman-Byzantine individuals from the adjacent regions of Anatolia sampled at Nicaea and in the Aegean administrative region of Turkey.[102, 103] Present-day Turks are shifted away from the Roman-Byzantine Anatolians, affected by ~9-22% Central Asian ancestry overall associated with plausibly Turkic migrations.[104]

Roman-Byzantine Anatolians, by contrast overlap the St. Isidore individuals, especially a subset of those buried during the Late Antique-Early Medieval period (4th-6th c.) in the (now-underwater) Basilica of the local St. Neophytos in Nicaea who was martyred in 303 AD.[105] Genetic similarity among early Byzantine (at Nicaea), late Byzantine (at Chios), and present-day Greek islanders strongly suggests the local origin of the St. Isidore man and woman, as part of the local population of the Roman empire that has continued after the Ottoman period to the present-day Greek islanders of the eastern Aegean.

A hint of even older connections is indicated by the Y-chromosome of the male individual, which is interesting because of the support for derived mutations downstream of haplogroup R-Z93 and a terminal designation of R-FT414856.

R-Z93+:M746(18985344C>A:A) R-Z2125+:Z2125(6892233C>T:T) R-M12280+:M12280(7591091C>A:A) R-M12298+:M12298(14981315G>C:C) R-FT414856+:FT414855(13705180T>A:A)

Haplogroup R-Z93 as a whole has a decidedly Asian distribution and is often associated with Indo-Iranian speakers.[106, 107] An estimated date of 3,300 BP for the particular subclade to which the male individual belongs (https://www.yfull.com/tree/R-FT414856/) is consistent with him sharing patrilineal ancestry with some Indo-Iranian speakers in at least a Late Bronze Age, but possibly later timeframe, and a specifically Iranic connection is suggested by its sampling among present-day Afghans and present-day people from Turkey of Kurdish and Zaza background.

What route the patrilineal ancestors of the St. Isidore male took to reach Chios cannot be determined, but the possibility is suggested that his patrilineal ancestor belonged to one of the diverse Iranic-speaking groups of the Hellenistic oecumene, which were incorporated into the Empire of Alexander and his successors that stretched from modern Greece to Afghanistan. His Hellenized descendants persisted in Anatolia or the islands through the beginning of the Roman period and through intermarriage became indistinguishable—in terms of overall ancestry—from other Roman-Byzantine western Anatolians and Greek

[102] See footnote 93, *supra*.

[103] See footnote 98, *supra*.

[104] See footnote 98, *supra*.

[105] See footnote 93, *supra*.

[106] Underhill, P. A., et al., (2015), "The phylogenetic and geographic structure of Y-chromosome haplogroup R1a", *European Journal of Human Genetics*, 23, pp. 124-131, doi:10.1038/ejhg.2014.50.

[107] Narasimhan V. M., et al., (2019), "The formation of human populations in South and Central Asia", *Science*, 365, eaat7487, doi:10.1126/science.aat7487.

islanders: people like the woman buried in St. Isidore and other earlier and later people of the Greek islands and western Asia Minor.

6.1. Historical Background to the Cult of S. Isidore in Venice

According to tradition, Isidore was a Roman soldier martyred during the Decian persecution of 250-1 CE.[108] There is some indication that he may have been of Alexandrian origin, but his *Acta* are otherwise silent on his background prior to his death on the island of Chios.[109] Isidore exercised the function of *optio*, a kind of deputy-centurion who helped maintain order in the ranks and took responsibility for provisioning the soldiers in his unit.[110] After his legion arrived at Chios to conscript more recruits, Isidore was denounced by a centurion (whether his own, or someone else in his cohort or legion is unclear) to the legionary commander for being a Christian, and thus in defiance of the Decian decree to offer sacrifice. The bulk of the *Acta* are made up by the tribunal interrogation of Isidore by the commander Numerius, which follows the typical hagiographic script where the saint demonstrates his fortitude despite repeated and insistent attempts to have him avoid death through the simple act of sacrifice. Isidore met his end when the sword's blade struck his neck.

There are conflicting traditions about how Isidore's remains were rescued. Isidore's *Acta* mention a certain associate by the name of Ammonius, who along with several others buried his body. There is a parallel tradition, however, which would become the one most commonly associated with the Isidore legend, that S. Myrope rescued his corpse while it was still under guard by order of Numerius.[111] When Numerius threatened to punish the soldiers who allowed the theft, Myrope in an act of charity came forward as the responsible party, ensuring a similar martyrdom that was soon forthcoming.

Up through the 14th century, Isidore's cult was almost exclusively observed within Eastern Christianity. A church was erected on Chios quite early, judging both by literary reports and the excavations documented in this study. In the mid-5th century, some of his relics were taken by St. Marcian, a presbyter and oeconomus of the church in Constantinople, who brought them to the capital and thus helped spread the saint's cult.[112] In the West, other

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[108] Isidor's *Acta* and related materials, including the subsequent passion of S. Myrope, were collected for May 15th by the Bollandists: *Acta sanctorum, Maii*, v. 3, Paris-Rome 1866, 443-50. Note that the date of May 15th reflects the tradition of the Martyrologium Romanum, whereas his feast day is more authentically celebrated on May 14th in the Orthodox Church. The Bollandists themselves identified the error: *Acta sanctorum, Maii*, v. 3, 446.

[109] The *Acta* edited by the Bollandists make no mention of Isidor's origin. One of the collated Latin versions, however, adds that the ships bearing the Roman legion to the island were originally from Alexandria (*Acta sanctorum, Maii*, v. 3, 449, not. b) A much later tradition, as represented by the brief resumé of the saint's life in the 10th c. *Synaxarion of Constantinople* (included in the *Acta sanctorum, Maii*, v. 3, 444), identifies him as Alexandrian.

[110] *Beatus igitur Isidorus, cum Optionis munus et dignitatem sustineret, annonam suis omnibus ex aequo distribuebat*; *Acta sanctorum,* 447.

[111] Myrope is variously described as being from Ephesus or the island of Chios itself. Included by the Bollandists with the Isidor material is a short extract from S. Myrope's *Acta*: *Acta sanctorum, Maii*, v. 3, p. 445. To solve the problem of these two separate traditions, they offer the clever suggestion that Ammonius may have been one of the soldiers guarding Isidor's body. A slightly fuller version of Myrope's story, taken from various Greek martyrologies, is given at July 3rd: *Acta sanctorum, Julii*, v. 3, Paris-Rome 1868, 458.

[112] *Acta sanctorum, Maii*, v. 3, 443.

than a brief mention in the 6th century in Gregory of Tours' *Glory of the Martyrs*, Isidore remained more or less unknown.[113]

The translation of Isidore's relics to Venice in 1125, when a Venetian fleet abducted his body after stopping in Chios on the way back from crusading, introduces a tantalizing mystery. The literary evidence for the *furta sacra* is confined to a single, remarkably vivid account by one Cerbanus Cerbani, a Venetian priest who had fled the court of Emperor John II Comnenos (1118-44) and joined up with Venetians, and who on his own initiative stole Isidore's relics and returned with them to Venice.[114] The account survives in a single 14th century manuscript, and is written in a remarkably elegant (by 12th century standards) Latin prose.[115] And yet, there is no evidence for the practice of Isidore's cult in the city until the mid-14th century, when his relics were allegedly "rediscovered" and given a magnificent chapel in San Marco by Doge Andrea Dandolo (1343-54).[116] What explains this disjuncture?

The alleged context for the theft of Isidore's relics was the Venetian "crusade" of 1122-24, which was one prong of possibly several Western military contingents organized by Pope Calixtus II (1119-24) in support of the Crusader States, which had recently suffered a brutal defeat at the Battle of the Field of Blood (1119).[117] As was typical of Venetian crusading activity in the East, their crusade vows did not prevent them from pursuing business along the way. Their first target was the Byzantine-controlled island of Corfu, to which they laid siege in reprisal for Emperor John II Comnenos' recent revocation of their trading privileges within the Empire. The choice of Corfu was not accidental, insofar as it was Venice's military support for Alexios Comnenos' (1081-1118) recapture of the island from the Normans in 1084 that had won it those privileges in the first place.[118] The siege was only lifted when news broke that King Baldwin II of Jerusalem (1118-31) had been taken captive by Muslim

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[113] *Acta sanctorum, Maii*, v. 3, 443. For an English translation of the passage, see: Gregory of Tours, *Glory of the Martyrs*, trans. R. van Dam, Liverpool 1988, 124. Gregory appears to be our earliest source for the detail that Isidor's body was thrown into a well, around which grew the church. The well would become a vector for the saint's miracles, with those seeking relief from illness drinking from its waters: *de cuius* [*putei*] *energumeni febricantesque vel reliqui infirmi saepius potati, salvantur*; *Acta sanctorum, Maii*, v. 3, 446. Gregory also reports having heard firsthand from a priest about a light that often shone from the mouth of the well. Gregory's account was likely the source for the occasional, brief notices of Isidor in later Frankish sources, such as the 9th c. *Martyrology of Usuard* or Ado of Vienne (d. 874).

[114] *Translatio mirifici martyris a Chio insula in civitatem Venetam*, in: *Receuil des historiens des croisades,* v. 5, Paris 1895, 321-34. Cerbanus has been connected to a Venetian family of noble lineage, whose members included a Patriarch of Grado in the late 11th century. For detailed biographical information, see P. Marco: Cerbano Cerbani, in: *Dizionario biografico degli italiani,* v. 23, Roma 1979. Available online at: http://www.treccani.it/enciclopedia/cerbano-cerbani_(Dizionario-Biografico).

[115] Venice, BML, Lat. cl IX, n. 27, ff. 234-39. The text is full of recondite vocabulary and rhetorical figures that could only be produced by someone with considerable exposure to Latin patristics, if not classical literature directly. See below for a better contextualization of Cerbanus' learning.

[116] The vicissitudes of S. Isidor's cult in Venice have been thoroughly analyzed by M. Tomasi: Prima, dopo, attorno alla cappella: Il culto di Sant'Isidoro a Venezia, *Quaderni della Procuratoria* 3 (2008), 15-23. It should be noted that the entirety of vol. 3 of the *Quaderni* is devoted to the history of the Chapel of S. Isidor, on the occasion of its modern restoration.

[117] For the reconstruction of the events leading up to the crusade, see: J. Riley-Smith, The Venetian Crusade of 1122-1124, in: *I communi italiani nel regno crociato di Gerusalemme: Atti del colloquio "The Italian Communes in the Crusading Kingdom of Jerusalem" Jerusalem May 24-28, 1984*, ed. B. Z. Kedar – G. Airaldi, Genoa 1986, 337-50.

[118] For the diplomatic and trade implications of the Venetian expedition, see: T. Madden, *Enrico Dandolo and the Rise of Venice*, Baltimore 2003, 7ff. For the broader question of Venetian-Byzantine relations, see: D. Nicol, *Byzantium and Venice: a Study in Diplomatic Relations*, Cambridge 1988.

forces. The Venetians would go on to win a number of military engagements in the Levant, culminating with the spectacular capture of the city of Tyre on July 7, 1124.[119] On the way back home, the Venetians renewed their retaliatory actions, and raided the Greek islands of Rhodes, Methone, Samos, and finally, Chios.

Although *furta sacra* was something of a Venetian specialty, the author of our sole account of the *translatio*, Cerbanus Cerbani, claims that the idea for the theft originated with him.[120] While on route to Tenedos after escaping from Constantinople, Cerbanus' ship was overtaken by a storm, which was soon brought to an end after the crew called upon S. Isidore for assistance.[121] The ship would eventually stop in Chios as it made its way down the coast of Asia Minor. It is there that Cerbanus prays to the saint for further protection, and as an inducement promises to bring his remains back with him to Venice and put him in the company of S. Mark.[122] After linking up with the Venetian fleet in Rhodes, he returned to Chios and set his plan in motion. Hammer in hand, Cerbanus and some companions broke into the crypt of S. Isidore's church, smashing through stone and marble until he came across four bodies – three adult forms and one of a child.[123] These remains were later identified by Cerbanus, after consulting with some locals on Chios, as SS. Afra, Hilaria, Myrope and her son, but as there were no epitaphs visible in the crypt, he did not know their identities at the time nor if Isidore was among them.[124] So they continued their search, and before long

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[119] Drawing upon his first-hand knowledge, Fulcher of Chartres provides a full (and the only contemporary) account of the Venetian engagements in the Levant (Book III.14-41): *A History of the Expedition to Jerusalem, 1095-1127*, trans. H. Fink, New York 1973, 238-77.

[120] The patron saint of the city, S. Mark, was merely the most notorious in a long list of purloined relics that Venice acquired over the centuries. On the theft of S. Mark from Alexandria as an exemplar of the phenomenon of medieval *furta sacra*, see: P. Geary, *Furta Sacra: Thefts of Relics in the Central Middle Ages* (rev. ed.), Princeton 1990, 88-94. For the later period, see: D. Perry, *Sacred Plunder: Venice and the Aftermath of the Fourth Crusade*, University Park 2015.

[121] *Cumque media nocte velificantes, aere turbato, Tenedon tendissent, ut applicarent, vel immitissimus repente boreas, quem a loco cardiacon vocant, irruens in litea* [sic] *navem violenter arripuit et procul repulit; vixque iam vela discissa deposuerant, cum fulgura, tonitrua, nimbi, instar montium fluctus, cum ea, nautas invadentes, convexant. At illi, tanta attoniti et concussi procella, cum interior inundatio exteriorem fere adaequaret, vita iam desperata, divinam pietatem et martyris eius Isidori interventum petebant, ut morientes veniam mererentur culparum*; Cerbanus, *Translatio*, 325. This passage should give some idea of Cerbanus' logophilia.

[122] *Quinimo, si, ut reor, praetiosi Christi nostri divino nutu et tuo ductu, noster huc venturus est exercitus, cunctis aliis inquisitionibus omissis, si Deo tibique placuerit, ad hanc sacram ita tui corporis urnam accedam, et, quamvis indignus, utpote cunctis criminibus sordidus, si tamen patriam forte nostram inhabitare dignatus fueris, acceptum navique impositum, illuc, Deo gubernante et te cooperante, transferam, ubi compatroni tui, ac quondam pastoris, et commilitis sacrosancti, ac beatissimi apostoli et evangelistae, Marci membra quiescent*; Cerbanus, *Translatio*, 326. Although he was not yet in the company of the Venetian fleet (*exercitus noster*), earlier in his story Cerbanus had mentioned knowing of their exploits in the Holy Land, and of his desire to join up with them and visit the Holy Sepulchre (Cerbanus, *Translatio*, 324).

[123] *Accepto itaque malleo, ditiorem et interiorem cryptae partem sacerdos accessit, et, cum primo percussisset, quamdam diversis massam materiebus compactam reperit, qua diruta, marmorea inventa est tabula, quae quoddam saxei tumuli cooperculum obtegebat, quibus confractis, quidam suavis odor circumstantium nares refecit. Cumque inspicerent, trium sanctorum ac quarti cuiusdam pueri corpora sunt intuiti*; Cerbanus, *Translatio*, 328.

[124] *Quaestione cum Graecis de quatuor sanctorum reliquiis habita, compertum est sanctos martyres, Myropem videlicet, cum filio, et Hilariam esse cum Affra*[*m*] *quae pro fide Christi et sepultura, ad imitationem sacri martyris praesentem martyrio finierunt vitam*; Cerbanus, *Translatio*, 331. There is a S. Afra, who along with her mother S. Hilaria was martyred during Diocletian's persecution, who would become the patron saint of Augsburg, where tradition placed her martyrdom. But whether the bodies discovered by Cerbanus were *those particular* Afra and Hilaria is unknown, and if so, what they might be doing in the Church of S. Isidor on Chios. There is no evidence that associates their cult with the island, though Afra's family was variously reported to be from Crete or Cyprus. The Bollandists assembled quite a bit of material related to Afra, located under August 5:

discovered evidence of an additional body visible through the cracks, from which the tell-tale *suavissimi odoris fragrantia* confirmed they had located their target.[125] The rest of Cerbanus' story concerns the negotiations with the Doge Domenico Michiel (1117-30), who was present with the fleet, to bring the relics back to Venice. According to Cerbanus, the Doge was initially angry for the priest having undertaken the *furta sacra* without permission. The Doge eventually relented, and the fleet sailed back home, with Isidore performing an additional miracle by protecting those on his transport ship from succumbing to a plague that had struck the rest of the Venetian armada, and restoring to health the wounded on board.[126]

Whatever splash the translation of Isidore's relics made at the time, it had no ripple effect on the spread of the saint's cult in Venice. As Michele Tomasi has observed, there are no references to Isidore in any liturgical material that can be associated with the city prior to the mid-14th century, nor any indication of where the relics were kept.[127] As far as Venice was concerned, the martyr did not exist. Given Isidore's subsequent political utility when his cult was revived via the spectacular chapel constructed for him in San Marco by Doge Andrea Dandolo, it may be tempting to dismiss the Cerbanus account as some kind of later fabrication. However, recent research has established Cerbanus' bona fides not only as an historical personage, but as someone whose education and character lines up well with what is known of him from the *Translatio*. Péter Bara has shown conclusively that the Cerbanus who wrote the *Translatio* is the same Cerbanus who was active as a translator in the Byzantine court, and who later travelled to Hungary and produced several translations of the works of Maximus Confessor and John Damascene.[128] Cerbanus' presumably extensive literary training helps to explain the exceptional erudition of the *Translatio*, and his subsequent travels in the Kingdom of Hungary show him to have been the kind of adventurer he depicts himself to be in the story.

Some 200 years after Isidore's relics came to Venice, his cult was suddenly reborn and put into service for the Venetian state. In the late 1340s Doge Andrea Dandolo ordered the

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Acta sanctorum, Augusti, v. 2, Paris-Rome 1867, 39-59. The bare mention of these additional saints in Cerbanus' narrative may explain why 14th c. Latin versions developed a prequal to Isidor's martyrdom, wherein he stays at the house of several prostitutes on Chios – one of them named Aphra – whom he eventually converts to Christianity. See, for example, Petrus de Natalibus' account in Book 5, ch. 2 of his hagiographic work: *cum* [*Isidorus*] *esset christianus occultus, Numerianum pretorem a Decio ad ipsam insulam missum comitatus est. Et apud quandam peccatricem Aphram nomine, que tres puellas publice omnibus se prostituentes detinebat, hospitatus est*; *Catalogus sanctorum*, Lyon 1513, f. 111v.

[125] *Tunc attentius ac sagacius perscrutantes, atque subtiliori indagationi totum praedictae soliditatis locum investigando rimantes, indiciis quibus dictus sanctus voluit, non solum saxum, sed praetiosis compaginatum marmoribus tumulum esse cognoscunt; dabant etiam huius rei lampades super eum ardentes non inconveniens argumentum…Tanta illico facilitate omnis illius soliditatis quae videbatur compago disiuncta est, ut, rimulis quibusdam patentibus, iam quod tam ardenter sitiebant contemplarentur. Cum igitur partem tabulae submovissent, tanta, o Deus mirabilis in sanctis tuis, suavissimi odoris fragrantia omnes astantes replevit, quantam nullus eorum meminerat unquam sensisse*; Cerbanus, *Translatio*, 328. They were able to confirm Isidor's identity thanks to a silver epitaph (*argenteum epitaphium*) that contained the saint's name and likeness.

[126] *Post discessum quoque, morbo eodem in via plurimi defecerant…Sed cum, de singulis navibus quae populous circumduxerant, nonnulli ea pernicie vel armis cedissent, praedictam martyris navem ab eius susceptione, ne unum quidem hominem contigerit perdidisse; cum et vulneratos, vita iam desperatos, et aegros, acutis passionibus pergravatos, multos habuerit, quos martyris medela piissimi pristinae cito sanitati restituit*; Cerbanus, *Translatio*, 333-4.

[127] Tomasi, Prima, dopo, 16-7.

[128] P. Bara, Egy velencei a Magyar Királyságban? Cerbanus Cerbano és biográfiája, *Acta Historica* 144 (2019), 25-41. The author would like to thank Dr. Bara for sending a draft of a forthcoming English adaptation of the article: "A Venetian Translator in the Hungarian Kingdom? Cerbanus Cerbano's Biography."

construction of a magnificent chapel for the martyr in San Marco (completed in 1355 under Doge Giovanni Gradenigo), including a sarcophagus for his relics and a cycle of remarkable mosaic scenes lifted directly from Cerbanus' account.[129] Exactly when and how the martyr and his relics resurfaced into Venetian consciousness is unclear. Dandolo himself makes no reference to the saint in the history of the city he composed prior to his election in 1343, the so-called *Chronica brevis*.[130] Only a couple of years later, however, Dandolo would mention the translation in his account of the year 1125 for his much expanded *Chronica per extensum*.[131] The Isidore story was not of his own invention, however, but was rather taken verbatim from the *Satirica rerum gestarum* by the Franciscan Paolino Veneto (1272-1344), who had served in various diplomatic posts for the city prior to becoming bishop of Pozzuoli in 1324.[132]

Isidore could not have reappeared at a more opportune time for Venice. Over and above the aesthetic brilliance of the Byzantine-style mosaics and the largesse displayed by both the commissioning Doge and the city that funded them, the martyr's chapel communicated a poignant message to Venice's rivals. Not only did the iconography of the chapel project its image as masters of the Eastern Mediterranean – and at a moment when Byzantine power was rapidly fading – it also effectively disputed the recent takeover of Chios by their arch rivals Genoa, who in 1346 had recaptured the island.[133] Although the mosaic cycle makes no mention of the plague, it is also possible that Isidore's miraculous protection of some Venetian sailors from pestilence may have been especially evocative in the immediate aftermath of the Black Death.[134] Almost immediately, the cult of S. Isidore would become tied to Venice's own collective memory. Dandolo's successor, Doge Marino Faliero (1354-55), would attempt an unsuccessful coup d'état, and was promptly executed on April 17th 1355 after the plot was discovered and condemned to *damnatio memoriae*. The very next month, the feast of Isidore's translation was established on April 16th and tied directly to the commemoration of the failed Faliero coup, to be observed every year with a religious procession in which the Doge and other leaders would attend Mass at San Marco and be

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[129] Cerbanus is identified by name in the mosaic cycle, and is one of the main participants, along with Doge Domenico Michiel. The chapel was one of several monumental renovations undertaken by Dandolo in S. Marco, including the Baptistry and the Pala d'Oro. In addition to the analysis by Tomasi ("Prima, dopo,"), see two excellent studies about the political context of Dandolo's renovation of San Marco by Stefania Gerevini: Art as Politics in the Baptistry and Chapel of Sant'Isodoro at San Marco, Venice, *Dumbarton Oaks Papers* 74 (2020), 243-268; Inscribing History, (Over)Writing Politics: Word and Image in the Chapel of Sant'Isodoro at San Marco, Venice, in: *Sacred Scripture/Sacred Space*, ed. T. Frese – W. Keil – K. Krüger, Berlin 2019, 323-49.

[130] A. Dandolo, *Chronica brevis*, in: *Rerum italicarum scriptores*, ed. E. Pastorello, v. 12.1, Bologna 1942, 351-73.

[131] A. Dandolo, *Chronica per extensum descripta*, in: *Rerum italicarum scriptores*, ed. E. Pastorello, v. 12.1, 234-5.

[132] The *Satirica* remains unedited, but a comparison between Dandolo's *Chronica* with the text of the *Satirica* contained in Vatican City, BAV, Vat. lat. 1960, f. 233rb, shows a direct dependence. The manuscript is available online at: https://digi.vatlib.it/view/MSS_Vat.lat.1960. Paolino had clearly read Cerbanus' account, as he cites him by name and freely paraphrases the *Translatio*. He adds a tantalizing detail at the end, however, which is absent from Cerbanus account, regarding a sanctuary that Doge Domenico Michiel ordered to be constructed for Isidor near San Marco: *et decernit* [*Dux*] *quatenus venecia e regione temple beati marci corte ipsius interiacente sancto martiri ecclesia construatur*; Vatican City, BAV, Vat, lat. 1960, f. 233rb.

[133] See the discussion and attendant bibliography in Gerevini, Art as Politics, 255-7. Gerevini makes an equally astute point that the John the Baptist mosaic cycle in the Baptistry could also be seen as a way of tweaking Genoa, whose patron saint was, of course, John the Baptist; Art as Politics, 260.

[134] Tomasi, Prima, dopo, 19.

reminded of their obligations to respect the Venetian constitution.[135] Over 1000 years after his martyrdom, Isidore continued to be a reminder of the fragility of power.

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[135] Tomasi, Prima, dopo, 15-6.

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